

#01#

Artículos originales (todos) \*\*\* Original articles (all)

Neuroendocrine tumors.

Agosto - Septiembre 2013 / August - September 2013

El sistema de alerta de literatura biomédica© es un servicio GRATUITO. La literatura ha sido compuesta en base a una patente que permite la indexización y ordenación de los artículos por orden de importancia. Consecuentemente existe un copyright de carácter compilativo (todos los derechos reservados). Este documento sólo contiene artículos escritos en Castellano y/o Inglés. Para mayor información visite el portal de la compañía haciendo un clic en la palabra [Enlace/Link](#)

The biomedical literature© alert system is a FREE service. The literature has been arranged according to a patent, which entitles the right to cataloguing and sorting articles by true relevance. Consequently, a compilation copyright exists (all rights reserved). Only articles written in Spanish and/or English are included. For more information please visit the website of the company by clicking on the following [Enlace/Link](#)

[1]

**TÍTULO / TITLE:** - Tumour markers fluctuations in patients with medullary thyroid carcinoma receiving long-term RET inhibitor therapy: ordinary lapping or alarming waves foreshadowing disease progression?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Oncol. 2013 Sep;24(9):2201-4. doi: 10.1093/annonc/mdt331.

●● Enlace al texto completo (gratis o de pago) [1093/annonc/mdt331](#)

**AUTORES / AUTHORS:** - Postel-Vinay S; Schlumberger M; Soria JC

**INSTITUCIÓN / INSTITUTION:** - SITEP, Department of Medicine.

[2]

**TÍTULO / TITLE:** - How to Incorporate New Tyrosine Kinase Inhibitors in the Treatment of Patients With Medullary Thyroid Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Sep 3.

●● Enlace al texto completo (gratis o de pago) [1200/JCO.2013.51.5098](#)

**AUTORES / AUTHORS:** - Haddad RI

**INSTITUCIÓN / INSTITUTION:** - Dana-Farber Cancer Institute, Harvard Medical School; and Brigham and Women's Hospital, Boston, MA.

[3]

**TÍTULO / TITLE:** - Enhanced glucagon-like peptide-1 secretion in a patient with glucagonoma: Implications for glucagon-like peptide-1 secretion from pancreatic alpha cells in vivo.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diabetes Res Clin Pract. 2013 Aug 19. pii: S0168-8227(13)00294-5. doi: 10.1016/j.diabres.2013.08.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.diabres.2013.08.005](#)

**AUTORES / AUTHORS:** - Yabe D; Rokutan M; Miura Y; Komoto I; Usui R; Kuwata H; Watanabe K; Hyo T; Kurose T; Nagamatsu T; Shimizu S; Kawai J; Imamura M; Seino Y

**INSTITUCIÓN / INSTITUTION:** - Division of Diabetes, Clinical Nutrition and Endocrinology, Kansai Electric Power Hospital, 2-1-7 Fukushima-ku, Osaka 553-0003, Japan; Division of Metabolism and Clinical Nutrition, Kansai Electric Power Hospital, 2-1-7 Fukushima-ku, Osaka 553-0003, Japan. Electronic address: [ydaisuke-kyoto@umin.ac.jp](mailto:ydaisuke-kyoto@umin.ac.jp).

**RESUMEN / SUMMARY:** - We examined GLP-1 secretion from the pancreas of a patient with glucagonoma and pancreatic resection by measuring GLP-1 after meal ingestion or selective arterial calcium injection, and immunohistochemical analysis. Our findings support the notion that GLP-1 is secreted from pancreatic alpha cells in humans.

[4]

**TÍTULO / TITLE:** - Hypoxia in a patient with carcinoid syndrome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Am Coll Cardiol. 2013 Aug 19. pii: S0735-1097(13)03904-1. doi: 10.1016/j.jacc.2013.05.091.

●● Enlace al texto completo (gratis o de pago) [1016/j.jacc.2013.05.091](#)

**AUTORES / AUTHORS:** - Rekhraj S; McNab DC; Shapiro LM; Hoole SP; Rana BS

**INSTITUCIÓN / INSTITUTION:** - Cardiology department, Papworth Hospital NHS Foundation Trust. Electronic address: [sr5344@hotmail.com](mailto:sr5344@hotmail.com).

[5]

**TÍTULO / TITLE:** - Low Accuracy of Tumor Markers for Diagnosing Pancreatic Neuroendocrine Tumors in Multiple Endocrine Neoplasia Type 1 Patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Aug 16.

●● Enlace al texto completo (gratis o de pago) [1210/jc.2013-1800](#)

**AUTORES / AUTHORS:** - de Laat JM; Pieterman CR; Weijmans M; Hermus AR; Dekkers OM; de Herder WW; van der Horst-Schrivers AN; Drent ML; Bisschop PH; Havekes B; Vriens MR; Valk GD

**RESUMEN / SUMMARY:** - Context: The assessment of tumor markers for diagnosing pancreatic neuroendocrine tumors (pNET) in multiple endocrine neoplasia type 1 (MEN1) patients is advised in the current guidelines but has never been validated for this purpose. Objective: The objective of the study was to assess the diagnostic accuracy of chromogranin A (CgA), pancreatic polypeptide (PP), and glucagon for pNET in MEN1. Design: This was a diagnostic study. Setting: The study was conducted at Dutch university medical centers from 2008 to 2011, representing 90% of the total Dutch MEN1 population. Patients and Methods: Patients for whom data on tumor markers in combination with the reference standard (ie, radiological imaging) were available between 2008 and 2011 were included. The reference standard for the presence of pNET was pathology or detection on magnetic resonance imaging, computed tomography, or endoscopic ultrasound confirmed on subsequent imaging, irrespective of modality at follow-up. Main Outcome Measures: The area under the receiver-operating characteristic curve (AUC), positive predictive value, negative predictive value, positive likelihood ratio, negative likelihood ratio, sensitivity, and specificity were calculated for each marker. Results: For the analysis of PP, CgA, and glucagon, 73, 81, and 94 patients were available, respectively. The AUC for CgA was 0.48 [95% confidence interval (CI) 0.35-0.61] with a sensitivity 0.33 and a specificity 0.73; the AUC for glucagon was 0.58 (95% CI 0.46-0.70) with a sensitivity 0.43 and a specificity 0.73; and the AUC for PP was 0.64 (95% CI 0.50-0.77) with a sensitivity 0.36 and a specificity 0.74. Age, imaging modality, tumor size, and number did not influence the outcomes. Conclusion: The diagnostic accuracy of the tumor markers CgA, PP, and glucagon for pNET in MEN1 is low.

[6]

**TÍTULO / TITLE:** - Prognostic Factors and Long-Term Outcome of Pancreatic Neuroendocrine Neoplasms: Ki-67 Index Shows a Greater Impact on Survival than Disease Stage. The Large Experience of the Spanish National Tumor Registry (RGETNE).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Neuroendocrinology. 2013 Sep 19:156-168.

●● [Enlace al texto completo \(gratis o de pago\) 1159/000355152](#)

**AUTORES / AUTHORS:** - Martin-Perez E; Capdevila J; Castellano D; Jimenez-Fonseca P; Salazar R; Beguiristain-Gomez A; Alonso-Orduna V; Martinez Del Prado P; Villabona-Artero C; Diaz-Perez JA; Monleon A; Marazuela M; Pachon V; Sastre-Valera J; Sevilla I; Castano A; Garcia-Carbonero R

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, University Hospital La Princesa, Madrid, España.

**RESUMEN / SUMMARY:** - Introduction: Pancreatic neuroendocrine neoplasms (PNEs) are uncommon neoplasms with a wide spectrum of clinical behavior. The objective of this study was to assess in a large cohort of patients the relative impact of prognostic

factors on survival. Methods: From June 2001 through October 2010, 1,271 patients were prospectively registered online ([www.getne.org](http://www.getne.org)) at the Spanish National Cancer Registry for Gastroenteropancreatic Neuroendocrine Tumors (RGETNE) by participating centers. Clinical and histopathological features were assessed as potential prognostic factors by uni- and multivariate analyses. Results: Of 483 PNENs, 171 (35%) were functional (F) and 312 (65%) non-functional (NF). NF-PNENs were associated with a higher incidence of histological features denoting more aggressive disease, such as poor tumor differentiation, Ki-67 >20%, or vascular invasion (NF- vs. F-PNENs, respectively,  $p < 0.05$ ). Nevertheless, functionality was not a significant predictor of survival ( $p = 0.19$ ). Stage at diagnosis, Ki-67 index, tumor differentiation and surgical resection of the primary tumor were all significant prognostic factors in univariate analysis. However, Ki-67 (>20 vs.  $\leq 2\%$ ) (hazard ratio (HR) 2.21,  $p = 0.01$ ) and surgical resection (yes vs. no) (HR 0.92,  $p = 0.001$ ) were the only independent predictors of survival in multivariate analysis. Among patients who underwent surgery, high Ki-67 index (HR 10.37,  $p = 0.02$ ) and poor differentiation (HR 8.16,  $p = 0.03$ ) were the only independent predictors of clinical outcome. Conclusion: Ki-67 index and tumor differentiation are key prognostic factors influencing survival of patients with PNENs and, in contrast to what it is observed for other solid malignancies, they seem to have a greater impact on survival than the extent of disease. This should be borne in mind by physicians in order to appropriately tailor therapeutic strategies and surveillance of these patients.

[7]

**TÍTULO / TITLE:** - Merkel Polyomavirus-Specific T Cells Fluctuate with Merkel Cell Carcinoma Burden and Express Therapeutically Targetable PD-1 and Tim-3 Exhaustion Markers.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Oct 1;19(19):5351-5360. Epub 2013 Aug 6.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-0035](http://1158/1078-0432.CCR-13-0035)

**AUTORES / AUTHORS:** - Afanasiev OK; Yelistratova L; Miller N; Nagase K; Paulson K; Iyer JG; Ibrani D; Koelle DM; Nghiem P

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Departments of Medicine/Dermatology, Pathology, Medicine, Laboratory Medicine, Global Health, University of Washington; Fred Hutchinson Cancer Research Center; Benaroya Research Institute, Seattle, Washington; and Department of Medicine/Dermatology, Saga University, Nabeshima, Japan.

**RESUMEN / SUMMARY:** - PURPOSE: The persistent expression of Merkel cell polyomavirus (MCPyV) oncoproteins in Merkel cell carcinoma (MCC) provides a unique opportunity to characterize immune evasion mechanisms in human cancer. We isolated MCPyV-specific T cells and determined their frequency and functional status.

EXPERIMENTAL DESIGN: Multiparameter flow cytometry panels and HLA/peptide tetramers were used to identify and characterize T cells from tumors (n = 7) and blood (n = 18) of patients with MCC and control subjects (n = 10). PD-1 ligand (PD-L1) and CD8 expression within tumors were determined using mRNA profiling (n = 35) and immunohistochemistry (n = 13). RESULTS: MCPyV-specific CD8 T cells were detected directly ex vivo from the blood samples of 7 out of 11 (64%) patients with MCPyV-positive tumors. In contrast, 0 of 10 control subjects had detectable levels of these cells in their blood (P < 0.01). MCPyV-specific T cells in serial blood specimens increased with MCC disease progression and decreased with effective therapy. MCPyV-specific CD8 T cells and MCC-infiltrating lymphocytes expressed higher levels of therapeutically targetable PD-1 and Tim-3 inhibitory receptors compared with T cells specific to other human viruses (P < 0.01). PD-L1 was present in 9 of 13 (69%) MCCs and its expression was correlated with CD8-lymphocyte infiltration. CONCLUSIONS: MCC-targeting T cells expand with tumor burden and express high levels of immune checkpoint receptors PD-1 and Tim-3. Reversal of these inhibitory pathways is therefore a promising therapeutic approach for this virus-driven cancer. Clin Cancer Res; 19(19); 5351-60. ©2013 AACR.

[8]

**TÍTULO / TITLE:** - Hypoxia-inducible factor signaling in pheochromocytoma: turning the rudder in the right direction.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Sep 4;105(17):1270-83. doi: 10.1093/jnci/djt201. Epub 2013 Aug 12.

●● [Enlace al texto completo \(gratis o de pago\) 1093/jnci/djt201](#)

**AUTORES / AUTHORS:** - Jochmanova I; Yang C; Zhuang Z; Pacak K

**INSTITUCIÓN / INSTITUTION:** - Affiliations of authors: Program in Reproductive and Adult Endocrinology, Eunice Kennedy Shriver National Institute of Child Health and Human Development (IJ, KP) and Surgical Neurology Branch, National Institute of Neurological Disorders and Stroke (YC, ZZ), National Institutes of Health, Bethesda, MD; 1st Department of Internal Medicine Medical Faculty, P. J. Safarik University Kosice, Slovakia (IJ).

**RESUMEN / SUMMARY:** - Many solid tumors, including pheochromocytoma (PHEO) and paraganglioma (PGL), are characterized by a (pseudo)hypoxic signature. (Pseudo)hypoxia has been shown to promote both tumor progression and resistance to therapy. The major mediators of the transcriptional hypoxic response are hypoxia-inducible factors (HIFs). High levels of HIFs lead to transcription of hypoxia-responsive genes, which are involved in tumorigenesis. PHEOs and PGLs are catecholamine-producing tumors arising from sympathetic- or parasympathetic-derived chromaffin tissue. In recent years, substantial progress has been made in understanding the

metabolic disturbances present in PHEO and PGL, especially because of the identification of some disease-susceptibility genes. To date, fifteen PHEO and PGL susceptibility genes have been identified. Based on the main transcription signatures of the mutated genes, PHEOs and PGLs have been divided into two clusters, pseudohypoxic cluster 1 and cluster 2, rich in kinase receptor signaling and protein translation pathways. Although these two clusters seem to show distinct signaling pathways, recent data suggest that both clusters are interconnected by HIF signaling as the important driver in their tumorigenesis, and mutations in most PHEO and PGL susceptibility genes seem to affect HIF-alpha regulation and its downstream signaling pathways. HIF signaling appears to play an important role in the development and growth of PHEOs and PGLs, which could suggest new therapeutic approaches for the treatment of these tumors.

[9]

**TÍTULO / TITLE:** - VIPoma in a 37-year-old man.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Lancet. 2013 Aug 31;382(9894):832. doi: 10.1016/S0140-6736(13)61217-9.

●● Enlace al texto completo (gratis o de pago) [1016/S0140-6736\(13\)61217-9](#)

**AUTORES / AUTHORS:** - Lam S; Liew H; Khor HT; Dalan R; Kon YC; Jong M; Chew DE; Leow MK

**INSTITUCIÓN / INSTITUTION:** - Tan Tock Seng Hospital, 11 Jalan Tan Tock Seng, Singapore. [stanley\\_lam@ttsh.com.sg](mailto:stanley_lam@ttsh.com.sg)

[10]

**TÍTULO / TITLE:** - Multimodality imaging findings of pheochromocytoma with associated clinical and biochemical features in 53 patients with histologically confirmed tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Oct;201(4):825-33. doi: 10.2214/AJR.12.9576.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.12.9576](#)

**AUTORES / AUTHORS:** - Raja A; Leung K; Stamm M; Girgis S; Low G

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Radiology and Diagnostic Imaging, University of Alberta, Walter C. Mackenzie Health Sciences Centre, 2ª 2.41, 8440 112 St NW, Edmonton, AB T6G 2B7 Canada.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purpose of this study was to determine the spectrum of imaging appearances of pheochromocytoma and the associated clinical and biochemical features. MATERIALS AND METHODS. In this retrospective study, a citywide pathology database (2000-2011) was searched to identify the records of

patients with pheochromocytoma. The search yielded the cases of 53 patients (28 men, 25 women; mean age, 50 years). The institutional PACS and radiology information system records, hospital charts, and the provincial electronic health records of these patients were reviewed. Imaging appearances and clinical and biochemical features related to pheochromocytomas were recorded. RESULTS. One chart was not available for review. In the 52 cases analyzed, 40 of the patients had symptoms: 31 patients had hypertension; 10 had the triad of palpitations, diaphoresis, and headaches; and all had elevated urinary metanephrine concentrations. Seven patients had a familial syndrome, and five had bilateral pheochromocytomas. One patient had an extraadrenal pheochromocytoma, and five had malignant tumors. The mean size of pheochromocytomas was 4.0 cm. Most pheochromocytomas were heterogeneous (CT, 56%; MRI, 65%; ultrasound, 45%) and were MIBG positive (90%). Eleven of 34 (32%) pheochromocytomas had T2 signal intensity greater than that of the spleen. Most pheochromocytomas were less enhancing than the spleen (CT, 85%; MRI, 71%). Contrast-enhanced CT was performed on 33 tumors, of which 20 enhanced less than the spleen and 8 showed similar enhancement to the spleen; contrast-enhanced MRI was performed on 24 tumors, of which 12 enhanced less than the spleen and 5 showed similar enhancement to the spleen. Predominant cystic change was found in 4 of 20 (20%) ultrasound, 9 of 41 (22%) CT, and 11 of 34 (32%) MRI examinations. Eight of 34 (24%) pheochromocytomas were hemorrhagic, two (5%) had calcifications, and three of six were PET positive. Two cystic pheochromocytomas and one lipid-containing pheochromocytoma were misdiagnosed as adrenal adenomas. CONCLUSION. Most pheochromocytomas were heterogeneous at imaging, were MIBG positive, accompanied elevated urinary metanephrine concentrations, and were symptomatic. High T2 signal intensity was found in approximately one third of solid tumors. Atypical imaging features included homogeneity, cystic change, hemorrhage, intense enhancement, calcifications, intracellular lipid, bilaterality, and malignancy.

[11]

**TÍTULO / TITLE:** - Avoiding and nonexpressing: coping styles of patients with paragangliomas.

**RESUMEN / SUMMARY:** -

[ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=23969183](https://ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=23969183)

●● Enlace al texto completo (gratis o de pago) [1210/jc.2013-1340](https://doi.org/10.21101/jc.2013-1340)

**AUTORES / AUTHORS:** - van Hulsteijn LT; Kaptein AA; Louisse A; Smit JW; Corssmit EP

**INSTITUCIÓN / INSTITUTION:** - MD, Department of Endocrinology and Metabolic Diseases, Leiden University Medical Center, PO Box 9600, 2300 RC Leiden, The Netherlands.

[l.t.van\\_hulsteijn@lumc.nl](mailto:l.t.van_hulsteijn@lumc.nl).

**RESUMEN / SUMMARY:** - Context: Paraganglioma (PGL) patients and succinate dehydrogenase (SDH) gene mutation carriers at risk for PGLs have a decreased quality

of life (QoL). QoL may be affected by the strategy an individual uses when dealing with a stressful situation, ie, specific coping styles. Understanding the various approaches to coping may allow the development of targeted interventions to improve patient QoL. Objective: The objective of the study was to assess coping styles in PGL patients and SDH mutation carriers. Design: This was a cross-sectional study. Setting: The study was conducted at a tertiary referral center. Patients and Methods: Coping styles were assessed using the Utrecht Coping List. The results from the study cohort were compared with a control group and data derived from the literature. Potential differences in coping styles between the various SDH mutation carriers and PGL patients without an SDH mutation were explored. Results: Of the 174 patients who responded, 122 were SDHD, 25 SDHB, and 2 SDHC mutation carriers. An additional 25 patients lacked an SDH mutation. They recruited 100 peers as controls. Compared with the general population, the study cohort was more avoidant of problems ( $P < .001$ ) and reported less expression of emotion ( $P < .01$ ). Compared with patients with other conditions, they sought more social support ( $P < .001$ ). There were no significant differences in coping styles between the various categories of mutation carriers or PGL patients lacking a mutation. Conclusions: Coping styles of PGL patients and SDH mutation carriers differ from those of control and reference groups and include an avoidant coping style and a lack of emotional expression.

[12]

**TÍTULO / TITLE:** - Chronic Hyperinsulinemia Does Not Increase the Production Rate of High-Density Lipoprotein Apolipoprotein AI: Evidence From a Kinetic Study in Patients With Insulinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arterioscler Thromb Vasc Biol. 2013 Oct;33(10):2460-5. doi: 10.1161/ATVBAHA.113.301597. Epub 2013 Aug 1.

●● Enlace al texto completo (gratis o de pago) [1161/ATVBAHA.113.301597](#)

**AUTORES / AUTHORS:** - Duvillard L; Florentin E; Pont F; Petit JM; Baillot-Rudoni S; Penfornis A; Verges B

**INSTITUCIÓN / INSTITUTION:** - From the Faculte de Medecine, INSERM U866-Universite de Bourgogne, Dijon, France (L.D., E.F., F.P., J.-M.P., B.V.); Laboratoire de Biologie Medicale, CHU, Dijon, France (L.D., E.F.); Service d'Endocrinologie et Maladies Metaboliques, CHU, Dijon, France (J.-M.P. S.B.-R., B.V.); and Service d'Endocrinologie et Maladies Metaboliques, CHU, Besancon, France (A.P.).

**RESUMEN / SUMMARY:** - OBJECTIVE: In vitro studies showed that insulin stimulates the production of apolipoprotein AI (apoAI). Thus, we hypothesized that chronic hyperinsulinemia could contribute to the increase in the production of high-density lipoprotein apoAI that is observed in metabolic syndrome. APPROACH AND RESULTS: We performed an in vivo kinetic study with stable isotope in 7 patients with

insulinoma who showed hyperinsulinemia but no insulin resistance, 8 patients with insulin resistance, and 16 controls. Insulinemia was 3.1x ( $P<0.01$ ) higher in patients with insulinoma or insulin resistance than in controls in the fasting state and, respectively, 3.5x and 2.6x ( $P<0.05$ ) higher in the fed state. The high-density lipoprotein apoAI pool size was smaller in patients with insulin resistance than in controls ( $49.3\pm 5.4$  versus  $59.6\pm 7.7$  mg.kg<sup>-1</sup>;  $P<0.01$ ), whereas both the high-density lipoprotein apoAI fractional catabolic rate and the high-density lipoprotein apoAI production rate were higher ( $0.30\pm 0.07$  versus  $0.20\pm 0.04$  pool.d<sup>-1</sup>;  $P<0.0001$  and  $14.6\pm 1.5$  versus  $11.5\pm 1.9$  mg.kg<sup>-1</sup>.d<sup>-1</sup>;  $P<0.01$ , respectively). In contrast, no significant difference was observed for these parameters between patients with insulinoma and controls. In patients with insulinoma, the apoAI pool size tended to be greater than in patients with insulin resistance ( $56.3\pm 8.6$  versus  $49.3\pm 5.4$  mg.kg<sup>-1</sup>;  $P=0.078$ ), whereas both the apoAI fractional catabolic rate and the production rate were lower ( $0.20\pm 0.06$  versus  $0.30\pm 0.07$  pool.d<sup>-1</sup>;  $P<0.01$  and  $11.1\pm 1.6$  versus  $14.6\pm 1.5$  mg.kg<sup>-1</sup>.d<sup>-1</sup>;  $P<0.01$ , respectively). The apoAI fractional catabolic rate was the only variable associated with the apoAI production rate in multivariate analysis and explained 80% of its variance. CONCLUSIONS: Chronic endogenous hyperinsulinemia does not induce any increase in the apoAI production rate, which seems to be more dependent on the apoAI fractional catabolic rate.

[13]

**TÍTULO / TITLE:** - Comparative Biodistribution and Radiation Dosimetry of 68Ga-DOTATOC and 68Ga-DOTATATE in Patients with Neuroendocrine Tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Nucl Med. 2013 Oct;54(10):1755-1759. Epub 2013 Aug 8.

●● [Enlace al texto completo \(gratis o de pago\) 2967/inumed.113.120600](#)

**AUTORES / AUTHORS:** - Sandstrom M; Velikyan I; Garske-Roman U; Sorensen J; Eriksson B; Granberg D; Lundqvist H; Sundin A; Lubberink M

**INSTITUCIÓN / INSTITUTION:** - Nuclear Medicine and PET, Uppsala University, Uppsala, Sweden.

**RESUMEN / SUMMARY:** - 68Ga-DOTATOC and 68Ga-DOTATATE are 2 radiolabeled somatostatin analogs for in vivo diagnosis of neuroendocrine tumors with PET. The aim of the present work was to measure their comparative biodistribution and radiation dosimetry. METHODS: Ten patients diagnosed with neuroendocrine tumors were included. Each patient underwent a 45-min dynamic and 3 whole-body PET/CT scans at 1, 2, and 3 h after injection of each tracer on consecutive days. Absorbed doses were calculated using OLINDA/EXM 1.1. RESULTS: Data from 9 patients could be included in the analysis. Of the major organs, the highest uptake at 1, 2, and 3 h after injection was observed in the spleen, followed by kidneys and liver. For both tracers, the highest absorbed organ doses were seen in the spleen and urinary bladder wall, followed by

kidney, adrenals, and liver. The absorbed doses to the liver and gallbladder wall were slightly but significantly higher for 68Ga-DOTATATE. The total effective dose was 0.021 +/- 0.003 mSv/MBq for both tracers. CONCLUSION: The effective dose for a typical 100-MBq administration of 68Ga-DOTATATE and 68Ga-DOTATOC is 2.1 mSv for both tracers. Therefore, from a radiation dosimetry point of view, there is no preference for either tracer for PET/CT evaluation of somatostatin receptor-expressing tumors.

[14]

**TÍTULO / TITLE:** - Prognostic Significance of MTOR Pathway Component Expression in Neuroendocrine Tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Sep 20;31(27):3418-3425. Epub 2013 Aug 26.

●● Enlace al texto completo (gratis o de pago) [1200/JCO.2012.46.6946](#)

**AUTORES / AUTHORS:** - Qian ZR; Ter-Minassian M; Chan JA; Imamura Y; Hooshmand SM; Kuchiba A; Morikawa T; Brais LK; Daskalova A; Heafield R; Lin X; Christiani DC; Fuchs CS; Ogino S; Kulke MH

**INSTITUCIÓN / INSTITUTION:** - Zhi Rong Qian, Monica Ter-Minassian, Jennifer A. Chan, Yu Imamura, Susanne M. Hooshmand, Aya Kuchiba, Teppei Morikawa, Lauren K. Brais, Anastassia Daskalova, Rachel Heafield, Charles S. Fuchs, Shuji Ogino, Matthew H. Kulke, Dana-Farber Cancer Institute and Harvard Medical School; Monica Ter-Minassian, Xihong Lin, David C. Christiani, Shuji Ogino, Harvard School of Public Health; David C. Christiani, Massachusetts General Hospital, Harvard Medical School; Charles S. Fuchs, Shuji Ogino, Brigham and Women's Hospital, Boston, MA.

**RESUMEN / SUMMARY:** - PURPOSE: Clinical studies have implicated the mechanistic target of rapamycin (serine/threonine kinase; MTOR) pathway in the regulation of neuroendocrine tumor (NET) growth. We explored whether expression of MTOR pathway components has prognostic significance in NET patients. PATIENTS AND METHODS: We evaluated immunohistochemical expression of MTOR and phospho (p) - MTOR; its downstream targets RPS6KB1, RPS6, and EIF4EBP1; and its upstream regulators, in a cohort of 195 archival neuroendocrine tumors. We correlated expression levels with clinical outcomes, after adjusting for other prognostic variables. RESULTS: We observed anticipated correlations between expression of upstream components of the MTOR pathway and their downstream targets. Expression of PIK3CA, MTOR, or p-EIF4EBP1 was associated with high MKI67 (Ki-67) labeling index. We failed to identify clinical correlations associated with expression of the upstream regulators TSC1, TSC2, AKT, p-AKT, PDPK1, PTEN, PIK3R1, or PIK3CA. In contrast, high expression of MTOR or its activated downstream targets p-RPS6KB1, p-RPS6, or p-EIF4EBP1 was associated with adverse clinical outcomes. CONCLUSION: Our observations suggest that expression of MTOR or its downstream targets may be adverse prognostic factors in neuroendocrine tumors.

[15]

**TÍTULO / TITLE:** - Comment on: Butler et al. Marked Expansion of Exocrine and Endocrine Pancreas With Incretin Therapy in Humans With Increased Exocrine Pancreas Dysplasia and the Potential for Glucagon-Producing Neuroendocrine Tumors. Diabetes 2013;62:2595-2604.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diabetes. 2013 Oct;62(10):e16-7. doi: 10.2337/db13-0690.

●● Enlace al texto completo (gratis o de pago) [2337/db13-0690](#)

**AUTORES / AUTHORS:** - Heine RJ; Fu H; Kendall DM; Moller DE

**INSTITUCIÓN / INSTITUTION:** - Lilly Research Laboratories and Lilly Diabetes, Eli Lilly & Co., Indianapolis, Indiana.

[16]

**TÍTULO / TITLE:** - Reponse to Comments on: Butler et al. Marked Expansion of Exocrine and Endocrine Pancreas With Incretin Therapy in Humans With Increased Exocrine Pancreas Dysplasia and the Potential for Glucagon-Producing Neuroendocrine Tumors. Diabetes 2013;62:2595-2604.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diabetes. 2013 Oct;62(10):e19-22. doi: 10.2337/db13-0996.

●● Enlace al texto completo (gratis o de pago) [2337/db13-0996](#)

**AUTORES / AUTHORS:** - Butler AE; Campbell-Thompson M; Gurlo T; Dawson DW; Atkinson M; Butler PC

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, Los Angeles, California.

[17]

**TÍTULO / TITLE:** - Comment on: Butler et al. Marked Expansion of Exocrine and Endocrine Pancreas With Incretin Therapy in Humans With Increased Exocrine Pancreas Dysplasia and the Potential for Glucagon-Producing Neuroendocrine Tumors. Diabetes 2013;62:2595-2604.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diabetes. 2013 Oct;62(10):e18. doi: 10.2337/db13-0525.

●● Enlace al texto completo (gratis o de pago) [2337/db13-0525](#)

**AUTORES / AUTHORS:** - Engel SS; Golm GT; Lauring B

**INSTITUCIÓN / INSTITUTION:** - Merck Sharp & Dohme Corp., Whitehouse Station, New Jersey.

[18]

**TÍTULO / TITLE:** - Revised Staging Classification Improves Outcome Prediction for Small Intestinal Neuroendocrine Tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Sep 16.

- [Enlace al texto completo \(gratis o de pago\) 1200/JCO.2013.51.1477](#)

**AUTORES / AUTHORS:** - Kim MK; Warner RR; Roayaie S; Harpaz N; Ward SC; Itzkowitz S; Wisnivesky JP

**INSTITUCIÓN / INSTITUTION:** - Mount Sinai School of Medicine, New York, NY.

**RESUMEN / SUMMARY:** - **PURPOSE:** Small intestinal (SI) neuroendocrine tumors (NETs) have heterogeneous outcomes. The NET societies have recently proposed a TNM staging classification. In this study, we used population-based data to assess the validity of the staging system. **PATIENTS AND METHODS:** We identified patients with SI-NETS diagnosed between 1988 and 2009 from the Surveillance, Epidemiology, and End Results registry. We used Kaplan-Meier analysis to assess disease-specific survival according to TNM status. Cox models were constructed to evaluate differences in prognosis after controlling for potential confounders. **RESULTS:** We identified 6,792 patients with SI-NET. Although the current staging system was predictive of prognosis, there was overlap among some groups (stage I/IIA,  $P = .36$ ; stage IIB/IIIB,  $P = .70$ ). Additionally, stage IIIB patients had better survival than stage IIIA patients ( $P < .001$ ). Adjusted analyses showed similar outcomes for T1 versus T2 disease (hazard ratio [HR], 1.02; 95% CI, 0.63 to 1.66). Patients with T3 (HR, 3.60; 95% CI, 2.28 to 5.69) and T4 (HR, 5.50; 95% CI, 3.42 to 8.86) tumors had significantly worse survival than patients with T1 disease. N1 involvement conferred worse survival in T1 (HR, 3.08; 95% CI, 1.75 to 5.44) and T2 disease (HR, 2.73; 95% CI, 1.84 to 4.07) but not in T3 (HR, 0.99; 95% CI, 0.76 to 1.30) or T4 (HR, 0.98; 95% CI, 0.71 to 1.35) disease. A revised classification showed no overlap in survival across groups. **CONCLUSION:** Progressively more advanced T status is associated with worse SI-NET prognosis. Regional lymph node involvement is a marker of worse survival only among patients with T1 or T2 status. These results suggest that revisions to the current staging classification may be helpful.

[19]

**TÍTULO / TITLE:** - Clinicopathologic significance of immunostaining of alpha-thalassemia/mental retardation syndrome X-linked protein and death domain-associated protein in neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Oct;44(10):2199-203. doi: 10.1016/j.humpath.2013.04.025. Epub 2013 Aug 16.

●● Enlace al texto completo (gratis o de pago) [1016/j.humpath.2013.04.025](https://doi.org/10.1016/j.humpath.2013.04.025)

**AUTORES / AUTHORS:** - Chen SF; Kasajima A; Yazdani S; Chan MS; Wang L; He YY; Gao HW; Sasano H

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Tohoku University Hospital, Sendai, J980-8574 Japan; Department of Pathology, The Second Hospital of Jilin University, Changchun, 130041 China.

**RESUMEN / SUMMARY:** - alpha-Thalassemia/mental retardation syndrome X-linked protein (ATRX) and death domain-associated protein (DAXX) genes are tumor suppressors whose mutations have been identified in sporadic pancreatic neuroendocrine tumors as well as in patients with MEN1. However, it is unknown whether ATRX and DAXX alterations are specific for pancreatic neuroendocrine tumor. In addition, the association of ATRX/DAXX protein loss with tumor cell proliferation has not been examined. We, therefore, immunostained ATRX and DAXX in 10 gastric, 15 duodenal, 20 rectal, 70 pancreatic, and 22 pulmonary neuroendocrine tumors with 15 nonneoplastic pancreases and 27 pancreatic adenocarcinomas to elucidate the site-specific roles of ATRX/DAXX abnormalities. At least 1 loss of ATRX and DAXX immunoreactivity was detected in all neuroendocrine tumor cases but not in any of nonneoplastic pancreatic tissues or pancreatic adenocarcinomas. The loss of DAXX protein was correlated with the Ki-67 index (ATRX,  $P = .904$ ; DAXX,  $P = .044$ ). The status of DAXX immunoreactivity correlated positively with World Health Organization histologic grade ( $P = .026$ ). These results suggest that the status of ATRX or DAXX protein loss in neuroendocrine tumor differed among the organs in which these tumors arose, and these proteins may play site-specific roles in the development of these tumors.

[20]

**TÍTULO / TITLE:** - Functional Significance of the Novel H-RAS Gene Mutation M72I in a Patient with Medullary Thyroid Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Exp Clin Endocrinol Diabetes. 2013 Aug 9.

●● Enlace al texto completo (gratis o de pago) [1055/s-0033-1351299](https://doi.org/10.1055/s-0033-1351299)

**AUTORES / AUTHORS:** - Barollo S; Pezzani R; Cristiani A; Bertazza L; Rubin B; Bulfone A; Pelizzo MR; Torresan F; Mantero F; Pennelli G; Moro S; Mian C

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine, Endocrinology Unit, University of Padua, Italy.

**RESUMEN / SUMMARY:** - Medullary thyroid cancer (MTC) accounts for around 5-10% of all thyroid cancers. Though usually sporadic, 1 in 4 cases are of genetic origin, with germinal mutations in the RET proto-oncogene in familial forms and somatic mutations both in RET and in the RAS family genes in sporadic ones. This study aimed to characterize a rare H-RAS sequence variant -M72I- in a patient with sporadic MTC,

focusing on its functional significance. Mutation analysis was performed for the RET, N-RAS, K-RAS and H-RAS genes by direct sequencing. Western blot analysis was done on 4 thyroid tissues from 1 patient carrying the M72I mutation in H-RAS, 1 with the Q61R mutation in H-RAS, 1 with no RET, H-RAS, K-RAS or N-RAS gene mutations, and 1 normal thyroid, using different antibodies against Erk1/2, phospho-Erk1/2 (Thr202/Tyr204), Akt and phospho-Akt (Ser473). Large-scale molecular dynamics simulations were completed for H-RAS wt and H-RAS M72I. Western blot analysis demonstrated that both MAPK and PI3K/Akt pathways were activated in the MTC patient carrying the M72I variant. In silico results showed conformational changes in H-RAS that could influence its activation by Sos and phosphate binding. Results of molecular dynamics were consistent with Western blot experiments. The M72I mutation may contribute effectively to proliferation and survival signaling throughout the MAPK and PI3K/Akt pathways. This work underscores the importance of studying genetic alterations that may lead to carcinogenesis.

[21]

**TÍTULO / TITLE:** - Targeting dopamine receptors subtype 2 (D2DR) in pheochromocytomas: head-to-head comparison between in vitro and in vivo findings.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Sep 5.

●● [Enlace al texto completo \(gratis o de pago\) 1210/jc.2013-2269](#)

**AUTORES / AUTHORS:** - Saveanu A; Sebag F; Guillet B; Archange C; Essamet W; Barlier A; Palazzo FF; Taieb D

**INSTITUCIÓN / INSTITUTION:** - Aix-Marseille Universite, CNRS, CRN2M UMR7286 (AS, AB), Department of Endocrine Surgery, LA Timone University Hospital (FS, FFP), Department of Nuclear Medicine, LA Timone University Hospital (BG, CA, DT), Department of Pathology and neuropathology (WE), Laboratory of Molecular biology, AP-HM, Conception Hospital (AS, AB). Manuscript category: Brief Reports. Clinical Trial Registration Number : NCT 00875407.

**RESUMEN / SUMMARY:** - Context Dopamine subtype 2 receptors (D2DR) are overexpressed in pheochromocytomas (PHEOs). D2DR-expressing tumors can be visualized by iodine-123 labeled iodobenzamide (123I-IBZM) single photon emission computed tomography (SPECT). Objective The hypothesis was that D2DR high expression in PHEOs would allow in vivo visualization through 123I-IBZM SPECT. The present prospective pilot study (NCT 00875407) aims to evaluate the performance of 123I-IBZM SPECT in PHEOs, and to correlate the tumor uptake with D2DR expression in tumor samples after surgery. Setting, Materials and Methods Ten unrelated patients with PHEOs were evaluated, prior to adrenalectomy, with 123I-IBZM SPECT (whole body scan at 4h and 24h post-injection; and SPECT centered on the abdomen at 24h). D2DR mRNA and protein expression were evaluated in all tumors by quantitative real-

time RT-PCR and immunohistochemistry, respectively. Main Outcome Measure: Intensity of tumoral uptake of 123I-IBZM. Results: All PHEOs express D2DR mRNA (ranging from 2.1 to 14.7 copy/copy ss-Gus) and protein (immunostaining score: moderate or strong in 9/10 cases). However, none of the patients (0 %) showed increased tumor uptake of 123I-IBZM. Conclusions: These results suggest that 123I-IBZM is not a useful radiopharmaceutical in the detection and characterization of PHEOs despite D2DR expression. Our findings and data from the related literature may support different hypotheses to explain failure of D2DR targeting by 123I-IBZM.

[22]

**TÍTULO / TITLE:** - ASCL1 and RET expression defines a clinically relevant subgroup of lung adenocarcinoma characterized by neuroendocrine differentiation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Sep 16. doi: 10.1038/onc.2013.359.

●● [Enlace al texto completo \(gratis o de pago\) 1038/onc.2013.359](#)

**AUTORES / AUTHORS:** - Kosari F; Ida CM; Aubry MC; Yang L; Kovtun IV; Klein JL; Li Y; Erdogan S; Tomaszek SC; Murphy SJ; Bolette LC; Kolbert CP; Yang P; Wigle DA; Vasmataz G

**INSTITUCIÓN / INSTITUTION:** - Department of Molecular Medicine, Mayo Clinic, Rochester, MN, USA.

**RESUMEN / SUMMARY:** - ASCL1 is an important regulatory transcription factor in pulmonary neuroendocrine (NE) cell development, but its value as a biomarker of NE differentiation in lung adenocarcinoma (AD) and as a potential prognostic biomarker remains unclear. We examined ASCL1 expression in lung cancer samples of varied histologic subtype, clinical outcome and smoking status and compared with expression of traditional NE markers. ASCL1 mRNA expression was found almost exclusively in smokers with AD, in contrast to non-smokers and other lung cancer subtypes. ASCL1 protein expression by immunohistochemical (IHC) analysis correlated best with synaptophysin compared with chromogranin and CD56/NCAM. Analysis of a compendium of 367 microarray-based gene expression profiles in stage I lung adenocarcinomas identified significantly higher expression levels of the RET oncogene in ASCL1-positive tumors (ASCL1+) compared with ASCL1- tumors (q-value <10<sup>-9</sup>). High levels of RET expression in ASCL1+ but not in ASCL1- tumors was associated with significantly shorter overall survival (OS) in stage 1 (P=0.007) and in all AD (P=0.037). RET protein expression by IHC had an association with OS in the context of ASCL1 expression. In silico gene set analysis and in vitro experiments by ASCL1 shRNA in AD cells with high endogenous expression of ASCL1 and RET implicated ASCL1 as a potential upstream regulator of the RET oncogene. Also, silencing ASCL1 in AD cells markedly reduced cell growth and motility. These results suggest that ASCL1 and RET expression defines a clinically relevant subgroup of approximately 10% of AD

characterized by NE differentiation. Oncogene advance online publication, 16 September 2013; doi:10.1038/onc.2013.359.

[23]

**TÍTULO / TITLE:** - The T Antigen locus of Merkel Cell Polyomavirus Down-regulates Human Toll-like Receptor 9 Expression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Virol. 2013 Sep 25.

●● Enlace al texto completo (gratis o de pago) [1128/JVI.01786-13](#)

**AUTORES / AUTHORS:** - Shahzad N; Shuda M; Gheit T; Kwun HJ; Cornet I; Saidj D; Zannetti C; Hasan U; Chang Y; Moore PS; Accardi R; Tommasino M

**INSTITUCIÓN / INSTITUTION:** - Infections and Cancer Biology Group, International Agency for Research on Cancer, World Health Organization, 69372 Lyon, France.

**RESUMEN / SUMMARY:** - Establishment of a chronic infection is a key event in virus-mediated carcinogenesis. Several cancer-associated, double-stranded (ds) DNA viruses act via their oncoproteins to down-regulate Toll-like receptor 9 (TLR9), a key receptor in the host innate immune response that senses viral or bacterial dsDNA. A novel oncogenic virus, Merkel cell polyomavirus (MCPyV), has been recently identified that causes up to 80% of Merkel cell carcinomas (MCC). However, it is not yet known whether this oncogenic virus also disrupts immune-related pathways. We find that MCPyV large T antigen (LT) expression down-regulates TLR9 expression in epithelial and MCC-derived cells. Accordingly, silencing of LT expression results in up-regulation of mRNA TLR9 levels. In addition, small T antigen (sT) also appears to inhibit TLR9 expression, since inhibition of its expression also resulted in an increase of TLR9 mRNA levels. LT inhibits TLR9 expression by decreasing the mRNA levels of the C/EBPbeta transactivator, a positive regulator of the TLR9 promoter. Chromatin immunoprecipitation reveals that C/EBPbeta binding at a C/EBPbeta response element (RE) in the TLR9 promoter is strongly inhibited by expression of MCPyV early genes and mutation of the C/EBP RE prevents MCPyV down-regulation of TLR9. A survey of BKPyV, JCPyV, KIPyV, MCPyV, SV40, and WUPyV early genes revealed that only BKPyV and MCPyV are potent inhibitors of TLR9 gene expression. MCPyV LT targeting of C/EBP transactivators is likely to play an important role in viral persistence and potentially inhibit host cell immune responses during MCPyV tumorigenesis.

[24]

**TÍTULO / TITLE:** - Effect of Temozolomide in Patients with Metastatic Bronchial Carcinoids.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Neuroendocrinology. 2013 Aug 31.

●● Enlace al texto completo (gratis o de pago) [1159/000354760](#)

**AUTORES / AUTHORS:** - Crona J; Fanola I; Lindholm DP; Antonodimitrakis P; Oberg K; Eriksson B; Granberg D

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Sciences, Uppsala University, Uppsala, Sweden.

**RESUMEN / SUMMARY:** - Introduction: Metastatic bronchial carcinoids are rare neoplasms, where efforts of medical treatment so far have been disappointing. A previous study from our center indicated that temozolomide might be of value. Materials and Methods: All patients with progressive metastatic bronchial carcinoid treated with temozolomide as monotherapy at our center between 2004 and 2010 (n = 31) were included in this retrospective study. 14 tumors were classified as typical and 15 as atypical carcinoids, whereas 2 tumors could not be classified. Temozolomide was given on 5 consecutive days every 4 weeks. Toxicity was evaluable in 28 of 31 patients, and 22 patients were evaluable by RECIST 1.1. Results: There were no complete responses. A partial response was seen in 3 patients (14%), stable disease in 11 (52%) and progressive disease in 7 patients (33%). Median progression-free survival was 5.3 months and median overall survival was 23.2 months from the start of temozolomide. Toxicities grade 3-4 were noted in 4 patients, thrombocytopenia (n = 3) and leukopenia (n = 1). Conclusion: Temozolomide as monotherapy shows activity in metastatic bronchial carcinoids. Regimens combining temozolomide with other agents (e.g. capecitabine and/or bevacizumab, everolimus, radiolabeled somatostatin analogues) should be further studied in these patients.

[25]

**TÍTULO / TITLE:** - Cabozantinib in Progressive Medullary Thyroid Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Sep 3.

●● Enlace al texto completo (gratis o de pago) [1200/JCO.2012.48.4659](#)

**AUTORES / AUTHORS:** - Elisei R; Schlumberger MJ; Muller SP; Schoffski P; Brose MS; Shah MH; Licitra L; Jarzab B; Medvedev V; Kreissl MC; Niederle B; Cohen EE; Wirth LJ; Ali H; Hessel C; Yaron Y; Ball D; Nelkin B; Sherman SI

**INSTITUCIÓN / INSTITUTION:** - Rossella Elisei, University of Pisa, Pisa; Lisa Licitra, Fondazione Istituto Di Ricovero e Cura a Carattere Scientifico-Istituto Nazionale dei Tumori, Milan, Italy; Martin J. Schlumberger, Institut Gustave Roussy, University Paris-Sud, Villejuif, France; Stefan P. Muller, Universitätsklinikum Essen, Essen; Michael C. Kreissl, Universitätsklinikum Würzburg, Würzburg, Germany; Patrick Schoffski, University Hospitals Leuven, Leuven, Belgium; Marcia S. Brose, University of Pennsylvania Abramson Cancer Center, Philadelphia, PA; Manisha H. Shah, Ohio State University Medical Center, Columbus, OH; Barbara Jarzab, Centrum Onkologii-Instytut im. Marii Skłodowskiej-Curie Oddział w Gliwicach, Gliwice, Poland; Viktor Medvedev,

Medical Radiological Research Centre of the Russian Academy of Medical Sciences, Obninsk, Russia; Bruno Niederle, Medizinische Universität Wien, Wien, Austria; Ezra E.W. Cohen, University of Chicago, Chicago, IL; Lori J. Wirth, Massachusetts General Hospital, Boston, MA; Haythem Ali, Henry Ford Health System, Detroit, MI; Colin Hessel and Yifan Yaron, Exelixis, South San Francisco, CA; Douglas Ball and Barry Nelkin, Johns Hopkins University School of Medicine, Baltimore, MD; and Steven I. Sherman, University of Texas MD Anderson Cancer Center, Houston, TX.

**RESUMEN / SUMMARY:** - PURPOSE: Cabozantinib, a tyrosine kinase inhibitor (TKI) of hepatocyte growth factor receptor (MET), vascular endothelial growth factor receptor 2, and rearranged during transfection (RET), demonstrated clinical activity in patients with medullary thyroid cancer (MTC) in phase I. PATIENTS AND METHODS: We conducted a double-blind, phase III trial comparing cabozantinib with placebo in 330 patients with documented radiographic progression of metastatic MTC. Patients were randomly assigned (2:1) to cabozantinib (140 mg per day) or placebo. The primary end point was progression-free survival (PFS). Additional outcome measures included tumor response rate, overall survival, and safety. RESULTS: The estimated median PFS was 11.2 months for cabozantinib versus 4.0 months for placebo (hazard ratio, 0.28; 95% CI, 0.19 to 0.40; P < .001). Prolonged PFS with cabozantinib was observed across all subgroups including by age, prior TKI treatment, and RET mutation status (hereditary or sporadic). Response rate was 28% for cabozantinib and 0% for placebo; responses were seen regardless of RET mutation status. Kaplan-Meier estimates of patients alive and progression-free at 1 year are 47.3% for cabozantinib and 7.2% for placebo. Common cabozantinib-associated adverse events included diarrhea, palmar-plantar erythrodysesthesia, decreased weight and appetite, nausea, and fatigue and resulted in dose reductions in 79% and holds in 65% of patients. Adverse events led to treatment discontinuation in 16% of cabozantinib-treated patients and in 8% of placebo-treated patients. CONCLUSION: Cabozantinib (140 mg per day) achieved a statistically significant improvement of PFS in patients with progressive metastatic MTC and represents an important new treatment option for patients with this rare disease. This dose of cabozantinib was associated with significant but manageable toxicity.

[26]

**TÍTULO / TITLE:** - Clinicopathologic characteristics of pancreatic neuroendocrine tumors and relation of somatostatin receptor type 2<sup>a</sup> to outcomes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Sep 10. doi: 10.1002/cncr.28341.

●● Enlace al texto completo (gratuito o de pago) [1002/cncr.28341](#)

**AUTORES / AUTHORS:** - Okuwaki K; Kida M; Mikami T; Yamauchi H; Imaizumi H; Miyazawa S; Iwai T; Takezawa M; Saegusa M; Watanabe M; Koizumi W

**INSTITUCIÓN / INSTITUTION:** - Department of Gastroenterology, Kitasato University East Hospital, Kanagawa, Japan.

**RESUMEN / SUMMARY:** - BACKGROUND: The impact of somatostatin receptor type 2 (SSTR-2<sup>a</sup>) expression levels on outcomes in patients with pancreatic neuroendocrine tumors (PNETs) has not been evaluated. METHODS: Correlations between clinicopathologic characteristics, including SSTR-2<sup>a</sup> expression and outcomes, were retrospectively studied in 79 patients with pancreatic neuroendocrine tumors (PNETs). RESULTS: The SSTR-2<sup>a</sup> score was 0 in 27% of patients, 1 in 24% of patients, 3 in 30% of patients, and 4 in 18% of patients. The overall survival rate was 87% at 1 year, 77% at 3 years, and 71% at 5 years. On univariate analysis, a pancreatic tumor that measured  $\geq 20$  mm in greatest dimension, stage IV disease, vascular invasion, neuroendocrine carcinoma (NEC), and an SSTR-2<sup>a</sup> score of 0 were associated significantly with poor outcomes. On multivariate analysis, NEC (P = .000; hazard ratio, 28.8; 95% confidence interval, 7.502-111.240) and an SSTR-2<sup>a</sup> score of 0 (P = .001; hazard ratio, 3.611; 95% confidence interval, 1.344-9.702) were related independently to poor outcomes. CONCLUSIONS: The current analysis of prognostic factors in patients with PNETs demonstrated that NEC and an SSTR-2<sup>a</sup> score of 0 both were significant independent predictors of poor outcomes. The results suggest that the assessment of SSTR-2<sup>a</sup> may facilitate the selection of treatment regimens and the prediction of outcomes. Because a considerable proportion of patients with NEC have SSTR-2<sup>a</sup>-positive tumors, further analyses of the usefulness of somatostatin analogues are warranted in patients who have SSTR-2<sup>a</sup>-positive NEC. Cancer 2013. © 2013 American Cancer Society.

[27]

**TÍTULO / TITLE:** - Pathologic nodal evaluation is increasingly commonly performed for patients with Merkel cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Am Acad Dermatol. 2013 Oct;69(4):653-4. doi: 10.1016/j.jaad.2013.06.002.

●● Enlace al texto completo (gratis o de pago) [1016/j.jaad.2013.06.002](https://doi.org/10.1016/j.jaad.2013.06.002)

**AUTORES / AUTHORS:** - Paulson KG; Iyer JG; Byrd DR; Nghiem P

**INSTITUCIÓN / INSTITUTION:** - Department of Dermatology/Medicine, University of Washington, Seattle, Washington; Department of Pathology, University of Washington, Seattle, Washington.

[28]

**TÍTULO / TITLE:** - A rare finding of a rare disease: a case report of a giant insulinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pancreas. 2013 Oct;42(7):1195-6. doi: 10.1097/MPA.0b013e31829004d9.

●● Enlace al texto completo (gratis o de pago)

[1097/MPA.0b013e31829004d9](https://doi.org/10.1097/MPA.0b013e31829004d9)

**AUTORES / AUTHORS:** - Fenech VA; Ellul P; Abela A; Caruana C; Cassar M; Laferla G

**INSTITUCIÓN / INSTITUTION:** - Department of Gastroenterology Mater Dei Hospital Malta  
[valerie\\_fenech@yahoo.com](mailto:valerie_fenech@yahoo.com) Department of Diabetes and Endocrinology Mater Dei Hospital Malta Department of Surgery Mater Dei Hospital Malta.

[29]

**TÍTULO / TITLE:** - Asymmetric Dimethylarginine (ADMA) and Soluble Vascular Cell Adhesion Molecule 1 (sVCAM-1) as Circulating Markers for Endothelial Dysfunction in Patients with Pheochromocytoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Exp Clin Endocrinol Diabetes. 2013 Sep 3.

●● Enlace al texto completo (gratis o de pago) [1055/s-0033-1353183](https://doi.org/10.555/s-0033-1353183)

**AUTORES / AUTHORS:** - Vasilev V; Matrozova J; Elenkova A; Vandeva S; Kirilov G; Zacharieva S

**INSTITUCIÓN / INSTITUTION:** - Department of Hypothalamic, Pituitary, Adrenal and Gonadal Diseases, Clinical Centre of Endocrinology, Sofia, Bulgaria.

**RESUMEN / SUMMARY:** - Endothelial dysfunction is a common feature of hypertension and is associated with reduced nitric oxide bioavailability. The endogenous inhibitor of nitric oxide synthase, asymmetric dimethylarginine (ADMA), and soluble adhesion molecules such as vascular cell adhesion molecule 1 (sVCAM-1) have been established as markers of endothelial dysfunction in a number of pathologic conditions including essential hypertension. There is little information, however, about these markers in endocrine hypertension. To investigate the levels of circulating ADMA and sVCAM-1 in patients with pheochromocytoma. Serum ADMA and sVCAM-1 concentrations were assayed by ELISA technique in 18 patients with pheochromocytoma, 18 patients with essential hypertension (EH) and 18 healthy subjects serving as a control group. ADMA and sVCAM-1 levels were significantly elevated in pheochromocytoma patients compared to normotensive healthy controls (0.479±0.072 vs. 0.433±0.054 micromol/l, p=0.037 and 690±181 vs. 577±108 ng/ml, p=0.03, respectively). Patients with EH also had higher ADMA concentrations than the control group, but the difference was not significant (0.476±0.075 vs. 0.433±0.054 micromol/l, p=0.06). No associations were found between the levels of ADMA, sVCAM-1 and some potential risk factors for endothelial dysfunction. Endothelial function is impaired in patients with pheochromocytoma as indicated by the elevated circulating levels of ADMA and sVCAM-1. The lack of association of these markers with catecholamines,

glucose and lipid abnormalities together with their comparable levels in EH patients suggests that endothelial dysfunction is most likely related to hypertension itself.

[30]

**TÍTULO / TITLE:** - Identification of Somatic VHL Gene Mutations in Sporadic Head and Neck Paragangliomas in Association With Activation of the HIF-1alpha/miR-210 Signaling Pathway.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Jul 31.

●● [Enlace al texto completo \(gratis o de pago\) 1210/jc.2013-1636](#)

**AUTORES / AUTHORS:** - Merlo A; Bernaldo de Quiros S; de Santamaria IS; Pitiot AS; Balbin M; Astudillo A; Scola B; Aristegui M; Quer M; Suarez C; Chiara MD

**INSTITUCIÓN / INSTITUTION:** - Servicio de Otorrinolaringología (A.M., S.B.d.Q., I.S.d.S., C.S., M.-D.C.), Oncología Molecular (A.S.P., M.B.), and Anatomía Patológica (A.A.), Hospital Universitario Central de Asturias, Instituto Universitario de Oncología del Principado de Asturias, Universidad de Oviedo, E-33006 Oviedo, España; Servicio de Otorrinolaringología (B.S., M.A.), Hospital Gregorio Marañón, Madrid, España; and Servicio de Otorrinolaringología (M.Q.), Hospital de la Santa Creu i Sant Pau, Barcelona, España.

**RESUMEN / SUMMARY:** - Context: Head and neck paragangliomas (HNPGLs) arise from parasympathetic paraganglia, and 35% to 45% are hereditary caused by mutations in succinate dehydrogenase (SDH) genes. The connection between SDH and tumor development is unclear. The most accepted hypothesis proposes a central role for the pseudohypoxic (pHx) pathway activated by hypoxia-inducible factor (HIF). Paradoxically, we showed that activation of HIF in HNPGLs is restricted to a subset of HNPGLs lacking SDH mutations. These tumors overexpress HIF-1alpha protein and target genes and the HIF-inducible microRNA miR-210 (pHx-HNPGLs). Objective: The present study aimed at unraveling the SDH-independent mechanisms involved in the activation of HIF in HNPGLs. Design: The VHL gene was analyzed in 53 tumors by gene sequencing, multiplex-ligation-dependent probe amplification, and quantitative PCR. The miR-210, HIF-1alpha, and CA9 levels were used as markers of the pHx gene signature. Meta-analysis of the transcriptome of pHx-HNPGLs was performed using the OncoPrint platform. Assays in cells lacking or with nonfunctional pVHL and HIF-1alpha were performed to analyze the role of pVHL/HIF-1alpha on miR-210 expression. Results: We identified, for the first time, somatic VHL mutations in HNPGLs. These were found in 2 of 4 pHx-HNPGLs with concomitant loss of heterozygosity in one of them; but not in non-pHx-HNPGLs. Meta-analysis of the transcriptome of pHx-HNPGLs revealed that these tumors are highly related to clear cell renal cell carcinoma. Cell-based assays showed that loss of pVHL lead to upregulation of miR-210 mainly via HIF-1alpha activation. Conclusions: VHL, involved in tumorigenesis of PGLs and clear cell

renal cell carcinomas, may be an important player in the pathogenesis of sporadic HNPGLs via activation of an HIF-1alpha/miR-210 pHx pathway.

[31]

**TÍTULO / TITLE:** - Cathepsin B Contributes to Atg7-induced NLRP3 Dependent Pro-inflammatory Response and Aggravates Lipotoxicity in Rat Insulinoma Cell Line.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Biol Chem. 2013 Aug 28.

●● Enlace al texto completo (gratis o de pago) [1074/jbc.M113.494286](#)

**AUTORES / AUTHORS:** - Li S; Du L; Zhang L; Hu Y; Xia W; Wu J; Zhu J; Chen L; Zhu F; Li C; Yang S

**INSTITUCIÓN / INSTITUTION:** - Nanjing Normal University, China.

**RESUMEN / SUMMARY:** - Abstract Impairment of glucose-stimulated insulin secretion (GSIS) caused by palmitate because of its lipotoxicity was found in beta cells. Recent studies have indicated that defects in autophagy contribute to pathogenesis in T2D. Here, we reported that autophagy related 7 (Atg7) induced excessive autophagic activation in INS-1(823/13) cells exposure to saturated fatty acids. Atg7-induced Cathepsin B (CTSB) overexpression resulted in unexpectedly significant increased pro-inflammatory chemokine and cytokine production level of IL-1beta, MCP-1, IL-6, and TNF-alpha. Inhibition receptor interacting protein (RIP1) did not affect inflammatory response ruling out involvement of necrosis. CTSB siRNA suppressed inflammatory response but did not affect apoptosis significantly suggested that CTSB was a molecular linker between autophagy and pro-inflammatory response. Blocking Caspase 3 suppressed apoptosis but did not affect inflammatory response suggested that CTSB induced inflammatory effects independent of apoptosis. Silencing of the NLRP3 receptor, completely abolished IL-1beta secretion, and completely abolished the down-regulation effects of Atg7-induced CTSB overexpression on GSIS impairment, thus identifying NLRP3 inflammasome as autophagy-responsive element in pancreatic INS-1(823/13) cell line. Combined together, our results indicated that CTSB contributed to Atg7 induced NLRP3 dependent pro-inflammatory response resulted in lipotoxicity aggravation, independent of apoptosis in pancreatic INS-1(823/13) cell line.

[32]

**TÍTULO / TITLE:** - Sinonasal paraganglioma with long-delayed recurrence and metastases: genetic and imaging findings.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Sep 12.

●● Enlace al texto completo (gratis o de pago) [1210/jc.2013-2320](#)

**AUTORES / AUTHORS:** - Michel J; Taieb D; Jolibert M; Torrents J; Wassef M; Morange I; Essamet W; Barlier A; Dessi P; Fakhry N

**INSTITUCIÓN / INSTITUTION:** - 1Department of Otorhinolaryngology - Head and Neck Surgery, LA Timone University Hospital, REFCOR, Aix-Marseille University, France;

**RESUMEN / SUMMARY:** - Context:Sinonasal paragangliomas (SNPGL) have rarely been reported in the literature. They are often aggressive.Patient:We report an original case of SNPGL with a tumor recurrence diagnosed 13 years after resection of the primary tumor. SRS and [18F]-FDG PET/CT were the most sensitive functional imaging techniques and ruled out distant metastases. Interestingly, [18F]-FDOPA PET/CT was negative, a feature that may be considered a sign of functional dedifferentiation. Screening for germline mutations of the SDHB, SDHC, SDHD, SDHAF2, VHL, MAX and TMEM127 was negative.Conclusion:The diagnosis of malignancy remains challenging at initial diagnosis and patients should be followed during their entire lifetime.

[33]

**TÍTULO / TITLE:** - Clinical remission of Merkel cell carcinoma after treatment with imatinib.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Am Acad Dermatol. 2013 Oct;69(4):e181-3. doi: 10.1016/j.jaad.2013.03.042.

●● Enlace al texto completo (gratis o de pago) [1016/j.jaad.2013.03.042](https://doi.org/10.1016/j.jaad.2013.03.042)

**AUTORES / AUTHORS:** - Loader DE; Feldmann R; Baumgartner M; Breier F; Schrama D; Becker JC; Steiner A

**INSTITUCIÓN / INSTITUTION:** - Department of Dermatology and Venerology, Hietzing Municipal Hospital Vienna, Vienna, Austria. Electronic address: [dagmara.loader@wienkav.at](mailto:dagmara.loader@wienkav.at).

[34]

**TÍTULO / TITLE:** - An exploration of pathways involved in lung carcinoid progression using gene expression profiling.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Carcinogenesis. 2013 Oct 1.

●● Enlace al texto completo (gratis o de pago) [1093/carcin/bgt271](https://doi.org/10.1093/carcin/bgt271)

**AUTORES / AUTHORS:** - Swarts DR; Van Neste L; Henfling ME; Eijkenboom I; Eijk PP; van Velthuysen ML; Vink A; Volante M; Ylstra B; Van Criekinge W; van Engeland M; Ramaekers FC; Speel EJ

**INSTITUCIÓN / INSTITUTION:** - Department of Molecular Cell Biology, GROW - School for Oncology & Developmental Biology, Maastricht University Medical Center, PO Box 616, 6200 MD Maastricht, The Netherlands.

**RESUMEN / SUMMARY:** - Pulmonary carcinoids comprise a well-differentiated subset of neuroendocrine tumors usually associated with a favorable prognosis, but mechanisms underlying disease progression are poorly understood. In an explorative approach to identify pathways associated with progression, we compared gene expression profiles of tumors from five patients with a favorable and five with a poor disease outcome. Differentially expressed genes were validated using quantitative real-time PCR on 65 carcinoid tumors, in combination with survival analysis. One of the identified pathways was further examined using immunohistochemistry. As compared with other chromosomal locations, a significantly higher number of genes downregulated in carcinoids with a poor prognosis were located at chromosome 11q (P = 0.00017), a region known to be frequently lost in carcinoids. In addition, a number of upregulated genes were found involved in the mitotic spindle checkpoint, the chromosomal passenger complex (CPC), mitotic kinase CDC2 activity and the BRCA-Fanconi anemia pathway. At the individual gene level, BIRC5 (survivin), BUB1, CD44, IL20RA, KLK12 and OTP were independent predictors of patient outcome. For survivin, the number of positive nuclei was also related to poor prognosis within the group of carcinoids. Aurora B kinase and survivin, major components of the CPC, were particularly upregulated in high-grade carcinomas and may therefore comprise therapeutic targets for these tumors. To our knowledge, this is the first expression profiling study focusing specifically on pulmonary carcinoids and progression. We have identified novel pathways underlying malignant progression and validated several genes as being strong prognostic indicators, some of which could serve as putative therapeutic targets.

[35]

**TÍTULO / TITLE:** - Inhibin-expressing clear cell neuroendocrine tumor of the ampulla: an unusual presentation of von Hippel-Lindau disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Virchows Arch. 2013 Oct;463(4):593-597. Epub 2013 Aug 4.

●● Enlace al texto completo (gratis o de pago) [1007/s00428-013-1465-6](#)

**AUTORES / AUTHORS:** - Gucer H; Szentgyorgyi E; Ezzat S; Asa SL; Mete O

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University Health Network, 200 Elizabeth Street, 11th floor, Toronto, Ontario,, M5G 2C4, Canada.

**RESUMEN / SUMMARY:** - von Hippel-Lindau (VHL) disease is a hereditary autosomal dominant disorder associated with deletions or mutations in the VHL tumor suppressor gene. Characteristically, up to 60 % of neuroendocrine tumors (NETs) associated with VHL disease display a spectrum of clear cell morphology including multivacuolated lipid-rich cell change. Unlike neurofibromatosis type 1 and multiple endocrine neoplasia type 1 syndromes, ampullary NETs have not been described in association with VHL disease. In this report, we discuss the features of an incidental ampullary

clear cell NET occurring in a patient with pancreatic VHL disease including multiple pancreatic NETs. The ampullary lesion consisted of epithelial cells resembling lipoblasts or signet ring cells. In our case, all NETs showing clear cell change were positive for inhibin. While the underlying mechanism of this finding is largely unknown, it is of note that positivity for inhibin has not been observed in clear cell NETs associated with multiple endocrine neoplasia type 1 syndrome. Our case proves that NETs can develop in the ampullary region in patients with VHL; clear cell change can occur in these lesions and can mimic signet ring cell carcinoma. This issue is of clinical significance especially in small biopsy samples; thus, positivity for keratin alone should not be taken as evidence of an adenocarcinoma. Moreover, demonstration of inhibin expression in a NET with clear cell change along with other clinical stigmata should alert the diagnostician to the possibility of VHL disease. However, further larger series examining inhibin expression in both syndrome-related and sporadic clear cell NETs are needed to confirm our findings.

[36]

**TÍTULO / TITLE:** - MicroRNA Expression Patterns Related to Merkel Cell Polyomavirus Infection in Human Merkel Cell Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Invest Dermatol. 2013 Aug 20. doi: 10.1038/jid.2013.355.

●● [Enlace al texto completo \(gratis o de pago\) 1038/jid.2013.355](#)

**AUTORES / AUTHORS:** - Xie H; Lee L; Caramuta S; Hoog A; Browaldh N; Bjornhagen V; Larsson C; Lui WO

**INSTITUCIÓN / INSTITUTION:** - 1] Department of Oncology-Pathology, Karolinska Institutet, Stockholm, Sweden [2] Cancer Center Karolinska, Karolinska University Hospital, Stockholm, Sweden.

**RESUMEN / SUMMARY:** - Merkel cell carcinoma (MCC) is an aggressive and lethal type of neuroendocrine skin cancer. Mutated Merkel cell polyomavirus (MCV) is commonly found in MCC, and leads to upregulation of the survivin oncogene. However, approximately 20% of MCC tumors do not have detectable MCV, suggesting alternative etiologies for this tumor type. In this study, our aim was to evaluate microRNA (miRNA) expression profiles and their associations with MCV status and clinical outcomes in MCC. We showed that miRNA expression profiles were distinct between MCV-positive (MCV+) and MCV-negative (MCV-) MCCs and further validated that miR-203, miR-30a-3p, miR-769-5p, miR-34a, miR-30a-5p, and miR-375 were significantly different. We also identified a subset of miRNAs associated with tumor metastasis and MCC-specific survival. Functionally, overexpression of miR-203 was found to inhibit cell growth, induce cell cycle arrest, and regulate survivin expression in MCV- MCC cells, but not in MCV+ MCC cells. Our findings reveal a mechanism of survivin expression regulation in MCC cells, and provide insights into the role of miRNAs in MCC

tumorigenesis. Journal of Investigative Dermatology advance online publication, 19 September 2013; doi:10.1038/jid.2013.355.

[37]

**TÍTULO / TITLE:** - Sorafenib and bevacizumab combination targeted therapy in advanced neuroendocrine tumour: A phase II study of Spanish Neuroendocrine Tumour Group (GETNE0801).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer. 2013 Sep 5. pii: S0959-8049(13)00549-2. doi: 10.1016/j.ejca.2013.06.042.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejca.2013.06.042](http://1016/j.ejca.2013.06.042)

**AUTORES / AUTHORS:** - Castellano D; Capdevila J; Sastre J; Alonso V; Llanos M; Garcia-Carbonero R; Manzano Mozo JL; Sevilla I; Duran I; Salazar R

**INSTITUCIÓN / INSTITUTION:** - Hospital Universitario 12 de Octubre, España. Electronic address: [cdanicas@hotmail.es](mailto:cdanicas@hotmail.es).

**RESUMEN / SUMMARY:** - BACKGROUND: Sorafenib and bevacizumab as single agents have shown efficacy and acceptable toxicity in NETs phase II trials. Sorafenib and bevacizumab combination has shown manageable toxicity in phase I trials in solid tumours. The purpose of this study was to evaluate the safety and efficacy of the combination of sorafenib and bevacizumab in patients with advanced neuroendocrine tumours. METHODS: Open-label, uncontrolled, multicenter, phase II clinical trial. Eligibility criteria: age ≥ 18 years, histologically confirmed measurable advanced NETs; 1 prior chemotherapy allowed; ECOG-PS 0-2. Patients were treated during 6 months and followed up for an additional 6 months. Treatment: sorafenib 200mg bid (days 1-5 of each week) and bevacizumab 5mg/kg once every 2 weeks (day 1, week 1). Tumour response was performed according to RECIST (v1.0) every 2 months during the treatment period. Adverse events were graded according to CTCAE (v3.0). FINDINGS: 44 Patients enrolled, 59.1% men, median age 60 years (range 32-76). 70.5% carcinoid tumours, 29.5% pancreatic tumour. Baseline target lesions mainly in the liver (86.4%). Global PFSR was 90.9% (91.7% carcinoid tumours and 88.9% pancreatic tumours). Median PFS was 12.4 months, median TTP was 14.5 months, ORR was 9.4% and DCR was 95.1%. Most common grade 3-4 toxicities: asthenia (11.4%) and hand-foot skin reaction (15.9%). INTERPRETATION: Sorafenib and bevacizumab combination showed clinical benefit but unfavourable safety results compared with drugs in monotherapy. Further development of this combination is not warranted and a sequential approach is recommended instead.

[38]

**TÍTULO / TITLE:** - The Characterization of Pheochromocytoma and Its Impact on Overall Survival in Multiple Endocrine Neoplasia Type 2.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Sep 12.

●● Enlace al texto completo (gratis o de pago) [1210/jc.2013-1653](#)

**AUTORES / AUTHORS:** - Thosani S; Ayala-Ramirez M; Palmer L; Hu MI; Rich T; Gagel RF; Cote G; Waguespack SG; Habra MA; Jimenez C

**INSTITUCIÓN / INSTITUTION:** - The Department of Endocrine Neoplasia and Hormonal Disorders (S.T., M.A.-R., M.I.H., R.F.G., G.C., S.G.W., M.A.H., C.J.), Division of Internal Medicine, University of Texas-MD Anderson Cancer Center; The Department of Biostatistics (L.P.), University of Texas-MD Anderson Cancer Center; and Clinical Cancer Genetics Program (T.R.), University of Texas-MD Anderson Cancer Center, Houston, Texas.

**RESUMEN / SUMMARY:** - Context:Pheochromocytoma (PHEO) occurs in 50% of patients with multiple endocrine neoplasia type 2 (MEN2). It is unknown if association with PHEO is associated with more aggressive medullary thyroid cancer (MTC).Objective:To present our experience with MEN2 PHEO and evaluate whether PHEO impacts MTC overall survival in patients with RET codon 634 mutations.Design:We performed a retrospective chart review of MEN2 patients at MD Anderson Cancer Center from 1960 through 2012.Patients:The study group comprised of 85 patients (group 1) with MEN2 associated PHEO. Of these, 59 patients (subgroup 1) with RET codon 634 mutations were compared to 48 patients (group 2) with RET codon 634 mutations, but without MEN 2-associated PHEO.Main Outcome Measures:Of 85 patients with MEN2 and PHEO, 70 had MEN2A and 15 had MEN2B. Median age at PHEO diagnosis was 32 years. The initial manifestation of MEN2 was MTC in 60% of patients, synchronous MTC and PHEO in 34%, and PHEO in 6% of patients. 72% of patients had bilateral PHEO, and most tumors were synchronous (82%). Subgroup analysis of MEN2 patients with and without PHEO, who were carriers of RET codon 634, the most common mutation with PHEO, showed no significant differences in the stage of MTC at initial diagnosis. The median follow-up time for patients with PHEO was 249 months and without PHEO was 67 months ( $p<.01$ ). Survival analyses among RET 634 carriers didn't show shorter survival for patients with PHEO. The median survival time for patients with PHEO was 499 months and without PHEO was 444 months ( $p<.05$ ).Conclusions:PHEO in MEN2 patients are usually bilateral and unlikely to be metastatic. Subgroup analysis of patients RET 634 mutations with and without PHEO, showed that PHEO was not associated with a more advanced stage of MTC at diagnosis or a shorter survival.

[39]

**TÍTULO / TITLE:** - Differential Diagnosis of Thyroid Nodules via Real-Time PET/Ultrasound (US) Fusion in a Case of Co-existing Medullary Thyroid Cancer and Adenoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Sep 3.

●● Enlace al texto completo (gratis o de pago) [1210/jc.2013-2566](#)

**AUTORES / AUTHORS:** - Guhne F; Winkens T; Mothes H; Freesmeyer M

**INSTITUCIÓN / INSTITUTION:** - Clinics of Nuclear Medicine (F.G., T.W., M.F.) and General, Visceral, and Vascular Surgery (H.M.), Jena University Hospital, 07743 Jena, Germany.

**RESUMEN / SUMMARY:** - Abstract Not Available.

[40]

**TÍTULO / TITLE:** - Prospective study of Merkel cell polyomavirus and risk of Merkel cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Aug 7. doi: 10.1002/ijc.28419.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28419](#)

**AUTORES / AUTHORS:** - Andersson K; Ekstrom J; Hortlund M; Robsahm TE; Dillner J

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Microbiology, Skane University Hospital, Lund University, Malmo, Sweden.

**RESUMEN / SUMMARY:** - Merkel cell carcinoma (MCC) is a rare type of skin cancer that has a characteristically increased incidence among immunosuppressed subjects. The DNA of Merkel cell polyomavirus (MCV) is regularly found in most MCC tumors. We investigated whether Merkel cell polyomavirus (MCV) infection increases the risk for future MCC. Two large biobank cohorts (Southern Sweden Microbiology Biobank and the Janus Biobank), containing samples from 856,000 healthy donors, were linked to the Cancer Registries in Sweden and Norway to identify cases of MCC occurring up to 30 years after donation of a serum sample. For each of the 22 cases (nine males and 13 females), four matched controls were included. The serum samples were analyzed with an MCV neutralization assay and for IgG antibodies to MCV pseudovirions, using JC polyomavirus and cutaneous human papillomaviruses as control antigens. An increased risk for future MCC was associated both with high levels of MCV antibodies [OR 4.4, 95% CI 1.3-17.4] and with MCV neutralizing activity (OR 5.3, 95% CI 1.3-32.3). In males, MCV seropositivity was not associated to MCC risk, whereas the risk was strongly increased in females, both for high levels of MCV antibodies (OR 7.0, 95% CI 1.6-42.8) and for MCV neutralizing activity (OR 14.3, 95% CI 1.7-677). In conclusion, we found prospective evidence that MCV infection is associated with an increased risk for future MCC, in particular among females.

[41]

**TÍTULO / TITLE:** - Antitumor effect of everolimus in a patient with type 3 gastric neuroendocrine tumor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Onkologie. 2013;36(9):502-4. doi: 10.1159/000354637. Epub 2013 Aug 16.

●● Enlace al texto completo (gratuito o de pago) [1159/000354637](#)

**AUTORES / AUTHORS:** - Bariani GM; Carvalheira JB; Riechelmann RP

**INSTITUCIÓN / INSTITUTION:** - Instituto do Cancer do Estado de Sao Paulo (ICESP), Sao Paulo, Brazil.

**RESUMEN / SUMMARY:** - Background: Gastric neuroendocrine tumors (NET) are rare and are classified into 3 types: type 1 and 2 (characterized by hypergastrinemia), and type 3 (characterized by normal gastrin). Surgery is the standard procedure, and systemic treatment is reserved for unresectable disease. Currently, targeted therapies are being evaluated in NET. The activity of everolimus, an mTOR inhibitor, has been shown in pancreatic NET but not reported in type 3 gastric carcinoid tumors. Case Report: Here we report a case of a patient who, after multiple lines of systemic therapy, had a prolonged disease control of nearly 1 year, significant clinical benefit, and minor tumor shrinkage with oral everolimus 10 mg continuously. Conclusion: There is no effective treatment for type 3 gastric carcinoid tumors. The frequency of mTOR expression in these tumors is not known, but the case reported here suggests that inhibition of this pathway may play an important role. © 2013 S. Karger GmbH, Freiburg.

[42]

**TÍTULO / TITLE:** - Thyroid hormone replacement therapy, surveillance ultrasonography, and fine-needle aspiration after hemithyroidectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Otol Rhinol Laryngol. 2013 Jul;122(7):450-6.

**AUTORES / AUTHORS:** - Noureldine SI; Khan A; Massasati SA; Kethman W; Kandil E

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Division of Endocrine and Oncological Surgery, Tulane University School of Medicine, New Orleans, LA 70112-2699, USA.

**RESUMEN / SUMMARY:** - OBJECTIVES: We undertook a retrospective analysis of a single surgeon's experience at a tertiary care teaching hospital to determine the rates of surveillance ultrasound, fine-needle aspiration (FNA), and the need for thyroid hormone replacement therapy (THRT) after hemithyroidectomy. METHODS: The study population comprised 120 consecutive patients who underwent hemithyroidectomy by one surgeon from January 2008 to June 2011. The medical records were reviewed for preoperative and postoperative calcium levels, fiberoptic direct laryngoscopy examination of vocal fold mobility, postoperative complications, final pathology, and postoperative follow-up. RESULTS: Fifteen patients required completion thyroidectomy for malignancy and were excluded from the surveillance analysis. Of the remaining 105 patients, 10 (9.5%) required postoperative THRT. The likelihood for THRT was

significantly associated with increased age ( $p = 0.01$ ) and the presence of thyroiditis ( $p = 0.04$ ). Other factors, such as gender, body mass index, residual thyroid volume, and presence of contralateral lobe nodules, were not significantly associated with this likelihood ( $p > 0.05$ ). Twenty-three patients (21.9%) were followed with surveillance ultrasound, of whom 12 (11.4%) underwent FNA for nodule(s) in the contralateral lobe. Seventy-eight percent of patients did not require any long-term postoperative surveillance. There were no instances of permanent recurrent laryngeal nerve injury or hypoparathyroidism. CONCLUSIONS: Hemithyroidectomy is an effective and efficient option for the management of benign and suspicious thyroid nodules. However, patients of increased age and/or with thyroiditis are at higher risk for postoperative hypothyroidism, and should be counseled to consider total thyroidectomy to avoid the need for long-term surveillance and the possible need for a second operation.

[43]

**TÍTULO / TITLE:** - Molecular Targeted Therapy in Enteropancreatic Neuroendocrine Tumors: from Biology to Clinical Practice.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Med Chem. 2013 Aug 23.

**AUTORES / AUTHORS:** - Fazio N; Scarpa A; Falconi M

**INSTITUCIÓN / INSTITUTION:** - Unit of Gastrointestinal and Neuroendocrine Tumor, European Institute of Oncology, Via Ripamonti 435, 20141 Milan, Italy.

[nicola.fazio@ieo.it](mailto:nicola.fazio@ieo.it).

**RESUMEN / SUMMARY:** - Advanced enteropancreatic (EP) neuroendocrine tumors (NETs) can be treated with several different therapies, including chemotherapy, biotherapy, and locoregional treatments. Over the last few decades, impressive progress has been made in the biotherapy field. Three main druggable molecular targets have been studied and developed in terms of therapy: somatostatin receptor (sstr), mammalian target of rapamycin (mTOR), and angiogenic factors. In particular, research has moved from the old somatostatin analogs (SSAs), such as octreotide (OCT) and lanreotide (LAN), specifically binding to the sstr-2, to the newer pasireotide (PAS), which presents a wider sstr spectrum. Over the last ten years, several molecular targeted agents (MTAs) have been studied in phase II trials, and very few of them have reached phase III. The mTOR inhibitor everolimus and the multitargeted inhibitor sunitinib have been approved for clinical use by the FDA and EMA in advanced well/moderately-differentiated (WD, MD) progressive pancreatic neuroendocrine tumors (PNETs), on the basis of the positive results of two international large randomized phase III trials vs. placebo. Bevacizumab has been studied in a large US phase III trial vs. interferon (IFN)-alfa2b, and results are pending. In this review, the biological and clinical aspects

of MTAs introduced into clinical practice or which are currently in an advanced phase of clinical investigation are addressed.

[44]

**TÍTULO / TITLE:** - Surgical Curability of Medullary Thyroid Cancer in Multiple Endocrine Neoplasia 2B: A Changing Perspective.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Surg. 2013 Sep 20.

●● Enlace al texto completo (gratis o de pago) [1097/SLA.0b013e3182a6f43a](#)

**AUTORES / AUTHORS:** - Brauckhoff M; Machens A; Lorenz K; Bjoro T; Varhaug JE; Dralle H

**INSTITUCIÓN / INSTITUTION:** - \*Department of General, Visceral and Vascular Surgery, University of Halle, Halle, Germany daggerDepartment of Surgery, Haukeland University Hospital, University of Bergen, Bergen, Norway double daggerDepartment of Surgical Sciences, University of Bergen, Bergen, Norway section signMedical Faculty, University of Oslo, Oslo, Norway paragraph signCentral Laboratory, The Norwegian Radium Hospital, Oslo University Hospital, Oslo, Norway.

**RESUMEN / SUMMARY:** - **OBJECTIVES::** This investigation aimed at exploring the suitability of nonendocrine manifestations preceding medullary thyroid cancer (MTC) for early diagnosis of multiple endocrine neoplasia type 2B (MEN 2B). **BACKGROUND::** MEN 2B patients, running a high risk of metastatic MTC, must be diagnosed early for biochemical cure. **METHODS::** Forty-four MEN 2B patients carrying inherited (3 patients) and de novo (41 patients) M918T RET mutations were examined for signs and symptoms prompting MEN 2B. **RESULTS::** All 3 patients with inherited mutations were diagnosed before the age of 1 year and cured of their C-cell disease. Among 41 patients with de novo mutations, MEN 2B was diagnosed in 12 patients after recognition of nonendocrine manifestations [intestinal ganglioneuromatosis (6 patients), oral symptoms (5 patients), ocular (“tearless crying”) (4 patients), and skeletal stigmata (1 patient) alone or concomitantly]. In the remaining 29 patients with de novo mutations, the diagnosis of MEN 2B was triggered by symptomatic MTC (28 patients) or pheochromocytoma (1 patient). The former patients, being significantly ( $P < 0.001$ ) younger (means of 5.3 vs 17.6 years) and having lower calcitonin levels (means of 115 vs 25,519 pg/mL), smaller tumors (67% vs 0% were  $\leq 10$  mm) and less often extrathyroidal extension (0% vs 81%), lymph node (42% vs 100%), and distant metastases (8% vs 79%), were biochemically cured more often (58% vs 0%). **CONCLUSIONS::** MTC is curable in patients with de novo mutations when nonendocrine MEN 2B components are quickly appreciated and surgical intervention is performed before patients turn 4 years old.

[45]

**TÍTULO / TITLE:** - Normotensive incidentally discovered pheochromocytomas display specific biochemical, cellular and molecular characteristics.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Sep 3.

●● [Enlace al texto completo \(gratis o de pago\) 1210/jc.2013-1844](#)

**AUTORES / AUTHORS:** - Haissaguerre M; Courel M; Caron P; Denost S; Dubessy C; Gosse P; Appavoupouille V; Belleannee G; Jullie ML; Montero-Hadjadje M; Yon L; Corcuff JB; Fagour C; Mazerolles C; Wagner T; Nunes ML; Anouar Y; Tabarin A

**INSTITUCIÓN / INSTITUTION:** - Departments of Endocrinology (M.H., SD, V.A., M-L.N., A.T.), Pathology (G.B., M-L.J.), Nuclear Medicine (J-B.C.) Endocrine Surgery (T.W.) and Cardiology (P.G.), CHU Bordeaux and University Victor Segalen - Bordeaux 2, France; INSERM Unit 982 and Laboratory of Neuronal and Neuroendocrine Communication, Institut for Research and Innovation on Biomedicine (M.C., C.D., M.M-H., L.Y., Y.A.), University of Rouen, MT-St-Aignan, France; Department of Endocrinology and Metabolic diseases, (P.C.) and Department of pathology, (C.M.), CHU of Toulouse; France; Department of Endocrinology (C.F.), CHU Ft-de-France, Martinique.

**RESUMEN / SUMMARY:** - Context:A number of incidentally discovered pheochromocytomas are not associated with hypertension. The characteristics of normotensive incidentally discovered pheochromocytomas (NIP) are poorly known.Objective:To assess the clinical, hormonal, histological and molecular features of NIPDesign:Retrospective cohort recruited from 2001 to 2011 in 2 tertiary-care medical departments.Patients and Methods:Clinical, biological and radiological investigations performed in 96 consecutive patients with sporadic unilateral pheochromocytomas were examined. 47 patients had overt pheochromocytomas responsible for hypertension. Among incidental pheochromocytomas, 28 patients had hypertension and 21 were normotensive (NIP). 62 tumors were examined for the PASS score, and 29 studied for the expression of 16 genes involved in chromaffin cell function.Results:Tumor size and MIBG scintigraphy results were similar between hypertensive pheochromocytomas (HP) and NIP. NIP patients displayed reduced summed levels of urinary catecholamines and metanephrines and, more specifically, reduced levels of adrenaline and metadrenaline compared to HP patients (P < 0.001). Urinary metanephrines had 98% diagnostic sensitivity in HP patients and only 75% in NIP patients (P < 0.01). Tumor diameter positively correlated with total amount of urinary concentrations of metanephrines in HP patients, (P < 0.001) but not in NIP patients. NIP displayed a global decreased chromaffin genes expression, reaching significance for 5 of them and 2 corresponding proteins: Phenylethanolamine N-methyltransferase, secretogranin II, and a significant increase in the cellularity, mitotic activity, and presence of atypical mitosis (P < 0.05).Conclusions:Normotensive incidentally discovered pheochromocytomas differ from pheochromocytomas responsible for hypertension and display features of altered chromaffin differentiation. Usual biological diagnostic tools may misdiagnose these tumors.

[46]

**TÍTULO / TITLE:** - The important role of radiation treatment in the management of Merkel cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Dermatol. 2013 Jul 31. doi: 10.1111/bjd.12481.

●● Enlace al texto completo (gratis o de pago) [1111/bjd.12481](#)

**AUTORES / AUTHORS:** - Hruby G; Scolyer RA; Thompson JF

**INSTITUCIÓN / INSTITUTION:** - Departments of Radiation Oncology, Royal Prince Alfred Hospital, Camperdown, Sydney, NSW, Australia; Departments of Disciplines of Medicine, The University of Sydney, Sydney, NSW, Australia.

**RESUMEN / SUMMARY:** - Merkel cell carcinoma is an aggressive, radiosensitive cutaneous neuroendocrine tumour. In this review, the roles of radiation therapy and chemo-radiation in the management of Merkel cell carcinoma are described and discussed, and guidelines for patient management are presented. Radiation treatment may be indicated for definitive (>55Gy) or adjuvant (>50Gy) treatment of the primary tumour site and for prophylactic (>50Gy), adjuvant (>50Gy) or definitive (>55Gy) treatment of the regional lymph node field. If a patient presents with positive margins after initial biopsy or resection, definitive radiation therapy or chemo-radiation may be an alternative to further surgery and, importantly, results in less delay than re-resection followed by adjuvant radiation treatment. Given the rarity of this tumour, patients should be enrolled on prospective databases and clinical trials, and managed in a multidisciplinary clinic setting wherever possible. This article is protected by copyright. All rights reserved.

[47]

**TÍTULO / TITLE:** - Oncolytic vesicular stomatitis virus as a treatment for neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Surgery. 2013 Aug 22. pii: S0039-6060(13)00197-9. doi: 10.1016/j.surg.2013.04.050.

●● Enlace al texto completo (gratis o de pago) [1016/j.surg.2013.04.050](#)

**AUTORES / AUTHORS:** - Randle RW; Northrup SA; Sirintrapun SJ; Lyles DS; Stewart JH 4th

**INSTITUCIÓN / INSTITUTION:** - Department of General Surgery, Wake Forest School of Medicine, Winston-Salem, NC.

**RESUMEN / SUMMARY:** - BACKGROUND: Therapeutic goals for neuroendocrine tumors (NETs) not amenable to operative cure are limited to relieving symptoms and slowing progression. Many malignancies acquire defective antiviral responses as they undergo unregulated proliferation. Therefore, we explored the abilities of recombinant wild-

type vesicular stomatitis virus and an attenuated matrix protein mutant (M51R-VSV) to exploit defective antiviral pathways in NETs. METHODS: Viral infectivity and lethality were evaluated in a panel of human NET cell lines H727, UMC-11, and CNDT2.5. We evaluated beta-interferon pathways in these cells to define the acquired defect. Murine xenografts were treated with a single intratumoral injection of M51R-VSV to study viral efficacy in vivo. RESULTS: VSV infected >99% of cells within 24 hours and killed >95% within 72 hours. NET cells did not produce relevant amounts of beta-interferon after infection, but exogenous beta-interferon protected cells from oncolysis. Treatment with M51R-VSV resulted in suppressed tumor growth (mean value +/- standard error of the mean) compared with mock-infected xenografts for H727 (87 +/- 72% vs 2,197 +/- 335%; P < .001), UMC-11 (13 +/- 59% vs 1,471 +/- 324%; P < .001), and CNDT2.5 (81 +/- 121% vs 1,576 +/- 349%; P = .001). CONCLUSION: VSV infects and kills human NETs by exploiting their inability to produce a type I antiviral response. Therefore, M51R-VSV is an excellent candidate for the treatment of advanced NETs.

[48]

**TÍTULO / TITLE:** - Gastrointestinal carcinoid: epidemiological and survival evidence from a large population-based study (n = 25 531).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Oncol. 2013 Sep 19.

●● Enlace al texto completo (gratis o de pago) [1093/annonc/mdt377](#)

**AUTORES / AUTHORS:** - Mocellin S; Nitti D

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery Oncology and Gastroenterology, School of Medicine, University of Padova, Padova, Italy.

**RESUMEN / SUMMARY:** - BACKGROUND: Owing to its rarity, the published evidence on gastrointestinal (GI) carcinoid is often based on small series of patients or population-based studies regarding all neuroendocrine tumors. Here, we present a comprehensive epidemiological and survival analysis of the largest cohort of patients with GI carcinoid ever reported. PATIENTS AND METHODS: Patients with histological diagnosis of GI carcinoid (n = 25 531) were identified from the Surveillance Epidemiology End Results (SEER) database (including 18 USA cancer registries and spanning the 1973-2009 time frame). Demographic and disease data were used for epidemiological and survival analyses. RESULTS: The incidence of GI carcinoid is steadily increasing over the past three decades at a rate higher than any other cancer [annual percentage change (APC) = 4.4, 95% confidence interval (CI) 4.0-4.8]. These patients have a higher risk of further primary tumor (standardized incidence ratio, SIR = 1.15, 95% CI 1.10-1.21), but also a reduced risk of skin melanoma (SIR = 0.64, 95% CI 0.41-0.95). Despite the overall favorable prognosis (5-year disease-specific and relative survival rate: 91.3% and 87.4%, respectively), the mortality rate is increasing over time

(APC = 3.5, 95% CI 3.0-4.0) and the 5-year survival rate of patients dying of GI carcinoid (28.5%), though better than that reported for GI cancers in general (8.4%), cannot be considered satisfactory. Finally, a nomogram is provided to predict patient survival on the basis of clinico-pathological factors independently associated with prognosis at multivariate analysis. CONCLUSIONS: These findings can be clinically useful for the management of patients with GI carcinoid and eagerly prompt the continuous effort to develop more effective therapeutic strategies against this slow-growing but chemoresistant tumor.

[49]

**TÍTULO / TITLE:** - Tianeptine interferes with microtubule organization and hormone secretion of pheochromocytoma cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cell Endocrinol. 2013 Aug 7;381(1-2):175-187. doi: 10.1016/j.mce.2013.07.033.

●● Enlace al texto completo (gratis o de pago) [1016/j.mce.2013.07.033](https://doi.org/10.1016/j.mce.2013.07.033)

**AUTORES / AUTHORS:** - Makani V; Hall J; Qamar K; Jain P; Jang Y; Hensley K; Park JJ

**INSTITUCIÓN / INSTITUTION:** - Department of Neurosciences, University of Toledo, College of Medicine and Life Science, Toledo, OH 43614, United States.

**RESUMEN / SUMMARY:** - Pheochromocytoma originates from chromaffin cells in the adrenal medulla and sympathetic paraganglia. 36-53% of pheochromocytoma becomes malignant and, thereafter, resistant to conventional treatments. Pheochromocytoma also causes hyper-secretion of catecholamines that cause severe hypertension. We found that an antidepressant, tianeptine, interfered with normal life cycle of pheochromocytoma cells at its clinical doses. Treatment with tianeptine caused microtubule bundling and specific degradation of cytoplasmic dynein, a retrograde microtubule motor that mediates various microtubule-dependent processes during interphase and mitosis, in the rat pheochromocytoma PC12 cells. Tianeptine also increased the levels of pro-apoptotic proteins, slowed cell cycle progression, and increased apoptosis in PC12 cells. Importantly, tianeptine treatment decreased high K<sup>+</sup>-stimulated secretion of norepinephrine and chromogranin A in PC12 cells and of epinephrine in the mouse pheochromocytoma MPC cells. Our study demonstrates, for the first time, that tianeptine interferes with normal life cycle of pheochromocytoma cells.

[50]

**TÍTULO / TITLE:** - Mitochondrial phosphate transport during nutrient stimulation of INS-1E insulinoma cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cell Endocrinol. 2013 Aug 9;381(1-2):198-209. doi: 10.1016/j.mce.2013.08.003.

●● Enlace al texto completo (gratis o de pago) [1016/j.mce.2013.08.003](https://doi.org/10.1016/j.mce.2013.08.003)

**AUTORES / AUTHORS:** - Quan X; Das R; Xu S; Cline GW; Wiederkehr A; Wollheim CB; Park KS

**INSTITUCIÓN / INSTITUTION:** - Department of Physiology and Institute of Lifestyle Medicine, Yonsei University Wonju College of Medicine, Wonju, Republic of Korea.

**RESUMEN / SUMMARY:** - Here, we have investigated the role of inorganic phosphate (Pi) transport in mitochondria of rat clonal beta-cells. In alpha-toxin-permeabilized INS-1E cells, succinate and glycerol-3-phosphate increased mitochondrial ATP release which depends on exogenous ADP and Pi. In the presence of substrates, addition of Pi caused mitochondrial matrix acidification and hyperpolarisation which promoted ATP export. Dissipation of the mitochondrial pH gradient or pharmacological inhibition of Pi transport blocked the effects of Pi on electrochemical gradient and ATP export. Knock-down of the phosphate transporter PiC, however, neither prevented Pi-induced mitochondrial activation nor glucose-induced insulin secretion. Using <sup>31</sup>P NMR we observed reduction of Pi pools during nutrient stimulation of INS-1E cells. Interestingly, Pi loss was less pronounced in mitochondria than in the cytosol. We conclude that matrix alkalinisation is necessary to maintain a mitochondrial Pi pool, at levels sufficient to stimulate energy metabolism in insulin-secreting cells beyond its role as a substrate for ATP synthesis.

[51]

**TÍTULO / TITLE:** - Observational study of natural history of small sporadic non-functioning pancreatic neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Sep 20.

●● Enlace al texto completo (gratis o de pago) [1210/jc.2013-2604](https://doi.org/10.1210/jc.2013-2604)

**AUTORES / AUTHORS:** - Gaujoux S; Partelli S; Maire F; D'Onofrio M; Larroque B; Tamburrino D; Sauvanet A; Falconi M; Ruzniewski P

**INSTITUCIÓN / INSTITUTION:** - 1Department of HPB Surgery - PMAD - Hopital Beaujon - AP-HP - Clichy, France.

**RESUMEN / SUMMARY:** - Context:Asymptomatic sporadic non-functioning well-differentiated pancreatic neuroendocrine tumors (NF-PNET) are increasingly diagnosed, and their management is controversial because of their overall good but heterogeneous prognosis.Objective:To assess the natural history of asymptomatic sporadic NF-PNETs smaller than 2 cm in size and the risk-benefit balance of non-operative management.Experimental design:From January 2000 to June 2011, 46 patients with proven AS-NF-PNET smaller than 2 cm in size were followed-up for at least 18 months with serial imaging in tertiary referral centers.Results:Patients were

mainly female (65%), with a median age of 60 years. Tumors were mainly located in the pancreatic head (52%), with a median lesion size of 13 mm (9-15). After a median follow-up of 34 months (24-52) and an average of 4 (3-6) serial imaging sessions, distant or nodal metastases appeared on the imaging in none of the patients. In 6 (13%) patients, a  $\geq 20\%$  increase in size was observed. Overall median tumor growth was 0.12 mm per year and neither patients nor tumor characteristics were found to be significant predictors of tumor growth. Overall, 8 patients (17%) underwent surgery after a median time from initial evaluation of 41 months (27-58); all resected lesions were ENETS T stage 1 (n=7) or 2 (n=1), grade 1, node negative, with neither vascular nor peripancreatic fat invasion. Conclusions: In selected patients, non-operative management of asymptomatic sporadic NF-PNET smaller than 2 cm in size is safe. Larger and prospective multicentric studies with long-term follow-up are now needed to validate this "wait and see" policy.

[52]

**TÍTULO / TITLE:** - Localization of CaSR Antagonists in CaSR-expressing Medullary Thyroid Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Sep 12.

●● [Enlace al texto completo \(gratis o de pago\) 1210/jc.2013-1756](#)

**AUTORES / AUTHORS:** - Ding H; Yusof AM; Kothandaraman S; Saji M; Wang C; Kumar K; Milum K; Carleton M; Pan X; Ringel MD; Tweedle MF; Phay JE

**INSTITUCIÓN / INSTITUTION:** - 1Department of Radiology, The Ohio State University, Columbus, OH 43210;

**RESUMEN / SUMMARY:** - Objective: Image-based localization of medullary thyroid cancer (MTC) and parathyroid glands would improve the surgical outcomes of these diseases. MTC and parathyroid glands express high levels of calcium-sensing receptor (CaSR). The aim of this study was to prove the concept that CaSR antagonists specifically localize to CaSR-expressing tumors in vivo. Design: We synthesized two isomers of a known CaSR calcilytic, Calhex 231, and four new analogues which have a favorable structure for labeling. Their antagonistic activity was determined using immunoblots demonstrating decreased ERK1/2 phosphorylation after calcium stimulation in human embryonic kidney cells overexpressing CaSR. Compound 9 was further radiolabeled with  $^{125}\text{I}$  and evaluated in nude mice with and without heterotransplanted xenografts of MTC cell lines, TT and MZ-CRC-1 that do and do not express CaSR respectively. Results: Two newly synthesized compounds, 9 and 11, exhibited better antagonistic activity than Calhex 231. The half-life of  $^{125}\text{I}$ -compound 9 in nude mice without xenografts was 9.9 h. A biodistribution study in nude mice bearing both tumors demonstrated that the uptake of radioactivity in TT tumors was higher than in MZ-CRC-1 tumors at 24 h:  $0.39 \pm 0.24$  vs  $0.18 \pm 0.12$  percentage of injected dose

per gram of tissue (%ID/g) ( $p = 0.002$ ), with a ratio of  $2.25 \pm 0.62$ . Tumor-to-background ratios for TT tumors, but not MZ-CRC-1 tumors, increased with time. Tumor-to-blood values increased from  $2.02 \pm 0.52$  at 1 h to  $3.29 \pm 0.98$  at 24 h ( $p = 0.015$ ) for TT tumors, and  $1.7 \pm 0.56$  at 1 h to  $1.48 \pm 0.33$  at 24 h ( $p = 0.36$ ) for MZ-CRC-1 tumors. Conclusions: Our new CaSR antagonists specifically inhibit CaSR function in vitro, preferentially localize to CaSR-expressing tumors in vivo and therefore have the potential to serve as scaffolds for further development as imaging pharmaceuticals.

[53]

**TÍTULO / TITLE:** - Bronchial Carcinoid and Primary Hyperparathyroidism.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Sep 20.

●● Enlace al texto completo (gratis o de pago) [1210/jc.2013-3067](#)

**AUTORES / AUTHORS:** - Shivaswamy V; Hankins J

**INSTITUCIÓN / INSTITUTION:** - 1 Departments of Medicine and Radiology.

**RESUMEN / SUMMARY:** - Abstract Not Available.

[54]

**TÍTULO / TITLE:** - Identification of prognostic immunophenotypic features in cancer stromal cells of high-grade neuroendocrine carcinomas of the lung.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cancer Res Clin Oncol. 2013 Sep 7.

●● Enlace al texto completo (gratis o de pago) [1007/s00432-013-1502-5](#)

**AUTORES / AUTHORS:** - Takahashi A; Ishii G; Kinoshita T; Yoshida T; Umemura S; Hishida T; Yoh K; Niho S; Goto K; Ohmatsu H; Ohe Y; Nagai K; Ochiai A

**INSTITUCIÓN / INSTITUTION:** - Pathology Division, Department of Pathology, Research Center for Innovative Oncology, National Cancer Center Hospital East, 6-5-1, Kashiwanoha, Kashiwa-City, Chiba, 277-8577, Japan.

**RESUMEN / SUMMARY:** - PURPOSE: The immunophenotypes of cancer stromal cells have been recognized as prognostic factors of cancer. The purpose of this study was to analyze the prognostic markers of high-grade neuroendocrine carcinomas of the lung (HGNEC; both small cell carcinoma and large cell neuroendocrine carcinoma) by examining the immunophenotypes of cancer stromal cells. MATERIALS AND METHODS: One hundred and fifteen patients who underwent a complete resection of HGNEC were included in this study. We examined the presence of CD204-positive tumor-associated macrophages (TAMs), Foxp3-positive regulatory T cells (Tregs), and podoplanin-positive cancer-associated fibroblasts (CAFs) to evaluate the prognostic values of these markers. RESULTS: The number of CD204-positive TAMs and Foxp3-

positive Tregs did not influence the overall survival (OS) or the relapse-free survival (RFS) of the patients. However, patients with podoplanin-positive CAFs had a significantly better prognosis than those with podoplanin-negative CAFs [OS:  $p = 0.002$ , RFS:  $p = 0.002$ , 5-year overall survival (5YR): 74 vs. 45 %]. According to subgroup analyses, patients with podoplanin-positive CAFs displayed a better prognosis for both small cell carcinoma (OS:  $p = 0.046$ , 5YR: 74 vs. 46 %) and large cell neuroendocrine carcinoma (OS:  $p = 0.020$ , 5YR: 74 vs. 45 %). Moreover, in multivariate analyses, the podoplanin status of the CAFs was shown to be a statistically significant independent predictor of recurrence. CONCLUSION: The presence of podoplanin-positive CAFs had a favorable prognostic value, suggesting that the evaluation of podoplanin expression by CAFs would lead to a novel risk classification of patients.

[55]

**TÍTULO / TITLE:** - Phase II study of pazopanib monotherapy in metastatic gastroenteropancreatic neuroendocrine tumours.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Sep 17;109(6):1414-9. doi: 10.1038/bjc.2013.470. Epub 2013 Aug 29.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.470](#)

**AUTORES / AUTHORS:** - Ahn HK; Choi JY; Kim KM; Kim H; Choi SH; Park SH; Park JO; Lim HY; Kang WK; Lee J; Park YS

**INSTITUCIÓN / INSTITUTION:** - 1] Division of Hematology-Oncology, Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea [2] Department of Internal Medicine, Gachon University Gil Medical Center, Incheon, Korea.

**RESUMEN / SUMMARY:** - Background: Treatment options for patients with metastatic gastroenteropancreatic neuroendocrine tumours (GEP NETs) are still limited. We investigated the antitumour activity and safety profile of pazopanib - a multitarget drug with anti-angiogenic activity in patients with metastatic GEP NETs. Methods: This was a nonrandomised, open-labeled, single-center phase II study. Pazopanib was orally administered at a dose of 800 mg daily continuously with a 28-day cycle. The primary end point was an objective response rate according to Response Evaluation Criteria in Solid Tumors (RECIST). The secondary end points were progression-free survival (PFS), overall survival (OS) and safety. An independent review of objective response was planned. The trial is registered with ClinicalTrials.gov, NCT number 01099540. Correlative biomarker analyses were performed. Results: Between April 2010 and February 2012, a total of 37 patients were enrolled. Thirty-two percent of the enrolled patients had pancreatic primary and 22% of the patients had colorectal primary NETs. This phase II study demonstrated an objective response rate of 18.9% (7 of the 37, 95% CI 8.0-35.2) and a disease control rate (CR+confirmed PR+stable

disease) of 75.7% (28 of the 37, 95% CI, 58.8-88.2) in metastatic GEP NETs. The independent review demonstrated a higher overall response rate of 24.3% (95% CI, 11.8-41.2%) with nine confirmed PRs. Conclusion: Pazopanib showed a comparable efficacy to other targeted agents not only in pancreatic NETs but also in NETs originating from gastrointestinal (GI) tract.

[56]

**TÍTULO / TITLE:** - Case 197: malignant paraganglioma manifesting with calvarial metastases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiology. 2013 Sep;268(3):919-23. doi: 10.1148/radiol.13120843.

●● Enlace al texto completo (gratis o de pago) [1148/radiol.13120843](http://1148.radiol.13120843)

**AUTORES / AUTHORS:** - Tan JH; Mafee MF

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, University of California San Diego, 200 W Arbor Dr, San Diego, CA 92103-8756.

[57]

**TÍTULO / TITLE:** - Olfactory Receptor 51E1 as a Novel Target in Somatostatin Receptor Negative Lung Carcinoids.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Mol Endocrinol. 2013 Aug 22.

●● Enlace al texto completo (gratis o de pago) [1530/JME-13-0144](http://1530/JME-13-0144)

**AUTORES / AUTHORS:** - Giandomenico V; Cui T; Grimelius L; Oberg KE; Pelosi G; Tsolakis AV

**INSTITUCIÓN / INSTITUTION:** - V Giandomenico, Department of Medical Sciences, Endocrine Oncology, Science for Life Laboratory, Uppsala University, Uppsala, Sweden.

**RESUMEN / SUMMARY:** - Somatostatin receptors (SSTRs) may be used in lung carcinoids (LCs) for diagnosis and therapy, although additional targets are clearly warranted. This study aimed to investigate whether olfactory receptor 51E1 (OR51E1) may be a potential target for LCs. OR51E1 coding sequence was analyzed in LC cell lines, NCI-H727 and NCI-H720. OR51E1 transcript expression was investigated in LC cell lines and frozen specimens by quantitative real-time PCR. OR51E1, SSTR2, SSTR3, and SSTR5 expression was evaluated by immunohistochemistry on paraffin-embedded sections of 73 typical carcinoids (TCs), 14 atypical carcinoids (ACs) and 11 regional/distant metastases, and compared to OctreoScan data. Immunohistochemistry results were rendered semiquantitatively on a scale from 0 to 3+, taking into account the cellular compartmentalization (membrane vs. cytoplasm) and the percentage of tumor cells (<50% vs. >50%). Our results showed that wild-type OR51E1 transcript was expressed in both LC cell lines. OR51E1 mRNA was expressed in 9/12 TCs and 7/9 ACs (p=NS).

Immunohistochemically, OR51E1, SSTR2, SSTR3 and SSTR5 were detected in 85%, 71%, 25% and 39% of TCs, and in 86%, 79%, 43% and 36% of ACs, respectively. OR51E1 immunohistochemical scores were higher or equal compared to SSTRs in 79% of TCs and 86% of ACs. Furthermore, in the LC cases where all SSTR subtypes were lacking, membrane OR51E1 expression was detected in 10/17 TCs and ½ ACs. Moreover, higher OR51E1 immunohistochemical scores were detected in 5/6 OctreoScan-negative LC lesions. Therefore, the high expression of OR51E1 in LCs makes it a potential novel diagnostic target in SSTR-negative tumors.

[58]

**TÍTULO / TITLE:** - Neuroendocrine Tumor Recurrence: Diagnosis with 68Ga-DOTATATE PET/CT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiology. 2013 Sep 20.

●● [Enlace al texto completo \(gratis o de pago\) 1148/radiol.13122501](#)

**AUTORES / AUTHORS:** - Haug AR; Cindea-Drimus R; Auernhammer CJ; Reincke M; Beuschlein F; Wangler B; Uebleis C; Schmidt GP; Spitzweg C; Bartenstein P; Hacker M

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine, Interdisciplinary Center of Neuroendocrine Tumors of the Gastro-Entero-Pancreatic System, Department of Internal Medicine 2, Medizinische Klinik und Poliklinik 4, and Institute of Clinical Radiology, Klinikum Grosshadern, Ludwig-Maximilians-University of Munich, Marchioninistrasse 15, Munich 81377, Germany.

**RESUMEN / SUMMARY:** - Purpose: To evaluate diagnostic performance of gallium 68-tetraazacyclododecane tetraacetic acid-octreotate (68Ga-DOTATATE) in detection of recurrent neuroendocrine tumors (NETs). Materials and Methods: Approval was waived by the local ethics committee for this retrospective study. Between 2007 and 2011, 63 patients (mean age, 58 years) were examined with 68Ga-DOTATATE positron emission tomography (PET)/computed tomography (CT) after primary NET curative resection. Reasons for PET/CT were regular follow-up examinations (n = 30), increased plasma levels of tumor markers (n = 27), or clinical suspicion of recurrence (n = 6). Final diagnosis was determined with histopathologic verification (n = 25) or clinical follow-up (n = 38). PET/CT scans were evaluated in consensus by two readers without blinding to clinical information and independently by two readers with blinding. Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) were calculated. Results: Final diagnosis of NET recurrence was determined in 29 patients. In three other patients, tumors of nonneuroendocrine origin were diagnosed. 68Ga-DOTATATE PET/CT helped identify NET recurrence in 26 of 29 patients (sensitivity, 90%) and exclude presence of recurrent NET in 28 of 34 patients (specificity, 82%). PET/CT provided false-positive and false-negative results in six and three patients (PPV, 81% [26 of 32]; NPV, 90% [28 of 31]; accuracy, 86% [54 of 63]). In gastroenteropancreatic

NET (n = 45), sensitivity was 94% (17 of 18); specificity was 89% (24 of 27); PPV was 85% (17 of 20); NPV was 96% (24 of 25); and accuracy was 91% (41 of 45). Two blinded readers achieved sensitivity of 79% (23 of 29) and 76% (22 of 29); specificity of 85% (29 of 34) and 94% (32 of 34) (kappa = 0.80); and accuracy of 83% and 86%. Conclusion: 68Ga-DOTATATE PET/CT is accurate in detection of recurrent NET. Blinded PET/CT review markedly decreased sensitivity, underlining importance of considering clinical parameters in NET recurrence. Present results must be further validated to substantiate use of 68Ga-DOTATATE PET/CT in routine follow-up after curative resection of NET. © RSNA, 2013 Supplemental material: <http://radiology.rsna.org/lookup/suppl/doi:10.1148/radiol.13122501/-/DC1>.

[59]

**TÍTULO / TITLE:** - Tropomyosin-related Kinase B Inhibitor Has Potential for Tumor Regression and Relapse Prevention in Pulmonary Large Cell Neuroendocrine Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Sep;33(9):3699-703.

**AUTORES / AUTHORS:** - Odate S; Onishi H; Nakamura K; Kojima M; Uchiyama A; Kato M; Katano M

**INSTITUCIÓN / INSTITUTION:** - Department of Cancer Therapy and Research, Graduate School of Medical Sciences, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka 812-8582, Japan. [ohnishi@surg1.med.kyushu-u.ac.jp](mailto:ohnishi@surg1.med.kyushu-u.ac.jp).

**RESUMEN / SUMMARY:** - Large cell neuroendocrine carcinoma (LCNEC) has an especially poor prognosis, and an effective therapeutic strategy has yet to be established. We have previously shown that the expressions of tropomyosin-related kinase B (TRKB) and brain-derived neurotrophic factor (BDNF) are high in LCNEC and that TRKB/BDNF signaling is involved in the proliferation, tumorigenesis, and invasive nature of LCNEC. Therefore, TRKB/BDNF signaling may offer a potential therapeutic target for LCNEC treatment. In the present study, we evaluated whether the TRKB tyrosine kinase inhibitor, k252a, has effects on tumor regression and relapse prevention on LCNEC, using a murine xenograft model. The LCNEC cell line and NCI-H810 cells were subcutaneously implanted into the flanks or intrathoracically injected into the bilateral pleural cavities of BALB/c nude mice. k252a significantly inhibited tumor volume, expression of matrix metalloproteinases and the formation of pleural dissemination by LCNEC. These results suggest that k252a has potential for tumor regression and relapse prevention in LCNEC. Since many patients with LCNEC suffer through the use of ineffective therapeutic strategies, a clinical trial using the TRKB inhibitor for LCNEC is urgently required.

[60]

**TÍTULO / TITLE:** - Protective Effect of Geranylgeranylacetone against Methamphetamine-Induced Neurotoxicity in Rat Pheochromocytoma Cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pharmacology. 2013 Aug 31;92(3-4):131-137.

●● Enlace al texto completo (gratis o de pago) [1159/000353213](#)

**AUTORES / AUTHORS:** - Lv T; Li Y; Jia J; Shi Z; Bai J

**INSTITUCIÓN / INSTITUTION:** - Faculty of Environmental Science and Engineering, Kunming University of Science and Technology, Kunming, China.

**RESUMEN / SUMMARY:** - Background: Methamphetamine is a central nervous system stimulant and is one of the agents most commonly abused by illicit drug users which could induce neuron apoptosis when it is used repeatedly and overdosed. Our previous study demonstrated that geranylgeranylacetone (GGA) was an inducer of thioredoxin-1 (Trx-1) and heat shock protein 70 (Hsp70), which played a cytoprotective role against neurotoxicity. Methods: Using the MTT assay, we detected the effect of GGA on cell viability by methamphetamine in rat pheochromocytoma (PC12) cells. Tyrosine hydroxylase, Trx-1, Hsp70, procaspase-9, procaspase-12 and procaspase-3 expression were examined by Western blot analysis. We also detected enzymatic activities of caspase-3 and caspase-9. Results: We found that GGA protected PC12 cells from apoptosis caused by methamphetamine. Furthermore, GGA reversed the decreases in Trx-1 and Hsp70 by methamphetamine, and prevented the methamphetamine-induced decreases in procaspase-9 and procaspase-3. On the other hand, GGA prevented the methamphetamine-induced increases in the enzymatic activity of caspase-9 and caspase-3. Procaspase-12 was not changed by any treatment. Conclusions: These results indicate that GGA protects PC12 cells from methamphetamine-induced toxicity by increasing Trx-1 and Hsp70 and by preventing mitochondria pathway-mediated apoptosis. In summary, GGA may be used as a therapy for neurotoxicity induced by methamphetamine. © 2013 S. Karger AG, Basel.

[61]

**TÍTULO / TITLE:** - Extracts from Leonurus sibiricus L. increase insulin secretion and proliferation of rat INS-1E insulinoma cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Ethnopharmacol. 2013 Aug 24. pii: S0378-8741(13)00555-2. doi: 10.1016/j.jep.2013.08.013.

●● Enlace al texto completo (gratis o de pago) [1016/j.jep.2013.08.013](#)

**AUTORES / AUTHORS:** - Schmidt S; Jakab M; Jav S; Streif D; Pitschmann A; Zehl M; Purevsuren S; Glasl S; Ritter M

**INSTITUCIÓN / INSTITUTION:** - Institute of Physiology and Pathophysiology, Paracelsus Medical University Salzburg, 5020 Salzburg, Austria. Electronic address: [sabine.schmidt@pmu.ac.at](mailto:sabine.schmidt@pmu.ac.at).

**RESUMEN / SUMMARY:** - ETHNOPHARMACOLOGICAL RELEVANCE: Traditional Mongolian medicine (TMM) uses preparations from herbs as one form of medication for the treatment of a diversity of diseases including diabetes mellitus (DM). We evaluated the effect of extracts from the plant *Leonurus sibiricus* L. (LS), used in TMM to treat typical symptoms of type 2 DM, on insulin secretion, electrophysiological properties, intracellular calcium concentration and cell proliferation of INS-1E insulinoma cells under standard cell culture conditions (SCC; 11.1mM glucose). MATERIALS AND METHODS: Insulin secretion was measured by ELISA, electrical properties were assessed by whole cell patch clamping, intracellular calcium concentration (Cai) by Fluo-4 time lapse imaging, insulin receptor expression was verified by RT-PCR and cell proliferation assessed by CellTiter-Glo® cell viability assay. RESULTS: Insulin released from INS-1E cells into the culture medium over 24h was significantly increased in presence of 500mg/L aqueous LS extract (LS OWE) as well as methanolic LS extract (LS MeOH/H<sub>2</sub>O) but not in the presence of the butanol-soluble extract (LS MeOH/BuOH). Acute application of LS OWE resulted in a depolarization of the cell membrane potential paralleled by an initial increase and subsequent decline and silencing of action potential frequency, by KATP channel inhibition, persisting depolarization and an increase in Cai. The electrophysiological effects were comparable to those of 100µM tolbutamide, which, however failed to elevate insulin secretion under SCC. Furthermore all LS extracts stimulated INS-1E cell proliferation. CONCLUSIONS: The finding that extracts from *Leonurus sibiricus* L. enhance insulin secretion and/or foster cell proliferation may provide possible explanations for the underlying therapeutic principles in the empirical use of LS-containing formulations in DM and DM-related disorders as applied in TMM.

[62]

**TÍTULO / TITLE:** - Immunohistochemical analysis of chromogranin A and p53 expressions in ulcerative colitis-associated neoplasia: neuroendocrine differentiation as an early event in the colitis-neoplasia sequence.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Sep 10. pii: S0046-8177(13)00262-1. doi: 10.1016/j.humpath.2013.06.008.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.humpath.2013.06.008](#)

**AUTORES / AUTHORS:** - Shigaki K; Mitomi H; Fujimori T; Ichikawa K; Tomita S; Imura J; Fujii S; Itabashi M; Kameoka S; Sahara R; Takenoshita S

**INSTITUCIÓN / INSTITUTION:** - Department of Surgical and Molecular Pathology, Dokkyo Medical University School of Medicine, 880 Kitakobayashi, Mibu, Shimotsuga, Tochigi

321-0293, Japan; Department of Coloproctology, Social Health Insurance Hospital, 22-1 Hyakunincho, Shinjuku, Tokyo 169-0073 Japan; Department of Organ Regulatory Surgery, Fukushima Medical University School of Medicine, 1 Hikarigaoka, Fukushima 960-1295, Japan.

**RESUMEN / SUMMARY:** - Pancellular dysplasia involving neuroendocrine cells has been shown to be comparatively rare but crucially implicated in the development of neuroendocrine tumors in ulcerative colitis (UC). We attempted to clarify the prevalence of chromogranin A expression as a marker of neuroendocrine differentiation in UC-associated neoplasia by immunohistochemical analyses of 26 lesions of low-grade dysplasia (LGD), 32 high-grade dysplasias (HGDs) and 27 invasive cancers (INVs), along with p53 expression. We additionally assessed the utility of these proteins for differential diagnosis between LGD and HGD. Chromogranin A was considered positive when immunoreactive cells were more than 5% of neoplastic lesions, and the positivity tended to be higher in HGDs (57.7%) or INVs (46.7%) than LGDs (32.0%). Focal or diffuse nuclear staining for p53 was defined as positive. The positive rate for p53 was also higher in HGDs (59.4%;  $P = 0.037$ ) or INVs (59.3%) than LGDs (30.8%). A similar trend was found in co-positivity for both proteins (HGDs, 30.7%/INVs, 26.7% versus LGDs, 12.0%). No positivity for both proteins was identified in the non-neoplastic mucosa. The combination of the two proteins improved the sensitivity (66.7%), specificity (80.0%), positive predictive value (72.7%) and negative predictive value (75.0%) for HGD as compared to p53 alone (sensitivity, 57.7%; specificity 68.0%; positive predictive value, 65.2%; negative predictive value, 60.7%). In conclusion, we show here that neuroendocrine differentiation is relatively common and represents an early event in the UC-neoplasia pathway in which p53 and chromogranin A are coordinately up-regulated. Immunohistochemical assessment of their expression might provide a useful adjunct tool for grading dysplasia in UC.

[63]

**TÍTULO / TITLE:** - Large-cell neuroendocrine lung tumor presenting as acute pancreatitis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Gastrointest Endosc. 2013 Aug 6. pii: S0016-5107(13)02085-3. doi: 10.1016/j.gie.2013.06.020.

●● Enlace al texto completo (gratis o de pago) [1016/j.gie.2013.06.020](https://doi.org/10.1016/j.gie.2013.06.020)

**AUTORES / AUTHORS:** - Dinis Silva J; Pinto Marques P; Brito MJ; Cortes J; Senhorinho R; Heredia V; Nunes A

**INSTITUCIÓN / INSTITUTION:** - Department of Gastroenterology, Hospital do Espírito Santo de Evora EPE, Evora, Portugal.

[64]

**TÍTULO / TITLE:** - Primary hepatic neuroendocrine carcinoma: MR imaging findings including preliminary observation on diffusion-weighted imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Abdom Imaging. 2013 Aug 14.

●● Enlace al texto completo (gratis o de pago) [1007/s00261-013-0029-1](#)

**AUTORES / AUTHORS:** - Li RK; Zhao J; Rao SX; Chen CZ; Zeng MS

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Jinshan Hospital, Shanghai School of Medicine, Fudan University, 1508 Longhang Road, Shanghai, 201508, China.

**RESUMEN / SUMMARY:** - PURPOSE: To investigate MR imaging findings of primary hepatic neuroendocrine carcinoma (PHNEC) including preliminary observations on diffusion-weighted imaging (DWI). MATERIALS AND METHODS: MR images of eight patients with pathologically confirmed PHNEC were retrospectively analyzed. The morphological characteristics and dynamic enhancement patterns were evaluated. RESULTS: One case showed a well-defined solitary nodule with homogenous hypointensity on T1-weighted imaging (T1WI) and hyperintensity on T2-weighted imaging (T2WI) and DWI. The remaining seven cases appeared as well-defined dominant masses with multiple satellite nodules. The dominant masses demonstrated heterogeneous hypointensity on T1WI and hyperintensity on T2WI, which all appeared as a marked enhancement at arterial phase and rapid washout at portal venous phase. Six cases demonstrated rim-like enhancement at equilibrium phase. The satellite lesions showed heterogeneous hypointensity on T1WI and marked hyperintensity on T2WI with variable enhancements, such as homogeneous, rim-like enhancement. All the dominant masses and satellite nodules appeared as markedly hyperintensity and reduced apparent coefficient (ADCs) values on DWI. The mean ADC value of the tumors was significantly lower than that of surrounding liver parenchyma (1.02 +/- 0.57 vs. 2.24 x 10<sup>-3</sup> mm<sup>2</sup>/s, p = 0.000). CONCLUSION: PHNECs typically appear as a large dominant hypervascular mass accompanied by satellite nodules, with rapid washout and capsular enhancement on dynamic MR imaging and restricted diffusion on DWI.

[65]

**TÍTULO / TITLE:** - Urinary cytomorphology and clinical correlates of prostatic small cell neuroendocrine carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Cytol. 2013;57(5):495-500. doi: 10.1159/000351301. Epub 2013 Sep 7.

●● Enlace al texto completo (gratis o de pago) [1159/000351301](#)

**AUTORES / AUTHORS:** - Toll AD; Ali SZ

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, The Johns Hopkins Hospital, Baltimore, Md., USA.

**RESUMEN / SUMMARY:** - Background: Small cell carcinoma (SCC) of the prostate represents a rare form of prostatic carcinoma. While the tumor is often considered to arise from neuroendocrine proliferation or possibly dedifferentiation of an acinar carcinoma, the precise etiology remains uncertain. The diagnosis of prostatic SCC in urine has to date not been described. Methods: A retrospective review was performed at a tertiary-care hospital, and 3 patients with prostatic SCC in voided urinary specimens were identified. The following clinical data were collected for each case: age, gender, treatment and follow-up information, when available. Results: The patient age range was 70-86 years, all male. Two patients had known metastatic adenocarcinoma of the prostate, and 1 had recently presented with prostatic SCC. One patient with metastatic disease died shortly after diagnosis, the other was lost to follow-up. The third patient with a recent presentation has yet to have a treatment plan finalized. Conclusions: Our results highlight the importance of making this uncommon diagnosis as it may carry significant treatment and prognostic importance. Future work should hopefully clarify the role of ERG gene rearrangements in the pathogenesis of prostatic SCC, as there is a potential role here for targeted therapy. © 2013 S. Karger AG, Basel.

[66]

**TÍTULO / TITLE:** - Implication of tumor stem-like cells in the tumorigenesis of sporadic paraganglioma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med Oncol. 2013 Dec;30(4):659. doi: 10.1007/s12032-013-0659-8. Epub 2013 Aug 31.

●● Enlace al texto completo (gratis o de pago) [1007/s12032-013-0659-8](#)

**AUTORES / AUTHORS:** - Yang Y; Guo L; Yang F; Huang Q; Zhang F; Ma H; Li H; Yang K; Lou J; Liu C

**INSTITUCIÓN / INSTITUTION:** - Developmental & Stem Cell Institute, Department of Gynecology, West China Second University Hospital, Sichuan University, Chengdu, 610041, People's Republic of China.

**RESUMEN / SUMMARY:** - It is commonly believed that paragangliomas are rare tumors arising from the neural crest-derived chromaffin cells. Although it has been speculated that paraganglioma is related to stem cell origin, there has been lack of direct evidence demonstrating the presence of (neural) stem cells in these tumor tissues. In this study, we found a subgroup of human paraganglioma from ten clinical samples displayed definitive markers of CD133 and/or nestin, the fundamental features of neural stem cell capable of self-renewal and differentiation. A panel of lineage-specific markers was also manifest in some of these tumors, consistent with the hierarchical and heterogeneous nature of these tumors. These observations strongly suggest that at least some forms of paraganglioma maintain tumor stem-like cells (TSCs) that

potentially contribute to the histologic complexity of human paraganglioma. Finally, we found that the genomic DNA structure becomes highly unstable in tumor cells of paraganglioma, indicating the loss of tight control of genomic surveillance system be an important transitory event from normal multi-potent tissue stem cells to TSCs.

-----  
[67]

**TÍTULO / TITLE:** - Clonality analysis of neuroendocrine cells in gastric adenocarcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Gastroenterol. 2013 Aug 28;19(32):5340-6. doi: 10.3748/wjg.v19.i32.5340.

●● [Enlace al texto completo \(gratis o de pago\) 3748/wjg.v19.i32.5340](#)

**AUTORES / AUTHORS:** - Wang LL; Yao GY; Zhao ZS; Wei XL; Xu RJ

**INSTITUCIÓN / INSTITUTION:** - Ling-Ling Wang, Institute of Pathology and Forensic Medicine, Zhejiang University, Hangzhou 310058, Zhejiang Province, China.

**RESUMEN / SUMMARY:** - AIM: To achieve a better understanding of the origination of neuroendocrine (NE) cells in gastric adenocarcinoma. METHODS: In this study, 120 cases of gastric adenocarcinoma were obtained. First, frozen section-immunohistochemical samples were selected from a large quantity of neuroendocrine cells. Second, laser capture microdissection was used to get target cells from gastric adenocarcinoma and whole genome amplification was applied to get a large quantity of DNA for further study. Third, genome-wide microsatellite abnormalities [microsatellite instability (MSI), loss of heterozygosity (LOH)] and p53 mutation were detected by polymerase chain reaction (PCR)-single-strand conformation polymerase-silver staining and PCR-sequencing in order to identify the clonality of NE cells. RESULTS: The total incidence rate of MSI was 27.4%, while LOH was 17.9%. Ten cases had a highest concordance for the two types of cells. The other samples had similar microsatellite changes, except for cases 7 and 10. Concordant p53 mutations exhibited in sample 4, 14, 21 and 27, and there were different mutations between two kinds of cells in case 7. In case 17, mutation took place only in adenocarcinoma cells. p53 mutation was closely related with degree of differentiation, tumor-node-metastasis stage, vessel invasion and lymph node metastasis. In brief, NE and adenocarcinoma cells showed the same MSI, LOH or p53 mutation in most cases (27/30). In the other three cases, different MSI, LOH or p53 mutation occurred. CONCLUSION: NE and the gastric adenocarcinoma cells may mainly derive from the same stem cells, but the remaining cases showing different origin needs further investigation.

-----  
[68]

**TÍTULO / TITLE:** - Outcome after resection and radiofrequency ablation of liver metastases from small intestinal neuroendocrine tumours.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Surg. 2013 Oct;100(11):1505-14. doi: 10.1002/bjs.9262.

●● Enlace al texto completo (gratis o de pago) [1002/bjs.9262](#)

**AUTORES / AUTHORS:** - Norlen O; Stalberg P; Zedenius J; Hellman P

**INSTITUCIÓN / INSTITUTION:** - Department of Surgical Sciences, Uppsala University, Uppsala, Sweden.

**RESUMEN / SUMMARY:** - BACKGROUND: In patients with small intestinal neuroendocrine tumour (SI-NET), liver resection or radiofrequency ablation (RFA) of liver metastases is performed for palliation of carcinoid syndrome, and in an effort to improve survival. Data are generally reported from case series, and no randomized trials have studied these treatments. The aim was to compare outcome after liver resection and/or RFA with that of non-surgical treatment in patients with liver metastases from SI-NET. METHODS: The study included patients with liver metastases from SI-NET who underwent liver RFA/resection or were treated non-surgically. A propensity score match was performed to reduce bias between groups, using baseline variables such as the Charlson co-morbidity index, age, symptoms, carcinoid heart disease, extent of metastases and proliferation index. RESULTS: Some 103 patients who had RFA and/or liver resection were compared with 273 controls. Propensity score matching resulted in two matched groups, each of 72 patients, with no significant differences in baseline variables. The matched resection/RFA and control groups showed no difference in overall survival (both 74 per cent at 5 years; P = 0.869) or disease-specific survival (74 versus 78 per cent respectively at 5 years; P = 1.000). However, urinary 5-hydroxyindoleacetic acid levels were lower (median 77 versus 120 micromol per 24 h; P = 0.005) and the proportion of patients with progressive disease within the liver was smaller (2 of 18 versus 8 of 18; P < 0.001) in the resection/RFA group after 5 years. CONCLUSION: These data do not support the use of liver resection and/or RFA in an effort to prolong survival in patients with liver metastases from SI-NET.

[69]

**TÍTULO / TITLE:** - Treatment of cervical paragangliomas: Is surgery the only way?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Otolaryngol. 2013 Sep 16. pii: S0196-0709(13)00211-1. doi: 10.1016/j.amjoto.2013.08.020.

●● Enlace al texto completo (gratis o de pago) [1016/j.amjoto.2013.08.020](#)

**AUTORES / AUTHORS:** - Kunzel J; Koch M; Brase C; Fietkau R; Iro H; Zenk J

**INSTITUCIÓN / INSTITUTION:** - Department of Otorhinolaryngology, Head and Neck Surgery, University of Erlangen-Nuremberg Medical School, Erlangen, Germany.

Electronic address: [julian.kuenzel@uk-erlangen.de](mailto:julian.kuenzel@uk-erlangen.de).

**RESUMEN / SUMMARY:** - PURPOSE: To analyze the results after surgery or stereotactic radiotherapy (SRT) in the treatment of cervical paragangliomas. Against this background, the decision-making algorithm used in the treatment of carotid body tumors (CBTs) and vagal paragangliomas (VPs) was reevaluated relative to the existing literature on the topic. MATERIALS AND METHODS: Retrospective study between 2000 and 2012. A total of 27 CBTs and nine VPs in 32 patients were treated. Shamblin class I: 59.3% (n=16); class II: 29.6% (n=8); class III: 11.1% (n=3). Treatment modalities were surgery, radiotherapy, or observation. The end points for analysis were long-term tumor control and integrity of the cranial nerves. RESULTS: 21 CBTs and seven VPs underwent surgery; SRT was performed in three CBTs and two VPs. Three CBTs were clinically observed. Permanent nerve paresis followed after surgery for CBTs in five patients (20%) and in all patients with VPs. No impaired cranial nerve function resulted after SRT. The median follow-up period was 4.7years. The tumor control rate after therapy for CBTs and VPs was 100%. One CBT that received clinical observation showed slow tumor progression. CONCLUSIONS: A surgical procedure should be regarded as the treatment of choice in patients with small CBTs. In larger CBTs, particularly in elderly patients with unimpaired cranial nerves, radical surgery should be regarded critically. As surgery for VPs caused regularly impairment of cranial nerves with functional disturbances of various degrees a comprehensive consultation with the patient is mandatory and nonsurgical strategies should be discussed.

[70]

**TÍTULO / TITLE:** - Genetics of hereditary head and neck paragangliomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Head Neck. 2013 Aug 3. doi: 10.1002/hed.23436.

●● [Enlace al texto completo \(gratis o de pago\) 1002/hed.23436](#)

**AUTORES / AUTHORS:** - Boedeker CC; Hensen EF; Neumann HP; Maier W; van Nederveen FH; Suarez C; Kunst HP; Rodrigo JP; P Takes R; Pellitteri PK; Rinaldo A; Ferlito A

**INSTITUCIÓN / INSTITUTION:** - Department of Otorhinolaryngology-Head and Neck Surgery, Albert-Ludwigs-University, Freiburg, Germany.

**RESUMEN / SUMMARY:** - Background: The purpose of this study was to give an overview on hereditary syndromes associated with head and neck paragangliomas (HNPGs). Methods: Our methods were the review and discussion of the pertinent literature. Results: About one third of all HNPG patients are carriers of germ line mutations. Hereditary HNPG have been described in association with mutations of ten different genes. Mutations of the genes SDHD, SDHAF2, SDHC and SDHB are the cause of paraganglioma syndromes (PGLs) 1, 2, 3 and 4. SDHA, VHL and TMEM127 gene mutations also harbor the risk for HNPG development. HNPG in patients with RET, NF1, and MAX gene mutations have been described very infrequently. Conclusions: All patients with HNPG should be offered a molecular genetic screening. This screening

may usually be restricted to mutations of the genes SDHD, SDHB and SDHC. Certain clinical parameters can help to set up the order in which those genes should be tested. Head Neck, 2013.

[71]

**TÍTULO / TITLE:** - MK-2206 Causes Growth Suppression and Reduces Neuroendocrine Tumor Marker Production in Medullary Thyroid Cancer Through Akt Inhibition.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Surg Oncol. 2013 Jul 31.

●● Enlace al texto completo (gratis o de pago) [1245/s10434-013-3168-2](https://doi.org/10.1245/s10434-013-3168-2)

**AUTORES / AUTHORS:** - Burke JF; Schlosser L; Harrison AD; Kunnimalaiyaan M; Chen H

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, K3/705 Clinical Science Center, University of Wisconsin, Madison, WI, USA.

**RESUMEN / SUMMARY:** - BACKGROUND: Development of targeted therapies for medullary thyroid cancer (MTC) has focused on inhibition of the rearranged during transfection (RET) proto-oncogene. Akt has been demonstrated to be a downstream target of RET via the key mediator phosphoinositide-3-kinase. MK-2206 is an orally administered allosteric Akt inhibitor that has exhibited minimal toxicity in phase I trials. We explored the antitumor effects of this compound in MTC. METHODS: Human MTC-TT cells were treated with MK-2206 (0-20 μM) for 8 days. Assays for cell viability were performed at multiple time points with MTT (3-[4,5-dimethylthiazol-2-yl]-2,5-diphenyltetrazolium bromide). The mechanism of action, mechanism of growth inhibition, and production of neuroendocrine tumor markers were assessed with Western blot analysis. RESULTS: MK-2206 suppressed MTC cell proliferation in a dose-dependent manner ( $p \leq 0.001$ ). Levels of Akt phosphorylated at serine 473 declined with increasing doses of MK-2206, indicating successful Akt inhibition. The apoptotic proteins cleaved poly (ADP-ribose) polymerase and cleaved caspase-3 increased in a dose-dependent manner with MK-2206, while the apoptosis inhibitor survivin was markedly reduced. Importantly, the antitumor effects of MK-2206 were independent of RET inhibition, as the levels of RET protein were not blocked. CONCLUSIONS: MK-2206 significantly suppresses MTC proliferation without RET inhibition. Given its high oral bioavailability and low toxicity profile, phase II studies with this drug alone or in combination with RET inhibitors are warranted.

[72]

**TÍTULO / TITLE:** - Childhood pheochromocytoma in a survivor of central primitive neuroectodermal tumor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pediatr Int. 2013 Aug;55(4):e100-2. doi: 10.1111/ped.12074.

●● Enlace al texto completo (gratis o de pago) [1111/ped.12074](http://1111/ped.12074)

**AUTORES / AUTHORS:** - Nakano Y; Fujimaru R; Ishii K; Sakamoto H; Inoue T; Sako M; Yamada H

**INSTITUCIÓN / INSTITUTION:** - Department of Pediatrics, Osaka City General Hospital, Osaka, Japan. [nakanolp@gmail.com](mailto:nakanolp@gmail.com)

**RESUMEN / SUMMARY:** - Pheochromocytoma and central nervous system primitive neuroectodermal tumor are both neural crest-derived tumors. The former is usually benign and develops mainly in adulthood and the latter brain tumor mainly occurs in childhood and has a poor prognosis. We report a case of a 15-year-old boy who developed pheochromocytoma after more than 10 years of complete remission of central primitive neuroectodermal tumor. Thus far, there have been no reports of childhood cancer survivors who developed pheochromocytoma. This quite rare occurrence of two tumors in a single patient may imply some unidentified linkage or common genetic background.

[73]

**TÍTULO / TITLE:** - CDX2 may be a useful marker to distinguish primary ovarian carcinoid from gastrointestinal metastatic carcinoids to the ovary.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Sep 9. pii: S0046-8177(13)00268-2. doi: 10.1016/j.humpath.2013.06.014.

●● Enlace al texto completo (gratis o de pago) [1016/j.humpath.2013.06.014](http://1016/j.humpath.2013.06.014)

**AUTORES / AUTHORS:** - Desouki MM; Liyd J; Xu H; Cao D; Barner R; Zhao C

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Magee-Womens Hospital of University of Pittsburgh Medical Center, Pittsburgh, PA 15213, USA.

**RESUMEN / SUMMARY:** - Primary ovarian carcinoids and metastatic tumors share similar morphologic features. Metastatic carcinoids must be excluded from primary ones for prognostic and therapeutic reasons. Gastrointestinal neuroendocrine (carcinoid) tumors are much more common with the majority arising from small intestine and appendix. The aim of this study is to evaluate the role of immunohistochemistry for CDX2 in differentiating primary ovarian from metastatic carcinoids of primary gastrointestinal origin. Thirty primary pure ovarian carcinoids, 16 primary ovarian carcinoids arising in association with benign teratomas, 10 ovarian carcinoids metastatic from primary gastrointestinal tract and 70 gastrointestinal neuroendocrine tumors were studied for the expression of CDX2 by immunohistochemistry. CDX2 expression revealed that 40 (57.1%) of 70 cases of gastrointestinal carcinoids and 9 (90%) of 10 ovarian metastatic carcinoids showed positive nuclear staining (diffuse or focal). On the other hand, 3 (18.8%) of 16 primary carcinoids with teratomatous elements showed weak positivity. Among the 70 gastrointestinal carcinoids, CDX2 was positive in 38 (90.5%) of 42 cases in the duodenum, small intestine, appendix, and only

in 2 (11.8%) of 17 cases of colorectal carcinoids and none of the 11 cases in the stomach. It is concluded that CDX2 may be a useful marker to distinguish primary ovarian carcinoid from metastasis from small intestinal and appendiceal neuroendocrine tumors.

[74]

**TÍTULO / TITLE:** - Benefits of combined modality treatment of Merkel cell carcinoma of the head and neck: single institution experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Laryngol Otol. 2013 Sep;127(9):908-16. doi: 10.1017/S0022215113001862. Epub 2013 Aug 19.

●● Enlace al texto completo (gratis o de pago) [1017/S0022215113001862](#)

**AUTORES / AUTHORS:** - Balakrishnan V; Berry S; Stew B; Sizeland A

**INSTITUCIÓN / INSTITUTION:** - Department of Surgical Oncology, Peter MacCallum Cancer Centre, Melbourne, Australia.

[75]

**TÍTULO / TITLE:** - Laparoendoscopic Single Site Retroperitoneoscopic Adrenalectomy for Pheochromocytoma: Case Selection, Surgical Technique and Short-Term Outcome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Aug 13.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0318](#)

**AUTORES / AUTHORS:** - He Y; Chen Z; Luo Y; Fang XL; Chen X

**INSTITUCIÓN / INSTITUTION:** - Xiangya Hospital, Central South University, Department of Urology, Changsha, China ; [heyao1984@163.com](mailto:heyao1984@163.com).

**RESUMEN / SUMMARY:** - ABSTRACT Objective: To present our experience with case selection and operative skills of laparoendoscopic single-site surgery (LESS) retroperitoneoscopic adrenalectomy for pheochromocytoma and evaluate its feasibility. Methods: Between June 2011 and December 2012, we performed LESS retroperitoneoscopic adrenalectomy for 16 patients with pheochromocytoma. In all patients, the diameter of the pheochromocytoma was less than 4.0 cm. During the operation, a single-port access (Shikonghou, Hangzhou Tonglu, China) was inserted through a 2.5-3.0 cm transverse incision below the tip of the 12th rib. Internally, the operation procedure duplicates the conventional retroperitoneoscopic adrenalectomy for pheochromocytoma. Results: No conversions to an open surgery or standard laparoscopy with additional trocars were necessary. The mean operative duration was 68.1 minutes (range, 41-125 minutes). The mean blood loss was negligible (< 50 mL) and no patient required blood transfusion. Intraoperative hypertension (SBP > 180 mmHg) occurred in 12.5% (2/16) of the patients. No patient had sustained

hypertension and none experienced intraoperative hypotension (SBP < 80 mmHg). The only postoperative complication was one case of pneumonia successfully treated with antibiotics. The average post-operative hospital stay was 3.1 days (range, 2-5 days). All patients left hospital with a good cosmetic appearance. Conclusions: In properly selected patients, LESS retroperitoneoscopic adrenalectomy is a feasible and safe procedure for pheochromocytoma.

[76]

**TÍTULO / TITLE:** - Is the clinical course of laryngeal typical carcinoid tumor indolent?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Arch Otorhinolaryngol. 2013 Sep 8.

●● Enlace al texto completo (gratis o de pago) [1007/s00405-013-2686-7](#)

**AUTORES / AUTHORS:** - Ferlito A; Devaney KO; Hunt JL; Rinaldo A

**INSTITUCIÓN / INSTITUTION:** - ENT Clinic, University of Udine, Piazzale S. Maria della Misericordia, 33100, Udine, Italy, [a.ferlito@uniud.it](mailto:a.ferlito@uniud.it).

[77]

**TÍTULO / TITLE:** - Dysregulation of the mammalian target of rapamycin pathway in chromophobe renal cell carcinomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Oct;44(10):2323-30. doi: 10.1016/j.humpath.2013.05.014. Epub 2013 Aug 15.

●● Enlace al texto completo (gratis o de pago) [1016/j.humpath.2013.05.014](#)

**AUTORES / AUTHORS:** - Chau A; Albadine R; Schultz L; Hicks J; Carducci MA; Argani P; Allaf M; Netto GJ

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Johns Hopkins Medical Institutions, Baltimore, MD, USA; Office of Scientific Research, Norte University, Asuncion, Paraguay.

**RESUMEN / SUMMARY:** - Targeted therapy in advanced clear cell renal cell carcinomas (RCC) is now an established modality. The latter is in stark contrast to non-clear cell subtypes. We explored the translational support for the use of antagonists of the mammalian target of rapamycin (mTOR) and the vascular endothelial growth factor pathways in chromophobe RCC. The immunoeexpression of PTEN, phos-AKT, phosphorylated S6 (phos-S6), 4EBP1, p27, c-MYC, and HIF-1alpha was evaluated in 33 patients with chromophobe RCC who were treated by partial/radical nephrectomy without adjuvant therapy. PTEN was lower in tumor than in normal kidney (P<.001), and loss of PTEN expression was found in 67% of the tumors. In tumor tissues, phos-S6 and 4EBP1 were higher than in normal kidney (P</.005). Conversely, scores of p27 were lower in tumor than in normal kidney (P<.001). Finally, scores of phos-AKT, c-

MYC, and HIF-1alpha were not significantly different in tumor and in normal kidney. Overall mortality and cancer-specific mortality were 9% and 0%, respectively. Multifocal tumors had higher levels of PTEN, phos-AKT, and HIF-1alpha ( $P \leq .01$ ). None of the clinicopathologic variables (age, ethnicity, gender, pT stage, tumor size, multifocality, and positive surgical margins) was associated with outcome. Similarly, none of the tested biomarkers predicted overall mortality, either in unadjusted or adjusted Cox regression models. In summary, our study provides new evidence of dysregulation of the mTOR pathway in chromophobe RCC. Immunohistochemistry for mTOR pathway and hypoxia-induced pathway members lacked prognostic significance in our cohort.

[78]

**TÍTULO / TITLE:** - Plexiform schwannoma of the clitoris in a young girl: a case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Reprod Med. 2013 Jul-Aug;58(7-8):365-8.

**AUTORES / AUTHORS:** - Azurah AG; Grover S; McGregor D

**INSTITUCIÓN / INSTITUTION:** - Department of Obstetrics and Gynecology, Pusat Perubatan UKM, Jalan Yaakob Latif, Kuala Lumpur 56100, Wilayah Persekutuan, Malaysia.

[nurazurahag@gmail.com](mailto:nurazurahag@gmail.com)

**RESUMEN / SUMMARY:** - BACKGROUND: Schwannoma (neurilemoma) is a benign, slow-growing tumor of the nerve sheath. These tumors are rarely found in the female genitalia and to date only 1 case of clitoral schwannoma has been reported in a young girl. We report here the second case of schwannoma of the clitoris. CASE: A 6-year-old girl presented with an enlarging clitoris. An alteration in her clitoral appearance had first been noted at 2 years of age. However, the size had further increased in the year prior to presentation. On examination her clitoris was normal in size but beneath the clitoral hood, predominantly on the left, there was a 3 x 2 cm irregular mobile mass. Her karyotype revealed normal 46XX female genotype. Magnetic resonance imaging of the abdomen and pelvis showed an isolated finding of diffuse enlargement of the clitoris with edema of the mons pubis. Surgical excision of the paraclitoral mass was performed. Intraoperatively the clitoral tip and shaft did not appear to be involved. However, the mass was found to be more diffuse, less well-defined, and more extensive than the clinical findings had suggested. On histology long spindle cells with nuclear palisading and focal Verocay body-like structures were found. There was mild to moderate pleomorphism. No mitotic figures were identified. There was diffuse staining of interweaving bundles for S100 protein and glial fibrillary acidic protein without staining for actin, desmin, or neurofilament. These features are consistent with a plexiform schwannoma. CONCLUSION: Although benign schwannomas rarely occur in the clitoris, we suggest that it should be considered as differential diagnosis for any young girl with clitoral or paraclitoral asymmetrical irregular mass.

[79]

**TÍTULO / TITLE:** - Serum calcitonin may falsely estimate tumor burden in chronic hypercalcemia: A case of prostatic and multiple bone metastases from medullary thyroid cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Thyroid. 2013 Aug 28.

●● Enlace al texto completo (gratis o de pago) [1089/thy.2013.0121](#)

**AUTORES / AUTHORS:** - Kim HK; Bae WK; Choi YD; Shim HJ; Yoon JH; Kang HC

**INSTITUCIÓN / INSTITUTION:** - Chonnam National University Medical School, Internal Medicine, Gwangju, Korea, Republic of ; [albeppey@gmail.com](mailto:albeppey@gmail.com).

**RESUMEN / SUMMARY:** - Background: Medullary thyroid cancer (MTC) is a calcitonin (Ct)-secreting tumor of the parafollicular or C cells of the thyroid gland. Higher serum Ct levels are associated with larger tumor size, distant metastases and prognosis. We report herein a case of prostate and multiple bone metastases of non-familial medullary thyroid cancer (MTC) with mildly elevated Ct levels. Patient Findings: A 73-year-old man who was diagnosed with a 2.5 cm-sized MTC in the left thyroid lobe with cervical lymph node metastases, presented with confused mental status due to severe hypercalcemia (albumin-modified serum calcium concentration 15.2 mg/dL) associated with multiple bone metastases. Prostate biopsy was performed because the patient had frequent urination with mildly elevated serum prostate-specific antigen (PSA, 5.297 ng/mL). Histologically, the prostate was diagnosed as MTC metastasis, forming a tissue architecture closely resembling the previously diagnosed MTC, and the cells were positive for calcitonin (Ct), carcinoembryonic antigen (CEA) and TTF-1. Although the patient had multiple MTC metastases, basal and calcium-stimulated serum Ct levels were not significantly elevated, measuring 22.7 pg/mL (normal < 10 pg/mL) and 22.1 pg/mL, respectively. Conclusions: A chronic hypercalcemic state may exhaust Ct reserves and diminish the Ct response to an acute intravenous calcium injection. Therefore, the Ct level of a patient in a hypercalcemic state should be carefully interpreted. To our knowledge, this is the first reported case in the literature in which serum Ct levels were not significantly increased when associated with hypercalcemia, and a MTC metastasis to the prostate.

[80]

**TÍTULO / TITLE:** - Update on the management of gastroenteropancreatic neuroendocrine tumors with emphasis on the role of imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Oct;201(4):811-24. doi: 10.2214/AJR.12.10240.

- Enlace al texto completo (gratis o de pago) [2214/AJR.12.10240](#)

**AUTORES / AUTHORS:** - Kim KW; Krajewski KM; Nishino M; Jagannathan JP; Shinagare AB; Tirumani SH; Ramaiya NH

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Radiology, Dana-Farber Cancer Institute, 450 Brookline Ave, Boston, MA 02115.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purposes of this article are to review the current management of gastroenteropancreatic neuroendocrine tumors (GEP-NETs) based on the 2012 National Comprehensive Cancer Network guidelines and to describe the role of imaging in a multidisciplinary approach. CONCLUSION. The management of GEP-NETs has become complex, requiring a multidisciplinary approach. The World Health Organization classification of GEP-NETs has been revised; the U.S. Food and Drug Administration has approved molecular targeted agents (sunitinib, everolimus) for the treatment of pancreatic NETs; and the National Comprehensive Cancer Network clinical practice guidelines have been updated.

[81]

**TÍTULO / TITLE:** - Imaging features of carcinoid tumors of the gastrointestinal tract.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Oct;201(4):773-86. doi: 10.2214/AJR.12.9758.

- Enlace al texto completo (gratis o de pago) [2214/AJR.12.9758](#)

**AUTORES / AUTHORS:** - Ganeshan D; Bhosale P; Yang T; Kundra V

**INSTITUCIÓN / INSTITUTION:** - 1 All authors: Division of Diagnostic Imaging, Body Imaging Section, Unit 1473, The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Blvd, Houston, TX 77030-4009.

**RESUMEN / SUMMARY:** - OBJECTIVE. Recent studies have provided a better understanding of the biologic behavior of gastrointestinal carcinoid tumors. This article focusing on imaging of gastrointestinal carcinoids will emphasize epidemiology, molecular biology, taxonomy, histopathology, and management. CONCLUSION. Gastrointestinal carcinoids are a biologically heterogeneous group of tumors, with variable clinical presentation and biologic behavior. Imaging can play an important role in multidisciplinary identification and management of this disease.

[82]

**TÍTULO / TITLE:** - HDLs protect the MIN6 insulinoma cell line against tunicamycin-induced apoptosis without inhibiting ER stress and without restoring ER functionality.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cell Endocrinol. 2013 Aug 28;381(1-2):291-301. doi: 10.1016/j.mce.2013.08.016.

●● Enlace al texto completo (gratis o de pago) [1016/j.mce.2013.08.016](https://doi.org/10.1016/j.mce.2013.08.016)

**AUTORES / AUTHORS:** - Puyal J; Petremand J; Dubuis G; Rummel C; Widmann C

**INSTITUCIÓN / INSTITUTION:** - Department of Fundamental Neurosciences, University of Lausanne, Switzerland.

**RESUMEN / SUMMARY:** - HDLs protect pancreatic beta cells against apoptosis induced by several endoplasmic reticulum (ER) stressors, including thapsigargin, cyclopiazonic acid, palmitate and insulin over-expression. This protection is mediated by the capacity of HDLs to maintain proper ER morphology and ER functions such as protein folding and trafficking. Here, we identified a distinct mode of protection exerted by HDLs in beta cells challenged with tunicamycin™, a protein glycosylation inhibitor inducing ER stress. HDLs were found to inhibit apoptosis induced by TM in the MIN6 insulinoma cell line and this correlated with the maintenance of a normal ER morphology. Surprisingly however, this protective response was neither associated with a significant ER stress reduction, nor with restoration of protein folding and trafficking in the ER. These data indicate that HDLs can use at least two mechanisms to protect beta cells against ER stressors. One that relies on the maintenance of ER function and one that operates independently of ER function modulation. The capacity of HDLs to activate several anti-apoptotic pathways in beta cells may explain their ability to efficiently protect these cells against a variety of insults.

[83]

- CASTELLANO -

**TÍTULO / TITLE:** Das Expressionsmuster von beta-catenin und Cyclin D1 in Merkelzellkarzinomen des Kopf-Hals-Bereiches.

**TÍTULO / TITLE:** - Expression of beta-catenin and cyclin D1 in Merkel cell carcinomas of the head and neck.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Wien Klin Wochenschr. 2013 Sep;125(17-18):501-507. Epub 2013 Aug 9.

●● Enlace al texto completo (gratis o de pago) [1007/s00508-013-0406-3](https://doi.org/10.1007/s00508-013-0406-3)

**AUTORES / AUTHORS:** - Lill C; Schneider S; Ghanim B; Brunner M; Heiduschka G; Loewe R; Thurnher D

**INSTITUCIÓN / INSTITUTION:** - Department of Otorhinolaryngology, Head and Neck Surgery, Medical University of Vienna, Waehringer Guertel 18-20, 1090, Vienna, Austria, [claudia.lill@meduniwien.ac.at](mailto:claudia.lill@meduniwien.ac.at).

**RESUMEN / SUMMARY:** - BACKGROUND: Merkel cell carcinomas (MCC) are very aggressive tumors of the sun-exposed skin with a high potential to metastasize. Little is known about the genesis of MCC and very few prognostic markers have been detected so far. The Wnt pathway protein beta-catenin and the cell cycle protein cyclin D1 are two promoters of tumor growth and are expressed in a variety of malignant

neoplasms such as lymphomas, thyroid, breast cancer, and many others. PATIENTS AND METHODS: Tissue samples of 27 patients with MCC were immunohistochemically stained for beta-catenin and cyclin D1 and correlated with overall survival of patients. In addition, western blot analysis was carried out in the two MCC cell lines MCC-13 and MCC-26. RESULTS: beta-catenin showed a cytoplasmatic expression of 10-30 % in 11 samples and an expression lower than 10 % in eight samples. Nuclear staining was visible in two samples. None of the 27 samples expressed cyclin D1. CONCLUSION: Neither cyclin D1 nor beta-catenin was expressed in a statistically significant manner, concluding that the development of MCCs is independent of beta-catenin and cyclin D1 expression and these proteins are not suitable as prognostic markers. We could describe the expression pattern of cyclin D1 for the first time.

[84]

**TÍTULO / TITLE:** - Perioperative, Functional, and Oncologic Outcomes of Partial Adrenalectomy for Multiple Ipsilateral Pheochromocytomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Sep 2.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0298](#)

**AUTORES / AUTHORS:** - Gupta GN; Benson JS; Ross M; Menon VS; Lin KY; Pinto P; Linehan WM; Bratslavsky G

**INSTITUCIÓN / INSTITUTION:** - Loyola University Medical Center, Urology, Maywood, Illinois, United States ; [gogupta@lumc.edu](mailto:gogupta@lumc.edu).

**RESUMEN / SUMMARY:** - Objective Managing patients with multiple adrenal masses is technically challenging. We present our experience with minimally invasive partial adrenalectomy performed for synchronous multiple ipsilateral pheochromocytomas in a single setting. Materials and Methods We reviewed records of patients undergoing partial adrenalectomy for pheochromocytoma at the National Cancer Institute between 1994 and 2010. Patients were included if multiple tumors were excised from the ipsilateral adrenal gland in the same operative setting. Perioperative, functional, and oncologic outcomes of partial adrenalectomy for multiple pheochromocytomas is shown. Results Of 121 partial adrenalectomies performed, 10 procedures performed in eight patients for synchronous multiple ipsilateral pheochromocytomas were identified. All eight patients were symptomatic at presentation. The mean patient age was 30.6 yrs, median follow up was 12 months. The average surgical time was 228 minutes, average blood loss of 125 mL, average number of tumors removed was 2.6 per adrenal. In total 26 tumors were removed, 24 were pathologically confirmed pheochromocytoma while two were adrenal-cortical hyperplasia. After surgery all patients had resolution of their symptoms, one patient required steroid replacement post operatively. On post operative imaging, one patient had evidence of ipsilateral adrenal nodule at the prior resection site two months post operatively, which was

consistent with incomplete resection. Conclusions Minimally invasive surgical resection of synchronous multiple pheochromocytomas is feasible with acceptable perioperative, functional, and oncologic outcomes.

[85]

**TÍTULO / TITLE:** - Chromophobe renal cell carcinoma-chromosomal aberration variability and its relation to Paner grading system: an array CGH and FISH analysis of 37 cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Virchows Arch. 2013 Oct;463(4):563-573. Epub 2013 Aug 3.

●● Enlace al texto completo (gratis o de pago) [1007/s00428-013-1457-6](#)

**AUTORES / AUTHORS:** - Sperga M; Martinek P; Vanecek T; Grossmann P; Bauleth K; Perez-Montiel D; Alvarado-Cabrero I; Nevidovska K; Lietuvielis V; Hora M; Michal M; Petersson F; Kuroda N; Suster S; Branzovsky J; Hes O

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, East University, Riga, Latvia.

**RESUMEN / SUMMARY:** - Genetically, chromophobe renal cell carcinoma (ChRCC) is characterized by multiple chromosomal changes, especially losses. The most common losses include chromosomes 1, 2, 6, 10, 13, 17, and 21. The Fuhrman grading system lacks prognostic relevance for ChRCC, and recently, a new grading system for ChRCC was proposed by Paner. The objective of this study was to map the spectrum of chromosomal aberrations (extent and location) in a large cohort of ChRCCs and relate these findings to the Paner grading system (PGS). A large cohort of ChRCC was reviewed and graded according to the PGS. All the cases were reevaluated and separated into groups according to their PGS. The final study set was 37 patients. ChRCCs were divided into PG 1-3, sarcomatoid, and aggressive groups. "Aggressive ChRCCs" were designated cases with known metastatic activity, local recurrence, aggressive growth to the adjacent organs, or invasive growth into the renal sinus (with/without angioinvasion). Sarcomatoid tumors were divided into their epithelial and sarcomatoid component (further molecular genetic analyses were performed separately). Array comparative genome hybridization and/or fluorescence in situ hybridization analysis was applied to 42 samples from the 37 cases. Multiple losses, as well as gains, were detected in different chromosomes. Regardless of the PGS groups, the most frequently detected losses involved chromosomes 1 (27/37), 2 (26/37), 6 (23/37), 10 (26/37), 13 (19/37), and 17 (24/37). Loss of chromosome 21 was found in 12/37 cases. The most frequently detected gains were found on chromosomes 4 (22/37), 7 (24/37), 15 (20/37), 19 (22/37), and 20 (21/37). Cluster analysis showed that there is no relation between PGS and particular pattern of chromosomal changes (losses or gains) in ChRCCs. Conclusions are as follows: (1) ChRCCs showed a significantly broader spectrum of chromosomal aberrations than previously recognized. While previously published chromosomal losses were found in our cohort, gains of multiple chromosomes were also identified in a high percentage. The most

frequently detected gains involved chromosomes 4, 7, 15, 19, and 20. (2) There is no relation between chromosomal numerical changes and Paner grading system.

[86]

**TÍTULO / TITLE:** - Medullary thyroid cancer diagnosis: An appraisal.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Head Neck. 2013 Aug 16. doi: 10.1002/hed.23449.

●● Enlace al texto completo (gratis o de pago) [1002/hed.23449](#)

**AUTORES / AUTHORS:** - Trimboli P; Giovanella L; Crescenzi A; Romanelli F; Valabrega S; Spriano G; Cremonini N; Guglielmi R; Papini E

**INSTITUCIÓN / INSTITUTION:** - Section of Endocrinology and Diabetology, Ospedale Israelitico, Rome, Italy.

**RESUMEN / SUMMARY:** - Since its first description in 1951, a timely diagnosis of medullary thyroid cancer (MTC) may represent a diagnostic challenge in clinical practice. Several contributes have been addressed to the treatment and follow-up of MTC, but review papers focused on the diagnostic problems of this cancer in clinical practice are sparse. As a delayed diagnosis and an inadequate initial treatment may severely affect the prognosis of this thyroid malignancy, the appropriate use and the correct interpretation of the available diagnostic tools for MTC is of crucial importance. The present paper is aimed to provide an easy-to-use guide reviewing the main issues of MTC diagnosis: Basal serum Calcitonin (CT) Stimulated serum CT Additional serum markers for MTC Ultrasonography and other imaging techniques Fine needle aspiration cytology (FNA) CT measurement on FNA washout (FNA-CT) RET (REarranged during Transfection) mutations Head Neck, 2013.

[87]

**TÍTULO / TITLE:** - Multiple endocrine neoplasia type 1 (MEN1) and type 4 (MEN4).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cell Endocrinol. 2013 Aug 8. pii: S0303-7207(13)00330-4. doi: 10.1016/j.mce.2013.08.002.

●● Enlace al texto completo (gratis o de pago) [1016/j.mce.2013.08.002](#)

**AUTORES / AUTHORS:** - Thakker RV

**INSTITUCIÓN / INSTITUTION:** - Academic Endocrine Unit, Radcliffe Department of Medicine, University of Oxford, Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM), Churchill Hospital, Headington, Oxford OX3 7LJ, United Kingdom. Electronic address: [rajesh.thakker@ndm.ox.ac.uk](mailto:rajesh.thakker@ndm.ox.ac.uk).

**RESUMEN / SUMMARY:** - Multiple endocrine neoplasia (MEN) is characterized by the occurrence of tumors involving two or more endocrine glands within a single patient. Four major forms of MEN, which are autosomal dominant disorders, are recognized

and referred to as: MEN type 1 (MEN1), due to menin mutations; MEN2 (previously MEN2A) due to mutations of a tyrosine kinase receptor encoded by the rearranged during transfection (RET) protooncogene; MEN3 (previously MEN2B) due to RET mutations; and MEN4 due to cyclin-dependent kinase inhibitor (CDNK1B) mutations. Each MEN type is associated with the occurrence of specific tumors. Thus, MEN1 is characterized by the occurrence of parathyroid, pancreatic islet and anterior pituitary tumors; MEN2 is characterized by the occurrence of medullary thyroid carcinoma (MTC) in association with pheochromocytoma and parathyroid tumors; MEN3 is characterized by the occurrence of MTC and pheochromocytoma in association with a marfanoid habitus, mucosal neuromas, medullated corneal fibers and intestinal autonomic ganglion dysfunction, leading to megacolon; and MEN4, which is also referred to as MENX, is characterized by the occurrence of parathyroid and anterior pituitary tumors in possible association with tumors of the adrenals, kidneys, and reproductive organs. This review will focus on the clinical and molecular details of the MEN1 and MEN4 syndromes. The gene causing MEN1 is located on chromosome 11q13, and encodes a 610 amino-acid protein, menin, which has functions in cell division, genome stability, and transcription regulation. Menin, which acts as scaffold protein, may increase or decrease gene expression by epigenetic regulation of gene expression via histone methylation. Thus, menin by forming a subunit of the mixed lineage leukemia (MLL) complexes that trimethylate histone H3 at lysine 4 (H3K4), facilitates activation of transcriptional activity in target genes such as cyclin-dependent kinase (CDK) inhibitors; and by interacting with the suppressor of variegation 3-9 homolog family protein (SUV39H1) to mediate H3K methylation, thereby silencing transcriptional activity of target genes. MEN1-associated tumors harbor germline and somatic mutations, consistent with Knudson's two-hit hypothesis. Genetic diagnosis to identify individuals with germline MEN1 mutations has facilitated appropriate targeting of clinical, biochemical and radiological screening for this high risk group of patients for whom earlier implementation of treatments can then be considered. MEN4 is caused by heterozygous mutations of CDNK1B which encodes the 196 amino-acid CDK1 p27Kip1, which is activated by H3K4 methylation.

[88]

**TÍTULO / TITLE:** - Familial pheochromocytomas and paragangliomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cell Endocrinol. 2013 Aug 7. pii: S0303-7207(13)00327-4. doi: 10.1016/j.mce.2013.07.032.

●● Enlace al texto completo (gratis o de pago) [1016/j.mce.2013.07.032](#)

**AUTORES / AUTHORS:** - King KS; Pacak K

**INSTITUCIÓN / INSTITUTION:** - Program in Reproductive and Adult Endocrinology, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD 20892, USA.

**RESUMEN / SUMMARY:** - Pheochromocytomas and paragangliomas are neural crest cell tumors of the adrenal medulla and parasympathetic/sympathetic ganglia, respectively, that are often associated with catecholamine production. Genetic research over the years has led to our current understanding of the association 13 susceptibility genes with the development of these tumors. Most of the susceptibility genes are now associated with specific clinical presentations, biochemical makeup, tumor location, and associated neoplasms. Recent scientific advances have highlighted the role of somatic mutations in the development of pheochromocytoma/paraganglioma as well as the usefulness of immunohistochemistry in triaging genetic testing. We can now approach genetic testing in pheochromocytoma/paraganglioma patients in a very organized scientific way allowing for the reduction of both the financial and emotional burden on the patient. The discovery of genetic predispositions to the development of pheochromocytoma/paraganglioma not only facilitates better understanding of these tumors but will also lead to improved diagnosis and treatment of this disease.

[89]

**TÍTULO / TITLE:** - MDCT of Adrenal Masses: Can Dual-Phase Enhancement Patterns Be Used to Differentiate Adenoma and Pheochromocytoma?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Oct;201(4):834-9. doi: 10.2214/AJR.12.9753.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.12.9753](#)

**AUTORES / AUTHORS:** - Northcutt BG; Raman SP; Long C; Oshmyansky AR; Siegelman SS; Fishman EK; Johnson PT

**INSTITUCIÓN / INSTITUTION:** - 1 All authors: Russell H. Morgan Department of Radiology and Radiological Sciences, Johns Hopkins Outpatient Center, 601 N Caroline St, Rm 3140D, Baltimore, MD 21287.

**RESUMEN / SUMMARY:** - **OBJECTIVE.** The purpose of this study was to compare enhancement of adrenal adenomas and pheochromocytomas during dual-phase (arterial and venous phases) CT performed with currently used MDCT protocols with the goal of defining enhancement patterns predictive of pathologic findings. **MATERIALS AND METHODS.** Pathologically proven pheochromocytomas were retrospectively compared with adrenal adenomas. Inclusion criteria for adenomas, collected by searching the radiology database, were confirmatory adrenal CT (unenhanced with or without washout) and absence of clinical indicators of pheochromocytoma. A fellowship-trained attending radiologist blinded to the

pathologic diagnosis reviewed existing images from dual-phase IV contrast-enhanced CT examinations to measure enhancement of adrenal lesions and characterize the appearance (homogeneous versus heterogeneous). Student t test analysis was performed to compare arterial and venous phase enhancement levels. RESULTS. The findings in 39 patients with 41 adenomas were compared with those in 10 patients with 12 pheochromocytomas. Mean arterial and venous enhancement of adenomas at 37 HU (-6 to 85 HU) and 60 HU (16-133 HU) was significantly lower than that of pheochromocytomas at 104 HU (42-190 HU) and 119 HU (61-195 HU) ( $p < 0.001$ ). No adenoma was more than 85-HU enhancing in the arterial phase, and 58% of pheochromocytomas were more than 110-HU enhancing. Most adenomas (85%) were more enhancing in the venous phase. No adenoma was more enhancing in the arterial phase, but 25% (3/12) of pheochromocytomas were. Most (58%) pheochromocytomas were heterogeneous in appearance, compared with 22% of adenomas. CONCLUSION. For indeterminate adrenal masses identified at dual-phase IV contrast-enhanced CT, higher enhancement during the arterial phase, arterial phase enhancement levels greater than 110 HU, and lesion heterogeneity should prompt consideration of pheochromocytoma.

[90]

**TÍTULO / TITLE:** - Serendipity in the diagnosis of pheochromocytoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Comput Assist Tomogr. 2013 Sep-Oct;37(5):820-3. doi: 10.1097/RCT.0b013e31829cbeef.

●● Enlace al texto completo (gratis o de pago) [1097/RCT.0b013e31829cbeef](#)

**AUTORES / AUTHORS:** - Oshmyansky AR; Mahammedi A; Dackiw A; Ball DW; Schulick RD; Zeiger MA; Siegelman SS

**INSTITUCIÓN / INSTITUTION:** - From the Johns Hopkins Medical Institutions, Baltimore, MD.

**RESUMEN / SUMMARY:** - OBJECTIVES: Pheochromocytomas are increasingly being discovered incidentally on imaging studies performed without clinical suspicion of the existence of an adrenal lesion. We aimed to determine the rate of diagnosis of adrenal pheochromocytoma as an incidental finding during a recent 7-year period. METHODS: We obtained the Department of Pathology database to study all the patients at our institution with newly diagnosed pheochromocytomas in the 7-year period from 2005 to 2011 to determine the clinical presentation and the means of diagnosis. RESULTS: In 40 (70.2%) of the 57 patients, an adrenal pheochromocytoma was detected in an imaging study performed without suspicion of an adrenal lesion. There were 13 chest computed tomography studies-8 to evaluate for possible pulmonary emboli. Other indications included abdominal pain or discomfort (n = 8), trauma (n = 3), abnormal liver function tests (n = 3), suspect renal artery stenosis (n = 3), hematuria (n = 2),

colitis (n = 2), and 4 miscellaneous indications. DISCUSSION: Our study documents that the commonest current means of initial detection of pheochromocytoma is by serendipitous discovery. In 16 of our 40 patients with serendipitously discovered pheochromocytomas, there were no clinical symptoms of pheochromocytoma; these were true incidentalomas. More than two thirds of the new cases of pheochromocytoma were detected by serendipity (found during studies not performed to evaluate for pheochromocytoma), approximately one third were true incidentalomas (pheochromocytomas in patients without symptoms). CONCLUSIONS: In a 7-year period at a single institution, 40 patients, 70% of new cases of surgically proven pheochromocytoma, were initially detected by serendipity. Sixteen patients, 40% of those incidentally discovered represented true examples of "incidentalomas."

[91]

**TÍTULO / TITLE:** - Recurrence of Pulmonary Carcinoid Tumors After Resection: Implications for Postoperative Surveillance.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Thorac Surg. 2013 Oct;96(4):1156-1162. doi: 10.1016/j.athoracsur.2013.05.047. Epub 2013 Jul 31.

●● [Enlace al texto completo \(gratis o de pago\)](#)

[1016/j.athoracsur.2013.05.047](#)

**AUTORES / AUTHORS:** - Lou F; Sarkaria I; Pietanza C; Travis W; Roh MS; Sica G; Healy D; Rusch V; Huang J

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, SUNY Downstate Medical Center, Brooklyn, New York.

**RESUMEN / SUMMARY:** - BACKGROUND: The current guidelines for follow-up care after treatment of non-small cell lung cancer recommend continued surveillance for detection of recurrent or metachronous disease. However, carcinoid tumors, especially those with a typical histologic profile, tend to be less aggressive. Our goal was to determine the patterns of relapse and the manner of detection of recurrences, to guide follow-up care after resection. METHODS: Patients who underwent operations for pulmonary carcinoids at our institution were identified from a prospectively maintained database, and their medical records were reviewed for relapse patterns, detection methods, and outcomes. RESULTS: A total of 337 patients who underwent resection between 1993 and 2010 were included, with a median follow-up time of 3.5 years. Typical and atypical carcinoids were present in 291 (86%) and 46 (14%) patients, respectively. Recurrences occurred in 21 patients (6%), with distant metastases in 20 patients (95%) and locoregional recurrence in only 1 patient. Most recurrences (15 [76%]) were not detected through scheduled surveillance imaging but after the presentation of symptoms (7 [33%]) or incidentally by studies performed for unrelated reasons (8 [38%]). The risk of recurrence increased with positive lymph nodes and

atypical histologic type. Only 9 of 291 patients (3%) with typical carcinoids experienced recurrences, with a median time to recurrence of 4 years (range, 0.8-12 years). Conversely, 12 of 46 patients (26%) with atypical carcinoids experienced recurrences, with a median time to recurrence of 1.8 years (range, 0.2-7 years). CONCLUSIONS: After complete resection, scheduled surveillance imaging failed to detect most recurrences. Recurrence was rare in patients with node-negative typical carcinoids. Given the low risk of recurrence and the unclear efficacy of surveillance imaging, routine surveillance imaging may not be warranted in this cohort.

[92]

**TÍTULO / TITLE:** - The Immunohistochemical Expression of Islet 1 and PAX8 by Rectal Neuroendocrine Tumors Should Be Taken into Account in the Differential Diagnosis of Metastatic Neuroendocrine Tumors of Unknown Primary Origin.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Pathol. 2013 Sep 15.

●● Enlace al texto completo (gratis o de pago) [1007/s12022-013-9264-9](#)

**AUTORES / AUTHORS:** - Koo J; Zhou X; Moschiano E; De Peralta-Venturina M; Mertens RB; Dhall D

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology and Laboratory Medicine, Cedars-Sinai Medical Center, Los Angeles, CA, USA, [jakoo@mednet.ucla.edu](mailto:jakoo@mednet.ucla.edu).

**RESUMEN / SUMMARY:** - Rectal neuroendocrine tumors (NETs) can be classified by histologic pattern and secretory products. Recently, rectal NETs have been noted to exhibit immunohistochemical (IHC) positivity for Islet 1 and PAX8, which are generally considered markers for NETs of pancreatic origin. In this study, we sought to characterize the IHC staining profile of rectal NETs and determine whether there was any correlation between the histologic pattern of rectal NETs and their IHC profile. Fifty-six primary rectal NETs were histologically reviewed and stained with antibodies against Islet 1, PAX8, CDX2, chromogranin A, and synaptophysin. In a subset of 31 cases, immunoreactivity for serotonin, pancreatic polypeptide (PP), and prostatic acid phosphatase (PAP) was also studied. By morphology, the tumors studied included 55 % trabecular, 27 % solid nested, 4 % acinar, and 14 % mixed patterns. Islet 1 was positive in 89 % and PAX8 in 79 % of cases. CDX2 was negative in all 56 cases. Cytoplasmic staining was observed for chromogranin A in 30 % of cases and for synaptophysin in all 56 cases. Cytoplasmic staining for serotonin, PP, and PAP was present in 16, 61, and 97 % of cases, respectively. There was no correlation between histologic pattern and IHC staining pattern with any of the antibodies studied. We have demonstrated that Islet 1 and PAX8 are not entirely specific for NETs of pancreatic origin, as they are expressed in a majority of rectal NETs. Since rectal NETs may show an IHC staining profile which mirrors that of pancreatic NETs (Islet 1 and PAX8-positive, CDX2-negative), a metastatic rectal NET should be considered in the differential diagnosis and ruled out

clinically in the work-up of a metastatic NET of unknown primary origin which exhibits this staining profile.

[93]

**TÍTULO / TITLE:** - Comparison of Segmental Enhancement Inversion on Biphasic MDCT Between Small Renal Oncocytomas and Chromophobe Renal Cell Carcinomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Sep;201(3):598-604. doi: 10.2214/AJR.12.10372.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.12.10372](#)

**AUTORES / AUTHORS:** - Woo S; Cho JY; Kim SH; Kim SY

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Radiology, Seoul National University College of Medicine, 101 Daehak-ro, Jongno-gu, Seoul 110-744, Korea.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purpose of this article is to assess the usefulness of segmental enhancement inversion on biphasic MDCT in differentiating small (< 4 cm) renal oncocytomas from chromophobe renal cell carcinomas (CRCCs). MATERIALS AND METHODS. Eighty-two patients (40 men and 42 women) with a mean (+/- SD) age of 54 +/- 12 years (range, 21-75 years) with 27 renal oncocytomas and 55 CRCCs diagnosed by surgery who underwent contrast-enhanced biphasic CT between January 2000 and December 2011 were included. CT scans were interpreted by two radiologists who were blinded to the pathologic findings. The tumors were evaluated for size and segmental enhancement inversion. After independent evaluation, a consensus was reached by measuring the attenuation. Pathologic analysis determined the presence of fibrous septa, cystic change, hemorrhage, and necrosis. The Fisher exact test was used to evaluate the relationship between segmental enhancement inversion, tumor type, and specific pathologic changes. Interobserver concordance was evaluated with kappa statistics. RESULTS. There were no significant differences in size between renal oncocytomas and CRCCs ( $p = 0.458$ ). Segmental enhancement inversion was present in 23, 20, and 21 (25.6%) of the 82 tumors according to reader 1, reader 2, and the consensus, respectively. The agreement was almost perfect ( $\kappa = 0.843$ ;  $p < 0.001$ ). Segmental enhancement inversion was more common in renal oncocytomas (63% [17/27]) than in CRCCs (7.3% [4/55];  $p < 0.001$ ). There were no significant relationships between the four pathologic changes and tumor type or segmental enhancement inversion ( $p = 0.351$  and  $p = 0.126$ , respectively). CONCLUSION. Our study findings suggest that segmental enhancement inversion on biphasic MDCT may be useful in differentiating small renal oncocytomas from CRCCs.

[94]

**TÍTULO / TITLE:** - Expression of activation-induced cytidine deaminase in Merkel cell carcinoma with lymph-node metastasis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Dermatol. 2013 Aug 1;23(4):539-40. doi: 10.1684/ejd.2013.2078.

●● Enlace al texto completo (gratis o de pago) [1684/ejd.2013.2078](#)

**AUTORES / AUTHORS:** - Watabe R; Nakamura M

**INSTITUCIÓN / INSTITUTION:** - Department of Dermatology, University of Occupational and Environmental Health, 1-1 Iseigaoka, Yahatanishi-ku, Kitakyushu 807-8555, Japan.

[95]

**TÍTULO / TITLE:** - Pheochromocytoma presenting with rhabdomyolysis and acute renal failure: a case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ren Fail. 2013 Sep 24.

●● Enlace al texto completo (gratis o de pago) [3109/0886022X.2013.832856](#)

**AUTORES / AUTHORS:** - Celik H; Celik O; Guldiken S; Inal V; Puyan FO; Tugrul A

**INSTITUCIÓN / INSTITUTION:** - Department of Internal Medicine, Division of Endocrinology and Metabolism, Trakya Medical School, University of Trakya , Edirne , Turkey .

**RESUMEN / SUMMARY:** - Abstract Rhabdomyolysis ranges from an asymptomatic illness with elevated creatine kinase levels to a life-threatening condition associated with extreme elevations in creatine kinase, electrolyte imbalances, acute renal failure, and disseminated intravascular coagulation. The most common causes are crush injury, overexertion, alcohol abuse, certain medicines, and toxic substances. A number of electrolyte abnormalities and endocrinopathies, including hypothyroidism, thyrotoxicosis, diabetic ketoacidosis, nonketotic hyperosmolar state, and hyperaldosteronism, cause rhabdomyolysis. Rhabdomyolysis and acute renal failure are unusual manifestations of pheochromocytoma. There are a few case reports with pheochromocytoma presenting rhabdomyolysis and acute renal failure. Herein, we report a case with pheochromocytoma crisis presenting with rhabdomyolysis and acute renal failure.

[96]

**TÍTULO / TITLE:** - The infratemporal fossa approach type a with transcondylar-transtubercular extension for Fisch type C2-C4 tympanojugular paragangliomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Head Neck. 2013 Aug 30. doi: 10.1002/hed.23480.

●● Enlace al texto completo (gratis o de pago) [1002/hed.23480](#)

**AUTORES / AUTHORS:** - Sanna M; Shin SH; Piazza P; Pasanisi E; Vittulo F; Di Lella F; Bacciu A

**INSTITUCIÓN / INSTITUTION:** - Gruppo Otologico Piacenza-Rome and University of Chieti, Italy.

**RESUMEN / SUMMARY:** - **BACKGROUND:** The classic infratemporal fossa type A approach (IFTA-A) permits superior and anterior exposure of the jugular foramen. The transcondylar-transtubercular extension facilitates posteroinferior and medial access to the jugular foramen. The purpose of this study is to present the IFTA-A with transcondylar-transtubercular extension and to assess its surgical results. **METHODS:** A review of patients with tympanojugular paraganglioma who underwent resection through the IFTA-A with transcondylar-transtubercular extension was performed. **RESULTS:** In all, 39 patients were included in the study. The average follow-up was 23.6 months. Gross total tumor removal was achieved in 87.2% of the cases and there was evidence of recurrence in 5.9% of this group. **CONCLUSION:** The transcondylar-transtubercular extension of the classic IFTA-A is aimed at making the excision of Fisch Type C2-C4 tympanojugular paragangliomas simpler and safer by drilling out of one-third of the lateral part of the occipital condyle and removing the jugular process and jugular tubercle. Head Neck, 2013.

[97]

**TÍTULO / TITLE:** - Bronchogenic carcinoid tumours that are 18F-fluorodeoxyglucose avid on positron emission tomography.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cardiothorac Surg. 2013 Sep 18.

●● [Enlace al texto completo \(gratis o de pago\) 1093/ejcts/ezt436](#)

**AUTORES / AUTHORS:** - Hunt BM; Horton MP; Vallieres E

**INSTITUCIÓN / INSTITUTION:** - Swedish Medical Center and Cancer Institute, Seattle, WA, USA.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** Bronchogenic carcinoid tumours are widely cited as non-fluorodeoxyglucose (FDG) avid. However, three case reports of FDG-avid bronchogenic carcinoid tumours have been published, leading to speculation as to which clinicopathological factors may be associated with increased activity on FDG-positron emission tomography. We reviewed a series of cases from our institution and compared them with the available reports in the literature, to attempt to identify the factors associated with FDG avidity in bronchogenic carcinoids. **METHODS:** We performed a single-institution retrospective review. **RESULTS:** One patient was identified at our institution who had a typical carcinoid tumour with a standardized uptake value (SUV) of 26, oncocytic features on histology and positive staining for glucose transporter 1 (GLUT1). Three additional patients were identified in the literature with typical bronchogenic carcinoids with SUVs of 39, 38 and 33. Two of

these tumours stained positive for GLUT1, and the remaining patient was not tested. Two of these patients had oncocytic features on histology, and results on the remaining patient are not reported. Additionally, 4 patients at our institution were identified with bronchogenic carcinoids with average SUV of 2.6. All were GLUT1 negative, and none had oncocytic features. In the reported literature, excluding the four most FDG-avid tumours described above, atypical carcinoids had a higher mean SUV than typical carcinoids (5.7 vs 3.4,  $P = 0.02$ ), but size was not correlated with SUV ( $r = 0.7$ ,  $P = 0.3$ ). CONCLUSIONS: FDG uptake is commonly associated with worse prognosis in malignancy; however, bronchogenic carcinoids, particularly oncocytic typical carcinoids, are a possible source of extremely high SUVs on FDG-PET.

[98]

- CASTELLANO -

**TÍTULO / TITLE:** Carcinoma de células de Merkel etmoidal.

**TÍTULO / TITLE:** - Merkel cell carcinoma of the ethmoid sinus.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Otorrinolaringol Esp. 2013 Aug 9. pii: S0001-6519(13)00097-6. doi: 10.1016/j.otorri.2013.05.003.

●● Enlace al texto completo (gratis o de pago) [1016/j.otorri.2013.05.003](#)

**AUTORES / AUTHORS:** - Moises-Hernandez JF; Reyes-Millan M; Hernandez-Serrano E; Carino-Cartagena DA

**INSTITUCIÓN / INSTITUTION:** - Servicio de Otorrinolaringología y Cirugía de Cabeza y Cuello, Hospital General de México Dr. Eduardo Liceaga, Ciudad de México, México. Electronic address: [jfmoises@hotmail.com](mailto:jfmoises@hotmail.com).

[99]

**TÍTULO / TITLE:** - The biochemical utility of chromogranin A, chromogranin B and cocaine- and amphetamine-regulated transcript for neuroendocrine neoplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Clin Biochem. 2013 Aug 12.

**AUTORES / AUTHORS:** - Bech P; Martin N; Ramachandran R; Bloom S

**INSTITUCIÓN / INSTITUTION:** - Division of Diabetes, Endocrinology and Metabolism, Imperial College London, London, UK.

**RESUMEN / SUMMARY:** - Neuroendocrine neoplasia (NEN) is a heterogeneous group of tumours and often represents a therapeutic challenge to clinicians. The peptides chromogranin A (CgA), chromogranin B (CgB) and cocaine- and amphetamine-regulated transcript (CART) are widely distributed throughout the neuroendocrine system. CgA and CgB have been used as general NEN biomarkers for many years, while CART has only recently been identified. Of these biomarkers, CgA is the most

commonly used. However, circulating CgA concentrations exhibit considerable intra-individual biological variation, are altered by proton pump inhibitors (PPIs) and somatostatin analogues and are elevated in non-NEN malignancies. Therefore, interpretation of CgA results must be in the context of these confounding factors. The effects of treatment and non-NEN conditions on circulating CgB and CART concentrations are less well understood. CgB is less affected by impaired renal function and PPIs than CgA; while, circulating CART concentrations lack a diurnal variation in humans and are more reliable markers of pancreatic NEN malignancy than CgA. The utility of circulating CgA measurements in NEN prognosis, surveillance and disease recurrence has been widely investigated. However, the utility of CgB and CART in NEN management is yet to be elucidated. Further studies are needed to establish whether CgB and CART are useful alternatives to CgA.

-----  
[100]

**TÍTULO / TITLE:** - Neuroendocrine carcinoma in a mediastinal teratoma as a rare variant of somatic-type malignancy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Virchows Arch. 2013 Aug 25.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00428-013-1476-3](#)

**AUTORES / AUTHORS:** - Schaefer IM; Zardo P; Freermann S; Marx A; Strobel P; Fischer S

**INSTITUCIÓN / INSTITUTION:** - Institute of Pathology, University Medical Center Gottingen, Robert-Koch-Strasse 40, 37075, Gottingen, Germany, [inga-marie.schaefer@med.uni-goettingen.de](mailto:inga-marie.schaefer@med.uni-goettingen.de).

**RESUMEN / SUMMARY:** - Somatic-type malignancy (STM), defined as any sarcoma, carcinoma, leukemia or lymphoma developing in a germ cell tumor, occurs in approximately 2 % of all germ cell tumors. Neuroendocrine carcinoma developing in a mediastinal germ cell tumor has not been previously reported. We here describe a 22-year-old man who underwent resection of a 11-cm mediastinal teratoma which consisted of components of all three germ cell layers with prominent foci of fetal-like liver tissue. The liver areas were surrounded by primitive neuroendocrine structures with ductal and solid growth pattern with a high proliferation rate. We diagnosed an immature mediastinal teratoma with STM, specifically neuroendocrine carcinoma arising in a background of immature liver tissue. Comparative genomic hybridization of dissected tumor tissue revealed chromosomal gains at 12 in the teratoma and neuroendocrine carcinoma component. In summary, clinicians and pathologists should be aware of neuroendocrine carcinoma as a rare type of STM complicating mediastinal germ cell tumors.

-----  
[101]

**TÍTULO / TITLE:** - A rare cause of diarrhea: pancreatic VIPoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endoscopy. 2013 Sep;45 Suppl 2:E311-2. doi: 10.1055/s-0033-1344411. Epub 2013 Sep 5.

●● Enlace al texto completo (gratis o de pago) [1055/s-0033-1344411](#)

**AUTORES / AUTHORS:** - Johnson JB; Marsden L; Samadder NJ

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine (Gastroenterology), Huntsman Cancer Institute and University of Utah, Salt Lake City, Utah, United States of America.

[102]

**TÍTULO / TITLE:** - Phosphohistone h3 and ki-67 labeling indices in cytologic specimens from well-differentiated neuroendocrine tumors of the gastrointestinal tract and pancreas: a comparative analysis using automated image cytometry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Cytol. 2013;57(5):501-8. doi: 10.1159/000351475. Epub 2013 Sep 7.

●● Enlace al texto completo (gratis o de pago) [1159/000351475](#)

**AUTORES / AUTHORS:** - Fung AD; Cohen C; Kavuri S; Lawson D; Gao X; Reid MD

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Emory University School of Medicine, Atlanta, Ga., USA.

**RESUMEN / SUMMARY:** - Background: Ki-67 proliferation index was recently incorporated in the grading of neuroendocrine neoplasms (NENs) of the gastrointestinal tract (GIT) and pancreas. These are now divided into well-differentiated neuroendocrine tumors (WDNETs, grades 1 and 2) and poorly differentiated neuroendocrine carcinomas (grade 3). While Ki-67 is an established proliferation marker in NENs, phosphohistone H3 (PHH3), a newer marker of mitotic activity, is not. Methods: We determined Ki-67 and PHH3 indices on cytologic samples from WDNETs of the GIT and pancreas using an automated cellular imaging system (ACIS®). Results: There was a strong correlation between Ki-67 and PHH3 indices generated by ACIS on cytologic samples. However, in some cases the two stains caused conflicting grades within the same tumor. Conclusion: Both antibodies stain cells in different phases of the cell cycle which may cause discordant grades, thus affecting patient management and prognostication. Ki-67 staining is stronger than PHH3, making 'hot spots' easier to identify on ACIS. Ki-67 is more ideal than PHH3 for staining NENs, especially in tumors with borderline grades. Because PHH3 generates lower mitotic indices it should not be used as a proliferation marker in NENs until its expression has been further characterized. © 2013 S. Karger AG, Basel.

[103]

**TÍTULO / TITLE:** - Diffuse Idiopathic Pulmonary Neuroendocrine Cell Hyperplasia with a Central and Peripheral Carcinoid and Multiple Tumorlets: A Case Report Emphasizing the Role of Neuropeptide Hormones and Human Gonadotropin-Alpha.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Pathol. 2013 Sep 5.

●● Enlace al texto completo (gratis o de pago) [1007/s12022-013-9265-8](#)

**AUTORES / AUTHORS:** - Oba H; Nishida K; Takeuchi S; Akiyama H; Muramatsu K; Kurosumi M; Kameya T

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Saitama Cancer Center, 818, Komuro, Ina, Kita-adachi, Saitama, 362-0806, Japan, [camo90570@yahoo.co.jp](mailto:camo90570@yahoo.co.jp).

**RESUMEN / SUMMARY:** - We report a case of diffuse idiopathic pulmonary neuroendocrine cell hyperplasia (DIPNECH). We performed immunohistochemical analysis of 17 neuropeptides and human gonadotropin-alpha (hCGalpha), a trophoblastic peptide that promotes the proliferation of neuroendocrine cells. A 51-year-old woman with no history of smoking was found to have a nodule in the right middle lobe. Upon examination, the nodule was found to comprise diffuse linear and nodular neuroendocrine cell hyperplasia (NECH), numerous pulmonary tumorlets merging with one peripheral carcinoid, and an additional central carcinoid. Immunohistochemical analysis revealed diffuse but intense expression of the general neuroendocrine markers CD56, synaptophysin, and chromogranin A, together with gastrin-releasing peptide (GRP), calcitonin, and hCGalpha throughout the carcinoids, tumorlets, and NECH. Positive staining was also noted for adrenocorticotrophic hormone, corticotropin-releasing hormone, met-enkephalin, vasoactive intestinal polypeptide, neurotensin, and growth hormone-releasing hormone in a few isolated cells of the carcinoids and the tumorlets, but staining for these proteins was entirely negative in the NECH lesions. The presence of these neuropeptides in neuroendocrine tumors might explain the presence of neuropeptide-producing tumors of the lungs, cases of which have been reported over the last 30 years. The preoperative serum proGRP level was high but returned to normal after surgical intervention, indicating that GRP was produced and secreted by carcinoids, tumorlets, and/or NECH lesions. It is also probable that neuroendocrine cells secreted GRP into the interstitium in a paracrine manner, leading to the development of dense fibrosis around the tumorlets. During the preoperative and postoperative periods, no evidence of bronchiolitis obliterans was noted, in contrast to some previously reported cases of DIPNECH.

[104]

**TÍTULO / TITLE:** - Ectopic Duodenal Insulinoma: A Very Rare and Challenging Tumor Type. Description of a Case and Review of the Literature.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Pathol. 2013 Sep 5.

●● Enlace al texto completo (gratis o de pago) [1007/s12022-013-9262-y](https://doi.org/10.5754/hge121185)

**AUTORES / AUTHORS:** - La Rosa S; Pariani D; Calandra C; Marando A; Sessa F; Cortese F; Capella C

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Ospedale di Circolo, Viale Borri 57, 21100, Varese, Italy, [stefano.larosa@ospedale.varese.it](mailto:stefano.larosa@ospedale.varese.it).

**RESUMEN / SUMMARY:** - Although most insulinomas are located in the pancreas, very rare ectopic cases have been described in the spleen, perisplenic tissue, duodenohepatic ligament, and adjacent to the ligament of Treitz. Moreover, three cases located in the duodenum have also been reported in the English literature. Ectopic insulinomas represent challenging neoplasms with clinical implications mainly due to the difficulties in their pre-operative diagnosis and localization. In the present paper, we describe the fourth ectopic duodenal insulinoma so far reported. A 75-year-old woman presented at clinical observation due to neuroglycopenic symptoms that disappeared after glucose intake. Tumor was localized in the second portion of the duodenum in front of the papilla of Vater and was surgically enucleated. Microscopically, it was composed of monomorphic cells with eosinophilic cytoplasm arranged in trabecular and lobular patterns and diffusely positive for insulin, proinsulin, amylin, and PDX1. About 30 % of tumor cells also showed immunoreactivity for somatostatin, while no positivity for glucagon, pancreatic polypeptide, gastrin, serotonin, and somatostatin receptor subtype 2<sup>a</sup> was found. The Ki67 proliferative index was 1 %. We have also reviewed the literature on this topic to give the reader a comprehensive overview of this very rare tumor type.

[105]

**TÍTULO / TITLE:** - Usefulness of endoscopic submucosal dissection for type I gastric carcinoid tumors compared with endoscopic mucosal resection.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hepatogastroenterology. 2013 Aug;60(126):1524-7. doi: 10.5754/hge121185.

●● Enlace al texto completo (gratis o de pago) [5754/hge121185](https://doi.org/10.5754/hge121185)

**AUTORES / AUTHORS:** - Sato Y; Takeuchi M; Hashimoto S; Mizuno K; Kobayashi M; Iwafuchi M; Narisawa R; Aoyagi Y

**RESUMEN / SUMMARY:** - Background/Aims: Gastric carcinoid tumors (GCTs) often extends into the submucosa, and are therefore difficult to resect completely by using conventional endoscopic mucosal resection (EMR). Endoscopic submucosal dissection (ESD) allows en bloc resection of submucosal gastrointestinal lesions. Therefore, ESD may be a feasible method for complete resection of GCT. Our purpose is to clarify the usefulness of ESD for treatment of type I GCT. Methodology: Between 1998 and 2011, EMR or ESD was performed for 13 lesions in 12 patients with type I GCTs. Among the 13 GCTs, 6 were resected using EMR, and 7 were removed using ESD. Results: All

lesions were histologically classified as Grade 1. The depth of invasion was the mucosa for 1 lesion and the submucosa for 12 lesions. The horizontal margins of excision were negative for all lesions; however, the vertical margins were positive in 4 lesions (66.7%) in the EMR group and no lesions (0%) in the ESD group. Conclusions: The results of this study suggest that ESD for small type I GCT is better to achieve complete resection than conventional EMR. ESD would be an effective technique for the treatment of small type I GCT.

[106]

**TÍTULO / TITLE:** - Metastatic small cell neuroendocrine carcinoma of the pelvic floor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocrine. 2013 Sep 25.

●● Enlace al texto completo (gratis o de pago) [1007/s12020-013-0053-5](#)

**AUTORES / AUTHORS:** - Treglia G; Bongiovanni M; Giovanella L

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine and PET/CT Centre, Oncology Institute of Southern Switzerland, Via Ospedale, 12, 6500, Bellinzona, Switzerland, [giorgiomednuc@libero.it](mailto:giorgiomednuc@libero.it).

[107]

**TÍTULO / TITLE:** - Elastographic presentation of medullary thyroid carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocrine. 2013 Sep 25.

●● Enlace al texto completo (gratis o de pago) [1007/s12020-013-0062-4](#)

**AUTORES / AUTHORS:** - Andrioli M; Trimboli P; Amendola S; Valabrega S; Fukunari N; Mirella M; Persani L

**INSTITUCIÓN / INSTITUTION:** - Division of Endocrine and Metabolic Diseases, Ospedale San Luca, IRCCS, Istituto Auxologico Italiano, p.le Brescia 20, 20149, Milan, Italy, [massimoandrioli1@virgilio.it](mailto:massimoandrioli1@virgilio.it).

**RESUMEN / SUMMARY:** - Aim of the study was to evaluate the elastographic appearance of medullary thyroid carcinoma (MTC) by a retrospective evaluation of 18 nodules histologically proven as MTC. Free-hand qualitative elastography was performed using Hitachi Logos EUB 7500. The elasticity score (ES), was assessed based on a colour elastogram, the blue colour being correlated with hard tissue, red colour with soft tissue, and green with intermediate hardness. Nodules were classified into four classes. A alleged diagnosis of malignancy was assigned to nodules with ES3 or 4 and a presumptive diagnosis of benignity was assigned to nodules with an ES1 or 2. More than half (55.6 %) of MTCs have a low-intermediate grade of elasticity. The hardest lesions (ES4) were those with ultrasonographic features highly suspicious for malignancy. In conclusion, most of MTCs present an elastographic pattern of benignity.

Therefore, qualitative elastography does not add useful information in pointing out MTC on the basis of its hardness. Our data suggest a marginal role for this technique in MTC evaluation.

[108]

**TÍTULO / TITLE:** - Retroperitoneal Laparoendoscopic single-site adrenalectomy for pheochromocytoma: our single centre experiences.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Sep 4.

●● [Enlace al texto completo \(gratis o de pago\) 1089/end.2013.0488](#)

**AUTORES / AUTHORS:** - Yuan X; Wang D; Zhang X; Cao X; Bai T

**INSTITUCIÓN / INSTITUTION:** - Shanxi Medical University, Taiyuan, Shanxi, China ;  
[yuanxiaobin1984@126.com](mailto:yuanxiaobin1984@126.com).

**RESUMEN / SUMMARY:** - Objective: To evaluate the feasibility and safety of retroperitoneal laparoendoscopic single-site adrenalectomy for pheochromocytoma (LESS-PHEO) and summarize our initial experience. Patients and Methods: Between June 2009 and June 2013, 21 patients with adrenal pheochromocytoma underwent adrenalectomy via LESS-PHEO in our department. Fifty three patients with pheochromocytoma underwent conventional retrolaparoscopic adrenalectomy (RLAP-PHEO) between March 2001 and June 2013, of whom 42 were selected as a control group for a retrospective serial case-control analysis (1:2 matched-pair cohort). In the operation, the retroperitoneal space was created and dilated by blunt finger dissection and the pneumoperitoneal pressure was maintained below 10 mm Hg. As the first step, ligation of the adrenal central vein was performed. Intraoperative hemodynamic parameters, operating time, estimated blood loss, transfusion requirement, incidence of perioperative complications, visual analog pain scale (VAPS) score, time to resumption of oral intake and ambulation, and postoperative hospitalization were compared between the groups. Results: All the operations were technically successful, without reoperations or conversion to open procedures. The 24-hour postoperative VAPS score was lower in the LESS-PHEO group than in the control group (5 versus 7;  $P < 0.001$ ). Despite a longer median operative time (167.4 min versus 125.5 min;  $P < 0.001$ ), the patients in the LESS-PHEO group resumed oral intake sooner (1 day versus 2 days;  $P < 0.001$ ), ambulated sooner (1 day versus 2 days;  $P < 0.001$ ), and were discharged earlier (4 days versus 7 days;  $P < 0.001$ ). No perioperative complications occurred in either group. No statistically significant differences in hemodynamic parameters or estimated blood loss were found between the groups. Conclusion: Although more training and practice are needed to shorten its operative time, LESS-PHEO, as performed by an experienced laparoscopic urologist, is a feasible and safe procedure associated with less postoperative pain and faster recovery.

[109]

**TÍTULO / TITLE:** - Refractory hypotension during spinal anesthesia for Cesarean delivery due to undiagnosed pheochromocytoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Anesth. 2013 Aug 26. pii: S0952-8180(13)00222-5. doi: 10.1016/j.jclinane.2013.04.015.

●● Enlace al texto completo (gratis o de pago) [1016/j.iclinane.2013.04.015](#)

**AUTORES / AUTHORS:** - Johnson RL; Arendt KW; Rose CH; Kinney MA

**INSTITUCIÓN / INSTITUTION:** - Department of Anesthesiology, Mayo Clinic College of Medicine, Rochester, MN 55905, USA. Electronic address: [Johnson.rebecca1@mayo.edu](mailto:Johnson.rebecca1@mayo.edu).

**RESUMEN / SUMMARY:** - Profound hypotension and resistance to conventional vasopressor therapy following administration of spinal anesthesia for Cesarean delivery occurred in a multiparous parturient. Postpartum evaluation for secondary hypertension showed a diagnosis of pheochromocytoma. Pheochromocytoma was mistaken for preeclampsia with significant vasopressor requirement to treat hypotension from spinal anesthesia. If pheochromocytoma is diagnosed during pregnancy and Cesarean delivery is required, spinal anesthesia may not be the optimal choice of anesthesia.

[110]

**TÍTULO / TITLE:** - Early, Prophylactic Thyroidectomy in Hereditary Medullary Thyroid Carcinoma: A 26-year Monoinstitutional Experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Clin Oncol. 2013 Sep 21.

●● Enlace al texto completo (gratis o de pago) [1097/COC.0b013e3182a78fec](#)

**AUTORES / AUTHORS:** - Pelizzo MR; Torresan F; Boschin IM; Nacamulli D; Pennelli G; Barollo S; Mian C; Rubello D

**INSTITUCIÓN / INSTITUTION:** - \*II General Surgery, Department of Surgery, Oncology and Gastroenterology daggerEndocrinology Unit double daggerII Pathology Unit, Department of Medicine-DIMED, University of Padua, Padua section signDepartment of Nuclear Medicine, Santa Maria della Misericordia Hospital, Rovigo, Italy.

**RESUMEN / SUMMARY:** - PURPOSE:: Prophylactic thyroidectomy has been encouraged for children with REarranged during Transfection (RET) germline mutations to prevent the onset, persistence, or recurrence of medullary thyroid carcinoma (MTC). The American Thyroid Association (ATA) recently published guidelines on the timing of prophylactic thyroidectomy. Our aim here was to seek information on the optimal timing of surgery for carriers of RET gene mutations with no clinical evidence of disease, bearing in mind the ATA recommendations. METHODS:: From 1986 to 2012, total thyroidectomy was

performed at our institute on 31 carriers of RET gene mutations, 28 of them found on family screening in the post-RET era, and the other 3 under 20 years of age and classified as “early cases” in the pre-RET era. The following parameters were studied: age at surgery, MTC risk, basal calcitonin (bCT) and pentagastrin-stimulated calcitonin (sCT), surgery outcomes, and persistence of disease. RESULTS:: By family, the most prevalent mutation was codon 634 (30%) RET mutation. The youngest MTC patient was 5 years old. Overall, MTC was found in 68% of cases; 52% of the sample had a normal bCT and 25% had an sCT unresponsive to pentagastrin. The only factor predicting the risk of MTC at final histology was an ATA-RET risk level C. On receiver operating curves analysis, a cutoff at age over 24 years predicted (P=0.06) a yield of MTC in the resected specimen. Interestingly, none of the patients with MTC had nodal involvement (0/21 patients with MTC). Yet, none of the patients had permanent nerve palsy, and only 1 patient had permanent hypocalcemia. bCT was normal postoperatively and during the follow-up in all but 3 patients. CONCLUSIONS:: It is noteworthy that the yield of cancer in removed thyroid was 100% for codon 634 (9/9 patients, 5 families) and for codons 891 and 768 (2/2 patients in each of the 2 families with those codon mutations), followed by 67% for codon 609 (4/6 patients, 1 family), and 60% for codon 618 (3/5 patients in 4 families) RET mutation. In cases of ATA-RET levels B and C, waiting for an increase in bCT and/or sCT may not guarantee that prophylactic surgery is performed before MTC develops (which would assure patients a life free of diseases and a less-invasive surgical procedure, without any need for central lymph-node dissection).

[111]

**TÍTULO / TITLE:** - Localization and prediction of malignant potential in recurrent pheochromocytoma/paraganglioma (PCC/PGL) using 18F-FDG PET/CT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Radiol. 2013 Sep 14.

●● [Enlace al texto completo \(gratis o de pago\) 1177/0284185113504330](#)

**AUTORES / AUTHORS:** - Saad FF; Kroiss A; Ahmad Z; Zanariah H; Lau W; Uprimny C; Donnemiller E; Kendler D; Nordin A; Virgolini I

**INSTITUCIÓN / INSTITUTION:** - Centre for Diagnostic Nuclear Imaging, Faculty of Medicine and Health Science, University Putra Malaysia, Serdang, Selangor, Malaysia.

**RESUMEN / SUMMARY:** - BACKGROUND: To our knowledge, data are lacking on the role of 18F-FDG PET/CT in the localization and prediction of neuroendocrine tumors, in particular the pheochromocytoma/paraganglioma (PCC/PGL) group. PURPOSE: To evaluate the role of 18F-FDG PET/CT in localizing and predicting the malignant potential of PCC/PGL. MATERIAL AND METHODS: Twenty-three consecutive patients with a history of PCC/PGL, presenting with symptoms related to catecholamine excess, underwent 18F-FDG PET/CT. Final confirmation of the diagnosis was made using the

composite references. PET/CT findings were analyzed on a per-lesion basis and a per-patient basis. Tumor SUVmax was analyzed to predict the dichotomization of patient endpoints for the local disease and metastatic groups. RESULTS: We investigated 23 patients (10 men, 13 women) with a mean age of 46.43 +/- 3.70 years. Serum catecholamine levels were elevated in 82.60% of these patients. There were 136 sites (mean SUVmax: 16.39 +/- 3.47) of validated disease recurrence. The overall sensitivities for diagnostic CT, FDG PET, and FDG PET/CT were 86.02%, 87.50%, and 98.59%, respectively. Based on the composite references, 39.10% of patients had local disease. There were significant differences in the SUVmax distribution between the local disease and metastatic groups; a significant correlation was noted when a SUVmax cut-off was set at 9.2 (P < 0.05). CONCLUSION: In recurrent PCC/PGL, diagnostic 18F-FDG PET/CT is a superior tool in the localization of recurrent tumors. Tumor SUVmax is a potentially useful predictor of malignant tumor potential.

[112]

**TÍTULO / TITLE:** - Multiple gastric G1 neuroendocrine tumors with venous and lymphatic invasion.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Intern Med. 2013;52(15):1697-701. Epub 2012 Mar 1.

**AUTORES / AUTHORS:** - Tatsuta T; Yoshimura T; Hasui K; Takasugi K; Sawaya M; Hanabata N; Shimoyama T; Kijima H; Fukuda S

**INSTITUCIÓN / INSTITUTION:** - Department of Gastroenterology, Hirosaki University Graduate School of Medicine, Japan.

**RESUMEN / SUMMARY:** - A 60-year-old woman was admitted for the treatment of a gastric neuroendocrine tumor (NET) associated with type A chronic atrophic gastritis. The lesion measured 10 mm in diameter, and a computed tomography scan did not reveal any metastatic lesions. Endoscopic submucosal dissection (ESD) was subsequently performed. A histological examination revealed three gastric NETs, two of which exhibited vessel invasion. Endocrine cell micronests associated with a high risk of recurrence were also observed. Therefore, the patient underwent total gastrectomy with lymph node dissection. Because vessel invasion can occur in patients with small gastric NET G1, the use of ESD should be considered to carefully estimate the presence of invasion.

[113]

**TÍTULO / TITLE:** - Sweet syndrome preceding a carcinoid lung tumor and multiple myeloma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cutis. 2013 Jul;92(1):E1.

**AUTORES / AUTHORS:** - Tewari A; Chandrakumar A; Macdonald D; Staughton R; Bunker CB

[114]

**TÍTULO / TITLE:** - Successful local control of cutaneous Merkel cell carcinoma on the eyelid with CyberKnife radiosurgery.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Dermatol. 2013 Sep 24.

●● Enlace al texto completo (gratis o de pago) [1684/ejd.2013.2123](#)

**AUTORES / AUTHORS:** - Tuskada A; Fujimura T; Hashimoto A; Kambayashi Y; Furudate S; Haga T; Aiba S

**INSTITUCIÓN / INSTITUTION:** - Department of Dermatology, Tohoku University Graduate School of Medicine, Seiryomachi 1-1, Aoba-ku, Sendai, 980-8574, Japan.

[115]

**TÍTULO / TITLE:** - Endobronchial Gangliocytic Paraganglioma: Not All Keratin-Positive Endobronchial Neuroendocrine Neoplasms are Pulmonary Carcinoids.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Pathol. 2013 Aug 4.

●● Enlace al texto completo (gratis o de pago) [1007/s12022-013-9258-7](#)

**AUTORES / AUTHORS:** - Gucer H; Mete O

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University Health Network, 200 Elizabeth Street, 11th floor, Toronto, ON, M5G 2C4, Canada.

[116]

**TÍTULO / TITLE:** - Risk of thyroid cancer in relatives of patients with medullary thyroid carcinoma by age at diagnosis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Relat Cancer. 2013 Sep 3;20(5):717-24. doi: 10.1530/ERC-13-0021. Print 2013.

●● Enlace al texto completo (gratis o de pago) [1530/ERC-13-0021](#)

**AUTORES / AUTHORS:** - Fallah M; Sundquist K; Hemminki K

**INSTITUCIÓN / INSTITUTION:** - Division of Molecular Genetic Epidemiology, German Cancer Research Center, Im Neuenheimer Feld 580, 69120 Heidelberg, Germany Center for Primary Health Care Research, Lund University, Malmö, Sweden.

**RESUMEN / SUMMARY:** - The familial risk of medullary thyroid carcinoma (MTC alone or as part of multiple endocrine neoplasms, MEN2A/MEN2B) is high, so we aimed to answer open questions about the lifetime cumulative risk of thyroid cancer (LCRTC at

0-79 years) among relatives of MTC patients by age and sex. For this nationwide study, a cohort of 3217 first-/second-degree relatives (FDRs/SDRs) of 389 MTC patients diagnosed in 1958-2010 in the Swedish Family-Cancer Database was followed for the incidence of thyroid cancer. The LCRTC in female relatives of patients with early-onset MEN2B (diagnosis age <25 years) was 44-57%, representing 140-520 times increase over the risk in their peers without a family history of endocrine tumors (men: LCRTC=22-52%, 320-750 times) depending on the number of affected FDRs/SDRs. The LCRTC in female relatives of patients with late-onset MEN2B (diagnosis age >=25 years) was about 15-43% (men=24%). The LCRTC among relatives of early-onset MTC-alone patients was 3-20%. The LCRTC among relatives of late-onset MTC-alone patients was 5-26%. The LCRTC in female relatives of MEN2A patients was 16-63% (men=52%). The relatives of patients with early-onset MTC exhibited a high tendency to develop early-onset thyroid cancer. Simply available data on the number of FDRs and even SDRs affected with MTC and their age at diagnosis were quite informative for the estimation of the risk of thyroid cancer in probands. In settings where genetic testing is not available or affordable for all, evidence-based cumulative risks reported in this nationwide study may help physicians to identify very high-risk individuals.

[117]

**TÍTULO / TITLE:** - Outcome and toxicity of salvage therapy with Lu-octreotate in patients with metastatic gastroenteropancreatic neuroendocrine tumours.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Nucl Med Mol Imaging. 2013 Sep 13.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00259-013-2547-z](#)

**AUTORES / AUTHORS:** - Sabet A; Haslerud T; Pape UF; Sabet A; Ahmadzadehfar H; Grunwald F; Guhlke S; Biersack HJ; Ezziddin S

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine, University Hospital Bonn, Sigmund-Freud-Str. 25, 53105, Bonn, Germany.

**RESUMEN / SUMMARY:** - **PURPOSE:** We assessed the outcome and toxicity of salvage therapy (repeat treatment) with <sup>177</sup>Lu-octreotate and high cumulative activities in patients with metastatic gastroenteropancreatic neuroendocrine tumours (GEP-NET). **METHODS:** We retrospectively analysed a consecutive cohort of 33 patients with metastatic GEP-NET who underwent salvage peptide receptor radionuclide therapy (PRRT) in our institution. All patients had progressive NET prior to salvage treatment and had shown an initial response to PRRT. The mean cumulative activity was 44.3 GBq (30.0-83.7 GBq). Radiographic response was assessed using CT and/or MRI according to modified SWOG criteria. Toxicity was evaluated using laboratory data, including complete blood counts and renal function tests using CTCAE 3.0. Survival analysis was performed with the Kaplan-Meier curve method and a significance level at  $p < 0.05$ . **RESULTS:** Radiographic responses consisted of complete response in 1 patient

(3.0 %), partial response in 6 patients (18.2 %), minor response in 1 patient (3.0 %), stable disease in 14 patients (42.4 %), and progressive disease in 11 patients (33.3 %). Median progression-free survival (PFS) from the start of salvage therapy was 13 months (95 % CI 9-18) and patients with a history of a durable PFS after initial PRRT tended to have long-lasting PFS after salvage treatment (p = 0.04). None of the patients developed severe nephrotoxicity (grade 3/4) or a myelodysplastic syndrome during follow-up. Relevant albeit reversible haematotoxicity (grade 3/4) occurred in 7 patients (21.2 %). The cumulative administered activity was not associated with an increased incidence of haematotoxicity. CONCLUSION: PRRT with 177Lu-octreotate in the re-treatment setting is safe and effective in patients with metastatic GEP-NET.

[118]

**TÍTULO / TITLE:** - Diagnostic Performance of Fluorine-18-Fluorodeoxyglucose Positron Emission Tomography in Patients with Merkel Cell Carcinoma: A Systematic Review and Meta-Analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Clin Dermatol. 2013 Aug 20.

●● Enlace al texto completo (gratis o de pago) [1007/s40257-013-0040-x](#)

**AUTORES / AUTHORS:** - Treglia G; Dabbagh Kakhki VR; Giovanella L; Sadeghi R

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine and PET Center, Oncology Institute of Southern Switzerland, via Ospedale, 12, 6500, Bellinzona, Switzerland, [giorgiomednuc@libero.it](mailto:giorgiomednuc@libero.it).

**RESUMEN / SUMMARY:** - BACKGROUND: Some studies reported the usefulness of fluorine-18-fluorodeoxyglucose (18F-FDG) positron emission tomography (PET) and PET/computed tomography (CT) in patients with Merkel cell carcinoma (MCC). OBJECTIVE: The aim of this study was to systematically review and meta-analyze published data about the diagnostic performance of 18F-FDG PET and PET/CT in patients with MCC. METHODS: A comprehensive literature search of studies published through June 2013 regarding 18F-FDG PET and PET/CT in patients with MCC was performed. All retrieved studies were reviewed and qualitatively analyzed. Pooled sensitivity, specificity, positive and negative likelihood ratio (LR+ and LR-) and diagnostic odds ratio (DOR) of 18F-FDG PET or PET/CT in patients with MCC on a per examination-based analysis were calculated. The area under the summary receiver operating characteristic (ROC) curve was calculated to measure the accuracy of 18F-FDG PET or PET/CT in these patients. RESULTS: Ten studies comprising 329 patients (549 scans) with MCC were included in the qualitative analysis (systematic review) and discussed. The quantitative analysis (meta-analysis) of six selected studies (including 92 patients with MCC) provided the following results on a per examination-based analysis: sensitivity was 90 % (95 % CI 80-96), specificity 98 % (95 % CI 90-100), LR+ 12 (95 % CI 4.3-33.0), LR- 0.15 (95 % CI 0.08-0.28), and DOR 86.8 (95 % CI 23-327). The area under

the summary ROC curve was 0.96. No significant statistical heterogeneity between the studies was found. CONCLUSIONS: In patients with MCC, 18F-FDG PET or PET/CT demonstrated high sensitivity and specificity, being accurate methods in this setting. Nevertheless, the literature focusing on the use of PET and PET/CT in MCC still remains limited. Prospective studies are needed to substantiate the high diagnostic accuracy of these methods in MCC.

[119]

**TÍTULO / TITLE:** - Neuroendocrine Thymic Carcinoma Metastatic to the Parathyroid Gland that was Reimplanted into the Forearm in Patient with Multiple Endocrine Neoplasia Type 1 Syndrome: A Challenging Management Dilemma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Pract. 2013 Sep 6:1-14.

●● [Enlace al texto completo \(gratis o de pago\) 4158/EP13267.CR](#)

**AUTORES / AUTHORS:** - Shifrin A; Livolsi V; Zheng M; Lann D; Fomin S; Naylor E; Mencil P; Fay A; Erler B; Matulewicz T

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Jersey Shore University Medical Center, Neptune, New Jersey.

**RESUMEN / SUMMARY:** - Objective: To describe a unique case of a metastatic thymic carcinoma to the hyperplastic parathyroid gland, and to present a challenging management dilemma. Methods: Patient is 60 year-old, mentally retarded male with history of the multiple endocrine neoplasia type 1 (MEN1) syndrome, a surgery in 1985 for hypercalcemia with removal of one parathyroid gland, surgery in 2007 with findings of extensively necrotic well differentiated neuroendocrine carcinoma (carcinoid tumor) of the thymus. In 2012, he presented with persistent hypercalcemia (calcium level 11.7 mg/dL (8.6-10.2), parathyroid hormone (PTH) level - 1225 pg/mL (15-65)). He underwent a repeat neck exploration with removal of 2 small inferior, and a large left superior 4.5x2.5x1.5cm parathyroid glands (all showed hyperplasia on intraoperative frozen section). A small portion of the superior gland was reimplanted into the patient's forearm. Final pathology showed the presence of a focus of neuroendocrine tumor within the left superior parathyroid gland with immunostain identical to the thymic carcinoma. His postoperative PTH level was 14 pg/mL and calcium 8.5 mg/dL. A PET CT and Octreotide scans revealed an extensive metastatic disease within the lung, mediastinum and bones. Results: We have decided to leave a portion of the reimplanted parathyroid gland, with possible metastatic thymic carcinoid, in his forearm because of the presence a widespread metastatic disease, and his mental retardation that would result in non-compliance with calcium replacement in case of permanent hypocalcemia. Conclusion: Metastatic thymic carcinoma to the parathyroid gland has never been reported in the literature. We have described the first case and presented a challenging management dilemma.

[120]

**TÍTULO / TITLE:** - A retrospective comparison between Ga-DOTA-TOC PET/CT and F-DOPA PET/CT in patients with extra-adrenal paraganglioma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Nucl Med Mol Imaging. 2013 Sep 27.

●● Enlace al texto completo (gratis o de pago) [1007/s00259-013-2548-y](#)

**AUTORES / AUTHORS:** - Kroiss A; Putzer D; Frech A; Decristoforo C; Uprimny C; Gasser RW; Shulkin BL; Url C; Widmann G; Prommegger R; Sprinzl GM; Fraedrich G; Virgolini IJ

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine, Innsbruck Medical University, Anichstrasse 35, 6020, Innsbruck, Austria, [alexander.kroiss@i-med.ac.at](mailto:alexander.kroiss@i-med.ac.at).

**RESUMEN / SUMMARY:** - PURPOSE: 18F-Fluoro-L-dihydroxyphenylalanine (18F-DOPA) PET offers high sensitivity and specificity in the imaging of nonmetastatic extra-adrenal paragangliomas (PGL) but lower sensitivity in metastatic or multifocal disease. These tumours are of neuroendocrine origin and can be detected by 68Ga-DOTA-Tyr3-octreotide (68Ga-DOTA-TOC) PET. Therefore, we compared 68Ga-DOTA-TOC and 18F-DOPA as radiolabels for PET/CT imaging for the diagnosis and staging of extra-adrenal PGL. Combined cross-sectional imaging was the reference standard. METHODS: A total of 5 men and 15 women (age range 22 to 73 years) with anatomical and/or histologically proven extra-adrenal PGL were included in this study. Of these patients, 5 had metastatic or multifocal lesions and 15 had single sites of disease. Comparative evaluation included morphological imaging with CT and functional imaging with 68Ga-DOTA-TOC PET and 18F-DOPA PET. The imaging results were analysed on a per-patient and a per-lesion basis. The maximum standardized uptake value (SUVmax) of each functional imaging modality in concordant tumour lesions was measured. RESULTS: Compared with anatomical imaging, 68Ga-DOTA-TOC PET and 18F-DOPA PET each had a per-patient and per-lesion detection rate of 100 % in nonmetastatic extra-adrenal PGL. However, in metastatic or multifocal disease, the per-lesion detection rate of 68Ga-DOTA-TOC was 100 % and that of 18F-DOPA PET was 56.0 %. Overall, 68Ga-DOTA-TOC PET identified 45 lesions; anatomical imaging identified 43 lesions, and 18F-DOPA PET identified 32 lesions. The overall per-lesion detection rate of 68Ga-DOTA-TOC PET was 100 % (McNemar,  $P < 0.5$ ), and that of 18F-DOPA PET was 71.1 % (McNemar,  $P < 0.001$ ). The SUVmax (mean +/- SD) of all 32 concordant lesions was 67.9 +/- 61.5 for 68Ga-DOTA-TOC PET and 11.8 +/- 7.9 for 18F-DOPA PET (Mann-Whitney U test,  $P < 0.0001$ ). CONCLUSION: 68Ga-DOTA-TOC PET may be superior to 18F-DOPA PET and diagnostic CT in providing valuable information for pretherapeutic staging of extra-adrenal PGL, particularly in surgically inoperable tumours and metastatic or multifocal disease.

[121]

**TÍTULO / TITLE:** - Carcinoid Valve Disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Treat Options Cardiovasc Med. 2013 Aug 18.

●● Enlace al texto completo (gratis o de pago) [1007/s11936-013-0265-2](#)

**AUTORES / AUTHORS:** - Askew JW; Connolly HM

**INSTITUCIÓN / INSTITUTION:** - Cardiovascular Diseases, Mayo Clinic, Gonda 6, 200 First Street SW, Rochester, MN, 55905, USA, [connolly.heidi@mayo.edu](mailto:connolly.heidi@mayo.edu).

**RESUMEN / SUMMARY:** - OPINION STATEMENT: Carcinoid is a rare neuroendocrine tumor that typically originates in the gastrointestinal tract and can result in a constellation of symptoms, mediated by vasoactive substances, referred to as carcinoid syndrome. Carcinoid valve and heart disease is characterized by the plaque-like, endocardial fibrous tissue deposits, primarily affecting the right heart endocardium and valves, which result as a consequence of the disease process. Potential mechanisms for the carcinoid valve disease include the complex role of excess serotonin and its interaction with serotonin receptors and transporters. Carcinoid valve and heart disease is a frequent occurrence in patients with carcinoid syndrome and is accountable for substantial morbidity and mortality. Cardiac surgery remains the most effective treatment option for carcinoid valve disease and a multidisciplinary approach at an experienced center is recommended for patients with metastatic carcinoid and carcinoid heart disease.

[122]

**TÍTULO / TITLE:** - Relapse of hyperthyroidism after hemithyroidectomy in concurrent medullary thyroid cancer and Graves' disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Bratisl Lek Listy. 2013;114(9):544-6.

**AUTORES / AUTHORS:** - Meng ZW; Zhang YJ; Li W; Shi T; Wu SG; Tan J

**RESUMEN / SUMMARY:** - We present a rare case of concurrent medullary thyroid cancer (MTC) and relapse of Graves' disease (GD). A 26-year-old Chinese female suffered from GD for 1 year. Physical examination demonstrated mildly diffuse goiter with a palpable 1.0 cm nodule in the right thyroid lobe and exophthalmos. Before hemithyroidectomy, calcitonin was elevated and thyroglobulin was normal. After surgery, histopathological findings proved coexistence of MTC and GD. 16 months later, GD relapsed and radioactive iodine 131 therapy was given. Meanwhile, postoperative monitoring showed well controlled calcitonin and carcinoembryonic antigen. Our lesson demonstrates although concomitant of MTC and GD is very rare, yet after hemithyroidectomy for the single nodular MTC lesion, remnant thyroid lobe could be the source of GD relapse very soon. More importantly, the relapse of GD and the following radioiodine therapy and radiation exposure could have been prevented if a

better therapy plan of total thyroidectomy was adopted in the first place, instead of hemithyroidectomy (Tab. 1, Fig. 2, Ref. 11). Keywords: medullary thyroid cancer, Graves' disease, relapse, calcitonin, thyroidectomy.

[123]

**- CASTELLANO -**

**TÍTULO / TITLE:** Un cas de syndrome de detresse respiratoire aigue repondant au bleu de methylene pendant une crise carcinoide.

**TÍTULO / TITLE:** - A case of acute respiratory distress syndrome responsive to methylene blue during a carcinoid crisis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Can J Anaesth. 2013 Sep 14.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s12630-013-0026-4](#)

**AUTORES / AUTHORS:** - van Diepen S; Sobey A; Lewanczuk R; Singh G; Sidhu S; Zibdawi M; Mullen JC

**INSTITUCIÓN / INSTITUTION:** - Divisions of Critical Care and Cardiology, University of Alberta, Edmonton, AB, Canada, [sv9@ualberta.ca](mailto:sv9@ualberta.ca).

**RESUMEN / SUMMARY:** - **PURPOSE:** In a carcinoid crisis, numerous vasoactive agents, such as bradykinin precursors, serotonin, and histamine, are secreted by tumour cells. Bradykinin has been shown to increase pulmonary vascular permeability and hypotension in animal models; however, little is known about its in vivo effects or targeted pharmacotherapy in a carcinoid crisis. We describe a case of acute respiratory distress syndrome (ARDS) in a carcinoid crisis refractory to conventional antiserotonin and antihistamine therapies. **CLINICAL FEATURES:** A 56-yr-old male with known liver metastases and previous resection of a small intestinal carcinoid tumour in 1991 underwent successful tricuspid and pulmonary valve replacements. On postoperative day 10, he developed hypotension, a fever, leukocytosis, and flushing. His hypotension was treated with a 200 mug octreotide iv bolus followed by a 150 mug.hr<sup>-1</sup> infusion, vasopressin, norepinephrine, and hydrocortisone. He also required tracheal intubation for ARDS (PaO<sub>2</sub>:FI<sub>O2</sub> ratio 96). After 72 hr of broad spectrum antibiotics and no clinical improvement, antiserotonin and antihistamine therapies were augmented with cyproheptadine, ranitidine, and serial octreotide boluses with an infusion of 1,500 mug.hr<sup>-1</sup>. These interventions improved his oxygenation (PaO<sub>2</sub>:F i O<sub>2</sub> ratio 162) and reduced his norepinephrine requirements. Following a methylene blue bolus (1 mg.kg<sup>-1</sup>) and 12-hr infusion (0.5 mg.kg<sup>-1</sup>.hr<sup>-1</sup>), all vasopressors were discontinued and his oxygenation improved (PaO<sub>2</sub>:F i O<sub>2</sub> ratio 297). **CONCLUSION:** In a patient with a carcinoid crisis and ARDS refractory to conventional therapies, substantial hemodynamic and oxygenation improvements were observed following methylene blue administration. This case highlights the potential pathophysiologic role of bradykinin and methylene blue as an adjunct therapeutic option in carcinoid crises.

[124]

**TÍTULO / TITLE:** - Assigning site of origin in metastatic neuroendocrine neoplasms: a clinically significant application of diagnostic immunohistochemistry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Adv Anat Pathol. 2013 Sep;20(5):285-314. doi: 10.1097/PAP.0b013e3182a2dc67.

●● Enlace al texto completo (gratis o de pago) [1097/PAP.0b013e3182a2dc67](#)

**AUTORES / AUTHORS:** - Bellizzi AM

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University of Iowa Hospitals and Clinics, IA, USA. [andrew-bellizzi@uiowa.edu](mailto:andrew-bellizzi@uiowa.edu)

**RESUMEN / SUMMARY:** - The neuroendocrine epithelial neoplasms (NENs) include well-differentiated neuroendocrine tumors (WDNETs) and poorly differentiated neuroendocrine carcinomas (PDNECs). Whereas PDNECs are highly lethal, with localized Merkel cell carcinoma somewhat of an exception, WDNETs exhibit a range of “indolent” biologic potentials—from benign to widely metastatic and eventually fatal. Within each of these 2 groups there is substantial morphologic overlap. In the metastatic setting, the site of origin of a WDNET has significant prognostic and therapeutic implications. In the skin, Merkel cell carcinoma must be distinguished from spread of a visceral PDNEC. This review intends to prove the thesis that determining the site of origin of a NEN is clinically vital and that diagnostic immunohistochemistry is well suited to the task. It will begin by reviewing current World Health Organization terminology for the NENs, as well as an embryologic and histologic pattern-based classification. It will present population-based data on the relative frequency and biology of WDNETs arising at various anatomic sites, including the frequency of metastases of unknown primary, and comment on limitations of contemporary imaging techniques, as a means of defining the scope of the problem. It will go on to discuss the therapeutic significance of site of origin. The heart of this review is a synthesis of data compiled from >100 manuscripts on the expression of individual markers in WDNETs and PDNECs, as regards site of origin. These include proteins that are considered “key markers” and others that are either useful “secondary markers,” potentially very useful markers that need to be further vetted, or ones that are widely applied despite a lack of efficacy. It will conclude with my approach to the metastatic NEN of unknown origin.

[125]

**TÍTULO / TITLE:** - Systemic Treatment of Gastroenteropancreatic Neuroendocrine Tumors (GEP-NETs): Current Approaches and Future Options.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Pract. 2013 Sep 6:1-30.

- Enlace al texto completo (gratis o de pago) [4158/EP13262.RA](http://4158/EP13262.RA)

**AUTORES / AUTHORS:** - Strosberg JR

**INSTITUCIÓN / INSTITUTION:** - H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida.

**RESUMEN / SUMMARY:** - Objective: To describe recent advances in treatment of gastroenteropancreatic neuroendocrine tumors (GEP-NETs). Methods: A review of the published English language literature on therapy of GEP-NETs with a focus on practice-changing clinical trials. Results: Somatostatin analog treatment remains a cornerstone of GEP-NET therapy, primarily for patients with hormonally functional tumors and midgut carcinoids. The biologic agents everolimus and sunitinib have similar tumor-stabilizing effects in pancreatic NETs and are both approved for treatment of progressive low-intermediate grade tumors. Their role in non-pancreatic NETs remains controversial. Cytotoxic chemotherapy has significant activity in pancreatic NETs but modern prospective data is lacking. Radiolabeled somatostatin analogs will likely become more widely available once phase III randomized studies are completed. Conclusions: New treatment options for GEP-NETs have become available, and highlight the necessity of developing predictive biomarkers which will allow for appropriate and individualized selection of therapy.

[126]

**TÍTULO / TITLE:** - Integrative genetic, epigenetic and pathological analysis of paraganglioma reveals complex dysregulation of NOTCH signaling.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Neuropathol. 2013 Oct;126(4):575-594. Epub 2013 Aug 18.

- Enlace al texto completo (gratis o de pago) [1007/s00401-013-1165-y](http://1007/s00401-013-1165-y)

**AUTORES / AUTHORS:** - Cama A; Verginelli F; Lotti LV; Napolitano F; Morgano A; D’Orazio A; Vacca M; Perconti S; Pepe F; Romani F; Vitullo F; di Lella F; Visone R; Mannelli M; Neumann HP; Raiconi G; Paties C; Moschetta A; Tagliaferri R; Veronese A; Sanna M; Mariani-Costantini R

**INSTITUCIÓN / INSTITUTION:** - Unit of General Pathology, Aging Research Center (Ce.S.I.), G. d’Annunzio University Foundation, Via Colle dell’Ara, 66100, Chieti, Italy.

**RESUMEN / SUMMARY:** - Head and neck paragangliomas, rare neoplasms of the paraganglia composed of nests of neurosecretory and glial cells embedded in vascular stroma, provide a remarkable example of organoid tumor architecture. To identify genes and pathways commonly deregulated in head and neck paraganglioma, we integrated high-density genome-wide copy number variation (CNV) analysis with microRNA and immunomorphological studies. Gene-centric CNV analysis of 24 cases identified a list of 104 genes most significantly targeted by tumor-associated alterations. The “NOTCH signaling pathway” was the most significantly enriched term

in the list ( $P = 0.002$  after Bonferroni or Benjamini correction). Expression of the relevant NOTCH pathway proteins in sustentacular (glial), chief (neuroendocrine) and endothelial cells was confirmed by immunohistochemistry in 47 head and neck paraganglioma cases. There were no relationships between level and pattern of NOTCH1/JAG2 protein expression and germline mutation status in the SDH genes, implicated in paraganglioma predisposition, or the presence/absence of immunostaining for SDHB, a surrogate marker of SDH mutations. Interestingly, NOTCH upregulation was observed also in cases with no evidence of CNVs at NOTCH signaling genes, suggesting altered epigenetic modulation of this pathway. To address this issue we performed microarray-based microRNA expression analyses. Notably 5 microRNAs (miR-200<sup>a,b,c</sup> and miR-34<sup>b,c</sup>), including those most downregulated in the tumors, correlated to NOTCH signaling and directly targeted NOTCH1 in in vitro experiments using SH-SY5Y neuroblastoma cells. Furthermore, lentiviral transduction of miR-200s and miR-34s in patient-derived primary tympano-jugular paraganglioma cell cultures was associated with NOTCH1 downregulation and increased levels of markers of cell toxicity and cell death. Taken together, our results provide an integrated view of common molecular alterations associated with head and neck paraganglioma and reveal an essential role of NOTCH pathway deregulation in this tumor type.

[127]

**TÍTULO / TITLE:** - Targeting the somatostatin receptor in pituitary and neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Opin Ther Targets. 2013 Aug 31.

●● Enlace al texto completo (gratis o de pago) [1517/14728222.2013.830711](#)

**AUTORES / AUTHORS:** - Veenstra MJ; de Herder WW; Feelders RA; Hofland LJ

**INSTITUCIÓN / INSTITUTION:** - Erasmus Medical Center, Division of Endocrinology, Department of Internal Medicine, Dr. Molewaterplein 50, 3015 GE Rotterdam, The Netherlands +31 10 7034633 ; +31 10 7035430 ; [l.hofland@erasmusmc.nl](mailto:l.hofland@erasmusmc.nl).

**RESUMEN / SUMMARY:** - Introduction: Neuroendocrine and pituitary tumors are uncommon tumors that develop from cells of the (neuro-)endocrine system. They can secrete hormones, leading to typical symptoms and syndromes. The cornerstone of antisecretory treatment for neuroendocrine and growth hormone-secreting pituitary tumors consists of somatostatin analogs, which target the somatostatin receptors that are expressed on the tumor cell membrane. Somatostatin analogs activate the second messenger pathways that inhibit hormone secretion and may also delay tumor growth. Areas covered: Recent developments in the field of somatostatin analogs and promising new angles in neuroendocrine tumor treatment are discussed. The recently approved somatostatin analog pasireotide and promising new analogs KE108 and somatoprim are reviewed. Further, innovative developments in the field of receptor

manipulation, such as epigenetic manipulation and viral somatostatin receptor subtype-2 expression vectors, are discussed, as well as oncolytic viruses specifically targeting neuroendocrine tumor cells. Expert opinion: In addition to the development of novel somatostatin analogs and refining treatment with existing somatostatin analogs, alternative treatments targeting the somatostatin receptors that aim at increasing the number of somatostatin receptors should be explored as well, thereby broadening treatment perspectives and increasing options for prolonging survival.

PTPTPTP - JOURNAL ARTICLE ----- [128]

**- CASTELLANO -**

**TÍTULO / TITLE:** Kardiomyopathie aufgrund eines Phochromozytoms.

**TÍTULO / TITLE:** - Cardiomyopathy due to pheochromocytoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Herz. 2013 Sep 27.

●● Enlace al texto completo (gratis o de pago) [1007/s00059-013-3951-7](http://1007/s00059-013-3951-7)

**AUTORES / AUTHORS:** - Kounatiadis P; Kolettas V; Megarisiotou A; Stiliadis I

**INSTITUCIÓN / INSTITUTION:** - Kardiologische Klinik, Unikrankenhaus AXEPA Thessaloniki, Thessaloniki, Greece.

**RESUMEN / SUMMARY:** - Alpha 33-year-old woman was admitted to our clinic with electrocardiographic (ECG) manifestations of anterior ST-elevation myocardial infarction, dizziness, weakness, and feeling of oncoming collapse. She underwent coronary angiography that showed normal coronary arteries and an echocardiography study that showed reduced left ventricular contractility with diffuse hypokinesia and an estimated ejection fraction of (EF) 35-40 %. The biochemical testing showed enzymatic activity typical of myocardial necrosis. The patient had hypertensive peaks on a 24-h recording of blood pressure, while immunological and virological test results were negative. Magnetic resonance imaging showed partial epicardial enhancement. A tumor in the right adrenal medulla was detected with computed tomography, and biochemical testing showed increased levels of urinary vanillylmandelic acid as well as serum metanephrines. The diagnosis of pheochromocytoma was made and confirmed by histological findings after surgical resection of the tumor. The left ventricular systolic dysfunction gradually reversed, the EF returned to normal, and the ECG findings were normalized, indicating cardiomyopathy due to pheochromocytoma.

-----  
[129]

**TÍTULO / TITLE:** - The management of head-and-neck paragangliomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Relat Cancer. 2013 Aug 23;20(5):R291-305. doi: 10.1530/ERC-13-0223. Print 2013.

●● Enlace al texto completo (gratis o de pago) [1530/ERC-13-0223](http://1530/ERC-13-0223)

**AUTORES / AUTHORS:** - Capatina C; Ntali G; Karavitaki N; Grossman AB

**INSTITUCIÓN / INSTITUTION:** - Oxford Centre for Diabetes, Endocrinology and Metabolism, University of Oxford, Oxford OX3 7LE, UK.

**RESUMEN / SUMMARY:** - Paragangliomas (PGLs) are tumours originating from neural crest-derived cells situated in the region of the autonomic nervous system ganglia. Head-and-neck PGLs (HNPGs) originate from the sympathetic and parasympathetic paraganglia, most frequently from the carotid bodies and jugular, tympanic and vagal paraganglia, and are usually non-catecholamine secreting. Familial PGLs are considered to be rare, but recently genetic syndromes including multiple PGLs and/or pheochromocytomas have been more thoroughly characterised. Nowadays, genetic screening for the genes frequently implicated in both familial and sporadic cases is routinely being recommended. HNPGs are mostly benign, generally slow-growing tumours. Continuous growth leads to the involvement of adjacent neurovascular structures with increased morbidity rates and treatment-related complications. Optimal management mostly depends on tumour location, local involvement of neurovascular structures, estimated malignancy risk, patient age and general health. Surgery is the only treatment option offering the chance of cure but with significant morbidity rates, so a more conservative approach is usually considered, especially in the more difficult cases. Radiotherapy (fractionated or stereotactic radiosurgery) leads to tumour growth arrest and symptomatic improvement in the short term in many cases, but the long-term consequences are unclear. Early detection is essential in order to increase the chance of cure with a lower morbidity rate. The constant improvement in diagnostic imaging, surgical and radiation techniques has led to a safer management of these tumours, but there are still many therapeutic challenges, and no treatment algorithm has been agreed upon until now. The management of HNPGs requires a multidisciplinary effort addressing the genetic, surgical, radiotherapeutic, oncological, neurological and endocrinological implications. Further progress in the understanding of their pathogenesis will lead to more effective screening and earlier diagnosis, both critical to successful treatment.

[130]

**TÍTULO / TITLE:** - Association of small foci of diffuse idiopathic pulmonary neuroendocrine cell hyperplasia (DIPNECH) with adenocarcinoma of the lung.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathol Res Pract. 2013 Sep;209(9):578-84. doi: 10.1016/j.prp.2013.06.019. Epub 2013 Jul 12.

●● Enlace al texto completo (gratis o de pago) [1016/j.prp.2013.06.019](https://doi.org/10.1016/j.prp.2013.06.019)

**AUTORES / AUTHORS:** - Mireskandari M; Abdirad A; Zhang Q; Dietel M; Petersen I

**INSTITUCIÓN / INSTITUTION:** - Institute of Pathology, Jena University Hospital, Friedrich Schiller University, Jena, Germany.

**RESUMEN / SUMMARY:** - DIPNECH is regarded as a precursor lesion of neuroendocrine lung tumors, specifically carcinoids. A relationship with lung adenocarcinomas has not been clearly established so far. We present a series of four cases with a concomitant presence of adenocarcinoma and DIPNECH in the lung. The cases were retrieved from the archives of the Institutes of Pathology of the Jena University Hospital and the Charite, Berlin. The clinical data were collected from the hospital information system. The microscopic findings of adenocarcinoma and DIPNECH were reviewed. A panel of neuroendocrine and epithelial markers was analyzed immunohistochemically. In addition, the H&E slides of a series of 82 lung carcinomas were reevaluated for the presence of DIPNECH foci and the parameters of the IASLC/ATS/ERS classification for lung adenocarcinoma. DIPNECH foci were composed of small intramucosal nests of proliferating pulmonary neuroendocrine cells alongside or at the periphery of terminal airways. All detected foci measured less than 5mm in maximal diameter and showed a consistent reactivity against Synaptophysin. They did not express epithelial markers of squamous cell carcinoma and adenocarcinoma. In three cases, the DIPNECH foci were clearly associated with the adenocarcinoma, while in one case, they were observed in the non-neoplastic lung tissue. The adenocarcinoma with DIPNECH inside mainly showed low grade histology, while the fourth case was intermediate to high grade. The histologic evaluation of the HE slides of the other 82 lung cancer cases showed no suspected or definite DIPNECH foci. Within this series, we could confirm the prognostic significance of the IASLC/ATS/ERS classification of lung adenocarcinoma. Our series suggest that a subset of lung adenocarcinoma is characterized by the concomitant presence of DIPNECH within the tumor, suggesting a causal relationship. These adenocarcinomas seem to be low grade ones, and may have a particular tumorigenesis and clinical behavior. These observations need to be confirmed in larger tumor collectives. We could confirm the prognostic relevance of the new adenocarcinoma classification.

-----  
[131]

**TÍTULO / TITLE:** - Paraganglioma presenting as cholesterol granuloma of the petrous apex.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ear Nose Throat J. 2013 Sep;92(9):430-4.

**AUTORES / AUTHORS:** - Heman-Ackah SE; Huang TC

**INSTITUCIÓN / INSTITUTION:** - Department of Otolaryngology-Head and Neck Surgery, University of Minnesota, MMC 396, 420 Delaware Ave., SE, Minneapolis, MN 55455, USA.

**RESUMEN / SUMMARY:** - We report the unique finding of a petrous apex cholesterol granuloma associated with a paraganglioma, also known as a glomus jugulare tumor, in a 52-year-old woman who presented to our department with pulsatile tinnitus,

hearing loss, aural fullness, and disequilibrium. She had been treated for a petrous apex cholesterol granuloma 20 years earlier, at which time she had undergone drainage of the granuloma via subtotal petrous apicectomy. When she came to our facility approximately 20 years later, she had signs and symptoms consistent with a jugular paraganglioma, which was likely to have been present at the time of her initial presentation for the cholesterol granuloma. In fact, microscopic bleeding from the paraganglioma might have led to the formation of the cholesterol granuloma. The metachronous presentation of these two entities, which to our knowledge has not been reported previously in the literature, indicates the potential association of paragangliomas with the formation of cholesterol granulomas of the petrous apex.

[132]

**TÍTULO / TITLE:** - Could Ga-somatostatin analogues replace other PET tracers in evaluating extra-adrenal paragangliomas?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Nucl Med Mol Imaging. 2013 Sep 27.

●● Enlace al texto completo (gratis o de pago) [1007/s00259-013-2568-7](#)

**AUTORES / AUTHORS:** - Treglia G; Giovanella L

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine and PET/CT Center, Oncology Institute of Southern Switzerland, via Ospedale, 12, 6500, Bellinzona, Switzerland, [giorgiomednuc@libero.it](mailto:giorgiomednuc@libero.it).

[133]

**TÍTULO / TITLE:** - Tako-tsubo-like cardiomyopathy induced by pheochromocytoma crisis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anadolu Kardiyol Derg. 2013 Sep 25;13(6):E35-E36. doi: 10.5152/akd.2013.221.

●● Enlace al texto completo (gratis o de pago) [5152/akd.2013.221](#)

**AUTORES / AUTHORS:** - Demircelik MB; Aydin HI

**INSTITUCIÓN / INSTITUTION:** - Department of Cardiology, Faculty of Medicine, Fatih University, Ankara-Turkey. [drdemircelik@yahoo.com](mailto:drdemircelik@yahoo.com).

[134]

**TÍTULO / TITLE:** - Current Understanding and Management of Medullary Thyroid Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncologist. 2013 Sep 13.

●● Enlace al texto completo (gratis o de pago) [1634/theoncologist.2013-](#)

[0053](#)

**AUTORES / AUTHORS:** - Roy M; Chen H; Sippel RS

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, University of Wisconsin, Madison, Wisconsin, USA.

**RESUMEN / SUMMARY:** - Medullary thyroid cancer (MTC) typically accounts for 3%-4% of all thyroid cancers. Although the majority of MTCs are sporadic, 20% of cases are hereditary. Hereditary MTC can be found in multiple endocrine neoplasia 2<sup>a</sup> or 2B or as part of familial MTC based on a specific germline mutation in the RET: proto-oncogene. This article discusses the current approaches available for the diagnosis, evaluation, and management of patients and their family members with suspected MTC. The disease is predominantly managed surgically and typically requires a total thyroidectomy and lymph node dissection. A review of recent guidelines on the extent and timing of surgical excision is discussed. There are not very many effective systemic treatment options for MTC, but several emerging therapeutic targets have promise.

[135]

**TÍTULO / TITLE:** - Gangliocytic paraganglioma of duodenum metastatic to lymph nodes and liver and extending into the retropancreatic space.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathologica. 2013 Jun;105(3):90-3.

**AUTORES / AUTHORS:** - Amin SM; Albrechtsen NW; Forster J; Damjanov I

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology and Laboratory Medicine, The University of Kansas School of Medicine, Kansas City, KS 66160, USA.

**RESUMEN / SUMMARY:** - Gangliocytic paraganglioma (GP) is a rare benign neuroendocrine tumour found most often in the duodenum. To our knowledge, only a dozen cases of possibly malignant duodenal GP with local lymph node metastasis and only one case with liver metastasis have previously been published. Herein, we report an unusual case of GP of the duodenum spreading to the retropancreatic space and metastatic to the liver and lymph nodes. Additionally, the present tumour secreted pancreatic polypeptide (PP) which was detected in the serum during the follow-up period. We suggest that serum PP could be a valuable marker in the diagnosis and follow-up of patients with GP.

[136]

**TÍTULO / TITLE:** - Rapid diagnosis of combined multifocal gastrointestinal stromal tumours and coeliac disease in a patient with type 1 neurofibromatosis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - JRSM Short Rep. 2013 Jul 1;4(8):2042533313476687. doi: 10.1177/2042533313476687.

●● Enlace al texto completo (gratis o de pago) [1177 2042533313476687](#) [pii]

- Enlace al texto completo (gratuito o de pago) [1177/2042533313476687](https://doi.org/10.1177/2042533313476687)

**AUTORES / AUTHORS:** - Hussey M; Holleran G; McNamara D

**INSTITUCIÓN / INSTITUTION:** - Department of Gastroenterology, Adelaide and Meath Hospital, Tallaght Hospital, Dublin 24, Ireland.

---

[137]

**TÍTULO / TITLE:** - The use of targeted therapies in pancreatic neuroendocrine tumours: patient assessment, treatment administration, and management of adverse events.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ther Adv Med Oncol. 2013 Sep;5(5):286-300. doi:

10.1177/1758834013501016.

- Enlace al texto completo (gratuito o de pago) [1177\\_1758834013501016](https://doi.org/10.1177/1758834013501016) [pii]

- Enlace al texto completo (gratuito o de pago) [1177/1758834013501016](https://doi.org/10.1177/1758834013501016)

**AUTORES / AUTHORS:** - Cummins M; Pavlakis N

**INSTITUCIÓN / INSTITUTION:** - Director of Nursing, Northern Cancer Institute, 49 Frenchs Forest Road, Frenchs Forest, NSW, 2086, Australia.

**RESUMEN / SUMMARY:** - Together with the use of novel oral targeted therapies, a multidisciplinary approach can be used to effectively treat patients with advanced pancreatic neuroendocrine tumours (pNETs). Here we review the integration of the oncology nurse to the newly developed oral treatment setting for patients with pNETs. From the outset, the nurse must be involved in various processes, including performance of baseline assessments (e.g. blood pathology, cardiac and lung function testing, patient history) and general medical observations, treatment administration, dietary guidance, evaluation of comorbidities, and review of concomitant medications. Patient education and establishment of a strong partnership in care before the start of pNET therapy ultimately increase treatment adherence and reduce potential toxicities. Regular review of general patient status and disease progression and continuous monitoring of adverse events also help enhance treatment outcomes and subsequently improve quality of life. Nurses' knowledge of agent-specific toxicities and prompt, proactive management is a critical aspect of care. In essence, as the pNET treatment landscape evolves, the role of the healthcare professional in overall patient care must shift accordingly.

---

[138]

**TÍTULO / TITLE:** - Hypertensive crisis in a patient with thyroid cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Natl Med J India. 2012 Nov-Dec;25(6):339-40.

**AUTORES / AUTHORS:** - Asha HS; Seshadri MS; Rajaratnam S

**INSTITUCIÓN / INSTITUTION:** - Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, 632004, Tamil Nadu, India.

**RESUMEN / SUMMARY:** - Pheochromocytomas may be discovered incidentally when patients present with hypertensive crisis during general anaesthesia. A 49-year-old man underwent thyroidectomy 25 years ago and was diagnosed to have spindle cell carcinoma of the thyroid. He presented with recent onset of hoarseness of voice and was found to have a vocal cord nodule. He developed a hypertensive crisis during surgery. He was subsequently evaluated and found to have bilateral pheochromocytoma. Further evaluation revealed a RET proto-oncogene mutation at codon 634 consistent with multiple endocrine neoplasia (MEN)-2<sup>a</sup>.

[139]

**TÍTULO / TITLE:** - Antiproliferative effects of lanreotide autogel in patients with progressive, well-differentiated neuroendocrine tumours: a Spanish, multicentre, open-label, single arm phase II study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BMC Cancer. 2013 Sep 20;13(1):427.

- [Enlace al texto completo \(gratis o de pago\) 1186/1471-2407-13-427](#)

**AUTORES / AUTHORS:** - Martin-Richard M; Massuti B; Pineda E; Alonso V; Marmol M; Castellano D; Fonseca E; Galan A; Llanos M; Sala MA; Pericay C; Rivera F; Sastre J; Segura A; Quindos M; Maisonobe P

**RESUMEN / SUMMARY:** - BACKGROUND: Somatostatin analogues (SSAs) are indicated to relieve carcinoid syndrome but seem to have antiproliferative effects on neuroendocrine tumours (NETs). This is the first prospective study investigating tumour stabilisation with the long-acting SSA lanreotide Autogel in patients with progressive NETs. METHODS: This was a multicentre, open-label, phase II trial conducted in 17 Spanish specialist centres. Patients with well-differentiated NETs and radiologically confirmed progression within the previous 6 months received lanreotide Autogel, 120 mg every 28 days over  $\leq 92$  weeks. The primary endpoint was progression-free survival (PFS). Secondary endpoints were response rate, tumour biomarkers, symptom control, quality of life (QoL), and safety. Radiographic imaging was assessed by a blinded central radiologist. RESULTS: Of 30 patients included in the efficacy and safety analyses, 40% had midgut tumours and 27% pancreatic tumours; 63% of tumours were functioning. Median PFS time was 12.9 (95% CI: 7.9, 16.5) months, and most patients achieved disease stabilisation (89%) or partial response (4%). No deterioration in QoL was observed. Nineteen patients (63%) experienced treatment-related adverse events, most frequently diarrhoea and asthenia; only one treatment-related adverse event (aerophagia) was severe. CONCLUSION: Lanreotide Autogel provided effective tumour stabilisation and PFS  $>12$  months in patients with progressive NETs ineligible for surgery or chemotherapy, with a safety profile consistent with the pharmacology of the class. Trial registration: ClinicalTrials.gov Identifier NCT00326469; EU Clinical Trial Register EudraCT no 2004-002871-18.

[140]

**TÍTULO / TITLE:** - Strumal carcinoid ovary with mucinous cystadenoma presenting as a large abdominal mass and increased tumour marker level.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Obstet Gynaecol. 2013 Aug;33(6):637-9. doi: 10.3109/01443615.2013.795134.

●● Enlace al texto completo (gratuito o de pago) [3109/01443615.2013.795134](#)

**AUTORES / AUTHORS:** - Bohara S; Agarwal S; Khuraijam B; Khurana N; Arora R

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Maulana Azad Medical College, New Delhi, India. [drsangitamamc@gmail.com](mailto:drsangitamamc@gmail.com)

[141]

**TÍTULO / TITLE:** - Basal like carcinoma of breast in patient with neurofibromatosis I: An association or co-existence?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Indian J Pathol Microbiol. 2013 Apr-Jun;56(2):166-8. doi: 10.4103/0377-4929.118682.

●● Enlace al texto completo (gratuito o de pago) [4103/0377-4929.118682](#)

**AUTORES / AUTHORS:** - Jinkala SR; Rajesh NG; Ramkumar A

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Jawaharlal Institute of Post-Graduate Medical Education and Research, Puducherry, India.

**RESUMEN / SUMMARY:** - Neurofibromatosis I (NF I), an autosomal dominant disorder is associated with increased risk of benign and malignant peripheral nerve sheath tumors and central nervous system tumors. There are only few case reports of breast carcinoma in known patients of NF I. We report a case of basal like carcinoma of the breast in a 69-year-old lady who had NF I. Considering the rare association of carcinomas with NF I and finding that both the NF I gene and a breast cancer pre-disposition gene, BRCA 1 are located in close proximity on chromosome 17q makes the association of these two conditions intriguing.

[142]

**TÍTULO / TITLE:** - Everolimus in the treatment of patients with advanced pancreatic neuroendocrine tumors: latest findings and interpretations.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Therap Adv Gastroenterol. 2013 Sep;6(5):412-9. doi: 10.1177/1756283X13496970.

●● Enlace al texto completo (gratuito o de pago) [1177\\_1756283X13496970](#) [pii

●● Enlace al texto completo (gratuito o de pago) [1177/1756283X13496970](#)

**AUTORES / AUTHORS:** - Liu E; Marincola P; Oberg K

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Surgical Oncology, Vanderbilt University Medical Center, Nashville, TN, USA.

**RESUMEN / SUMMARY:** - Pancreatic neuroendocrine tumors (pNETs) are a heterogeneous group of neoplasms with various clinical presentations. More than half of patients present with so-called nonfunctioning tumors with no hormone-related symptoms, whereas other tumors produce symptoms like gastric problems, ulcers, hypoglycemia, skin rash and diarrhea related to hormone production. The traditional treatment for pNETs over the last three decades has been cytotoxic agents, mainly streptozotocin plus 5-fluorouracil or doxorubicin. Most recently two new compounds have been registered worldwide for the treatment of pNETs, the mammalian target of rapamycin (mTOR) inhibitor everolimus and the tyrosine kinase inhibitor sunitinib. This paper concentrates on the use of mTOR inhibitors and the mechanisms of action. The mTOR pathway is altered in a number of pNETs. Everolimus (RAD001) is an orally active rapamycin analog and mTOR inhibitor. It blocks activity of the mTOR pathway by binding with high affinity to the cytoplasmic protein FKBP-12. The efficacy of everolimus in pNETs has been demonstrated in two multicenter studies (RADIANT 1 and 3). The RADIANT 3 study was a randomized controlled study in pNETs of everolimus 10 mg/day versus placebo, showing an increased progression-free survival (11.7 months versus 4.6 months) and hazard ratio of 0.35 ( $p < 0.001$ ). Current studies indicate that there is strong evidence to support the antitumor effect of rapalogs in pNETs. However, significant tumor reduction is very rarely obtained, usually in less than 10% of treated patients. Therefore, these drugs may be more effective in combination with other anticancer agents, including chemotherapy, targeted therapies as well as peptide receptor radiotherapy.

[143]

**TÍTULO / TITLE:** - A catecholamine-secreting skull base sinonasal paraganglioma presenting with labile hypertension in a patient with previously undiagnosed genetic mutation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Neurol Surg Rep. 2012 Oct;73(1):19-24. doi: 10.1055/s-0032-1301408. Epub 2012 Feb 17.

●● Enlace al texto completo (gratis o de pago) [1055/s-0032-1301408](#)

**AUTORES / AUTHORS:** - Hahn S; Palmer JN; Adappa ND

**INSTITUCIÓN / INSTITUTION:** - Department of Otorhinolaryngology-Head and Neck Surgery, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania.

**RESUMEN / SUMMARY:** - Sinonasal paragangliomas are very uncommon neuroendocrine tumors that can present as skull base lesions. Functional paragangliomas are exceedingly rare. They can be associated with genetic mutations that have been associated with increased risk of head and neck paragangliomas. We present a case of

a rare functioning sinonasal paraganglioma of the skull base in a patient with distant history of prior abdominal paragangliomas. The patient underwent subtotal endoscopic resection of the skull base lesion limited by carotid encasement of the tumor. They were treated with postoperative adjuvant radiation and therapeutic metaiodobenzylguanidine (MIBG) therapy. Genetic testing revealed succinate dehydrogenase B (SDHB) mutation. Skull base paragangliomas are rare tumors that may preclude complete surgical resection. (131)Iodine-MIBG can be used as adjuvant therapy in postoperative external beam radiation and in MIBG avid tumors. Long-term follow-up is needed given locally aggressive nature of these tumors, especially for patients with history of genetic mutations such as SDHB mutations as recurrent paragangliomas may develop.

[144]

**TÍTULO / TITLE:** - Chromogranin A, Ki-67 index and IGF-related genes in patients with neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Connect. 2013 Sep 16.

●● [Enlace al texto completo \(gratis o de pago\) 1530/EC-13-0052](#)

**AUTORES / AUTHORS:** - van Adrichem RC; Hofland LJ; Feelders RA; De Martino MC; van Koetsveld PM; Van Eijck CH; de Krijger RR; Sprij-Mooij DM; Janssen JA

**INSTITUCIÓN / INSTITUTION:** - R van Adrichem, Endocrinology, Erasmus Medical Center, Rotterdam, 3015 CE, Netherlands.

**RESUMEN / SUMMARY:** - CONTEXT: Chromogranin A (CgA) and the Ki-67 proliferation index are considered as important biochemical and pathological markers for clinical behaviour of gastroenteropancreatic neuroendocrine tumors (GEP NETs), respectively. The insulin-like growth factor (IGF) system has been suggested as an important regulator of GEP NET proliferation and differentiation. A possible relationship between serum CgA (sCgA), Ki-67 proliferation index and expression of IGF-related genes in patients with GEP NETs has not been demonstrated yet. OBJECTIVE: To investigate a relationship between sCgA, the Ki-67 proliferation index and the expression of IGF-related genes in GEP NET tissues and their relation with 5-years survival. MATERIALS AND METHODS: Tumor and blood samples from 22 GEP NET patients were studied. TUMORAL MRNA EXPRESSION OF IGF-RELATED GENES [IGFS: IGF1, IGF2; IGF receptors: IGF1R, IGF2R; insulin receptors: subtype A (IR-A) and B (IR-B); IGF binding proteins (IGFBPs): IGFBP1, IGFBP2, IGFBP3 and IGFBP6] was measured using quantitative RT-PCR. Ki-67 proliferation index was determined using immunohistochemistry. SCGA WAS MEASURED WITH ELISA. RESULTS: 5-years survival in patients with nonelevated sCgA (n=11) was 91% versus 46% in patients with elevated sCgA (n=11) (p=0.006). IR-A mRNA expression was significantly higher in tumors from patients with elevated sCgA than in those from patients with nonelevated sCgA (6.42+/-2.08 vs 2.60+/-0.40; p=0.04). CONCLUSIONS: 1. sCgA correlates well with

5-years survival of GEP NET patients. 2. IR-A mRNA expression correlates well with tumor mass in GEP NET patients.

[145]

**TÍTULO / TITLE:** - Usefulness of single photon emission computed tomography (SPECT)/computed tomography and radioguided surgery in a patient with recurrent pheochromocytoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Indian J Nucl Med. 2013 Jan;28(1):59-60. doi: 10.4103/0972-3919.116801.

●● Enlace al texto completo (gratis o de pago) [4103/0972-3919.116801](#)

**AUTORES / AUTHORS:** - Una-Gorospe JA; Munoz-Iglesias J; De Sequera-Rahola M; Anton L

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine, Hospital Universitario Nuestra Señora de Candelaria, Carretera del Rosario sn., Santa Cruz de Tenerife, España.

[146]

**TÍTULO / TITLE:** - Peptide receptor radionuclide therapy of neuroendocrine tumors with Y-DOTATOC: Is treatment response predictable by pre-therapeutic uptake of Ga-DOTATOC?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diagn Interv Imaging. 2013 Sep 11. pii: S2211-5684(13)00232-5. doi: 10.1016/j.diii.2013.07.006.

●● Enlace al texto completo (gratis o de pago) [1016/j.diii.2013.07.006](#)

**AUTORES / AUTHORS:** - Oksuz MO; Winter L; PfannenberG C; Reischl G; Mussig K; Bares R; Dittmann H

**INSTITUCIÓN / INSTITUTION:** - Departement d'Imagerie Medicale, Hopital neuchatelois, Maladiere 45, 2000 Neuchatel, Switzerland; Department of Nuclear Medicine, Tubingen University Hospital, Otfried-Muller-Strasse 14, 72076 Tubingen, Germany. Electronic address: [mehmet-oz.er.oksuz@ne.ch](mailto:mehmet-oz.er.oksuz@ne.ch).

**RESUMEN / SUMMARY:** - PURPOSE: PET with 68Ga-DOTATOC allows for imaging and quantitative assessment of somatostatin receptor expression in neuroendocrine tumors (NET). The aim of this retrospective study was to analyze whether pre-therapeutic 68Ga-DOTATOC PET/CT is able to predict response to Peptide Receptor Radionuclide Therapy (PRRT). PATIENTS AND METHODS: Forty patients with advanced stage NET were treated with a fixed dose of 90Y-DOTATOC (5550 or 3700MBq). Prior to PRRT, each patient received 68Ga-DOTATOC PET/CT. Treatment results were evaluated after 3 months by CT, tumor marker levels and clinical course and correlated with 68Ga-DOTATOC uptake (SUVmax) and the assumed uptake of 90Y-DOTATOC in tumor manifestations (MBq/g). ROC analysis and pairwise comparison of area under the curve (AUC) were performed with pre-treatment uptake of 68Ga-DOTATOC,

assumed uptake of <sup>90</sup>Y-DOTATOC and treatment activity alone and in relation to body weight as continuous variables, and response/no response as classification variable. RESULTS: According to conventional criteria (tumor shrinkage, decrease of tumor markers, improved or stable clinical condition), 20 patients were classified as responders, 16 as non-responders and in four patients findings were equivocal. Using a SUV more than 17.9 as cut-off for favorable outcome, PET was able to predict treatment response of all responders and 15 out of 16 non-responders. All four patients with equivocal findings showed SUV less than or equal to 17.9 and soon experienced tumor progression. The assumed uptake of <sup>90</sup>Y-DOTATOC in tumor manifestations using a cut-off more than 1.26MBq/g as predictor of response was able to correctly classify 19 out of 20 responders, and 14 out of 16 non-responders. In all patients with equivocal findings, the assumed uptake of <sup>90</sup>Y-DOTATOC was below 1.26MBq/g. CONCLUSION: Pre-therapeutic <sup>68</sup>Ga-DOTATOC tumor uptake as well as assumed uptake of <sup>90</sup>Y-DOTATOC are strongly associated with the results of subsequent PRRT. The defined cut-off values should be confirmed by prospective studies and may then provide the rationale for individual dosing and selecting patients with high likelihood of favorable treatment outcome.

---

[147]

**TÍTULO / TITLE:** - Pulmonary carcinoid presenting with cavitating lung infection and oligometastatic mediastinal disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Hosp Med (Lond). 2013 Sep;74(9):528-9.

**AUTORES / AUTHORS:** - Medford A; Bhatt N; Edey A

**INSTITUCIÓN / INSTITUTION:** - Consultant and Honorary Senior Clinical Lecturer in Interventional Pulmonology and Thoracic Medicine in the North Bristol Lung Centre, Southmead Hospital, Westbury-on-Trym, Bristol.

**RESUMEN / SUMMARY:** - A previously fit 25-year-old man presented with cavitating lung infection and evidence of cystic bronchiectasis. Computed tomography showed a 4.7cm soft tissue mass containing patchy calcification occluding the basal bronchus of the right lower lobe, resulting in atelectasis and marked distal airway dilatation with endoluminal air-fluid levels and mediastinal lymphadenopathy.

---

[148]

**TÍTULO / TITLE:** - Above-Label Doses of Octreotide-LAR in Patients With Metastatic Small Intestinal Carcinoid Tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Gastrointest Cancer Res. 2013 May;6(3):81-5.

**AUTORES / AUTHORS:** - Strosberg J; Weber J; Feldman M; Goldman J; Almhanna K; Kvols L

**INSTITUCIÓN / INSTITUTION:** - Department of GI Oncology Moffitt Cancer Center and Research Institute Tampa, FL.

**RESUMEN / SUMMARY:** - BACKGROUND: Octreotide LAR is indicated for treatment of malignant carcinoid syndrome and has been studied at doses of 10 to 30 mg intramuscularly every 4 weeks. In clinical practice, higher doses are often prescribed for patients who experience refractory carcinoid syndrome (flushing and/or diarrhea) or tumor growth while on the maximum label-recommended dose. METHODS: We performed a retrospective, longitudinal review of octreotide LAR administration at a tertiary institution to determine the frequency of above-label dosing and outcomes. RESULTS: Three hundred thirty-eight patients were considered evaluable, among whom 100 (30%) underwent at least 1 increase in dose or frequency of octreotide-LAR above the standard label dose. The most common maximum doses were 40 mg every 4 weeks (n = 37 patients), 60 mg every 4 weeks (n = 34), and 30 mg every 3 weeks (n = 18). The indications for dose increase were worsening carcinoid syndrome (n = 60), radiographic progression (n = 33), and rising urine 5-HIAA (n = 6). Of the patients whose doses were increased for refractory carcinoid syndrome, 62% (n = 34) experienced improvement in diarrhea, and 56% (n = 28) experienced improvement in flushing. CONCLUSIONS: In conclusion, octreotide LAR is commonly prescribed in doses or schedules above the recommended dose and frequency. Patients with refractory carcinoid syndrome appear to experience a clinical benefit from this change. Prospective data may be used to further evaluate this strategy.

-----

[149]

**TÍTULO / TITLE:** - Pre-operative prediction of cervical nodal metastasis in papillary thyroid cancer by 99mTc-MIBI SPECT/CT; a pilot study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Med Assoc Thai. 2013 Jun;96(6):696-702.

**AUTORES / AUTHORS:** - Tangjaturonrasme N; Vasavid P; Sombuntham P; Keelawat S

**INSTITUCIÓN / INSTITUTION:** - King Chulalongkorn Memorial Hospital, Thai Red Cross Society, Department of Otolaryngology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand. [Napadon.T@chula.ac.th](mailto:Napadon.T@chula.ac.th)

**RESUMEN / SUMMARY:** - OBJECTIVE: Papillary thyroid cancer has a high prevalence of cervical nodal metastasis. There is no “gold standard” imaging for pre-operative diagnosis. The aim of the present study was to assess the accuracy of pre-operative 99mTc-MIBI SPECT/CT in diagnosis of cervical nodal metastasis in patients with papillary thyroid cancer MATERIAL AND METHOD: Fifteen patients were performed 99Tc-MIBI SPECT/CT pre-operatively. Either positive pathological report of neck dissection or positive post-treatment I-131 whole body scan with SPECT/CT of neck was concluded for definite neck metastasis. The PPV, NPV, and accuracy of 99mTc-MIBI SPECT/CT were analyzed. RESULTS: The PPV NPV and accuracy were 80%, 88.89%, and 85.71%, respectively. 99mTc-MIBI SPECT/CT could localize the abnormal lymph nodes groups correctly in most cases when compared with pathological results. However the authors found one false positive case with caseating granulomatous

lymphadenitis and one false negative case with positive post-treatment 1-131 whole body scan with SPECT/CT of neck on cervical nodes zone II and IV CONCLUSION: 99mTc-MIBI SPECT/CT seem promising for pre-operative staging of cervical nodal involvement in patients with papillary thyroid cancer without the need of using iodinated contrast that may complicate subsequent 1-131 treatment. However, false positive result in granulomatous inflammatory nodes should be aware of especially in endemic areas. 99mTc-MIBI SPECT/CT scan shows a good result when compared with previous study of CT or MRI imaging. The comparative study between different imaging modality and the extension of neck dissection according to MIBI result seems interesting.

[150]

**TÍTULO / TITLE:** - Reactive oxygen species scavenging activities in a chemiluminescence model and neuroprotection in rat pheochromocytoma cells by astaxanthin, beta-carotene, and canthaxanthin.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Kaohsiung J Med Sci. 2013 Aug;29(8):412-21. doi: 10.1016/j.kjms.2012.12.002. Epub 2013 Feb 8.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.kjms.2012.12.002](#)

**AUTORES / AUTHORS:** - Chang CS; Chang CL; Lai GH

**INSTITUCIÓN / INSTITUTION:** - Division of Gastroenterology, Taichung Veterans General Hospital, Taiwan.

**RESUMEN / SUMMARY:** - The objective of this study was to determine chemiluminescence (CL) antioxidant activities and neuroprotective effects of astaxanthin, beta-carotene (beta-carotene), and canthaxanthin on undifferentiated rat pheochromocytoma (PC12) cells. We performed three CL antioxidant assays, and the three carotenoids showed varying degrees of antioxidant activity, with astaxanthin exhibiting the highest antioxidant activity than the other two samples. Results of a pyrogallol-luminol assay revealed beta-carotene to have higher antioxidant activity than canthaxanthin, whereas cupric sulfate-Phen-Vc-hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) assay showed canthaxanthin to have higher antioxidant activity than beta-carotene. Luminol-H<sub>2</sub>O<sub>2</sub> assay showed the antioxidant activity series as canthaxanthin > beta-carotene at 62.5-1000 µg/mL and beta-carotene > canthaxanthin at 1000-4000 µg/mL. Astaxanthin exhibited partial neuroprotective activity against H<sub>2</sub>O<sub>2</sub> and the strongest neuroprotective activity against amyloid beta-peptide(25-35) [(Aβ)(25-35)]-induced undifferentiated PC12 cell deaths at 0.5-5.0 µM. Canthaxanthin showed partial neuroprotective activity in Aβ(25-35)-induced undifferentiated PC12 cell deaths at 1.0-5.0 µM. Astaxanthin protected undifferentiated PC12 cells from the damaging effects of H<sub>2</sub>O<sub>2</sub> and Aβ(25-35) by the following ways: (1) scavenging superoxide anion radicals, hydroxyl radicals, and

H(2)O(2); (2) securing cell viability; (3) suppressing the production of reactive oxygen species; and (4) eliminating calcium ion influx. Our results conclusively show that astaxanthin has the merit as a potential neuron protectant.

[151]

**TÍTULO / TITLE:** - Surgical management of extensive jugular paragangliomas: 10-year-experience with a large cohort of patients in China.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Surg. 2013 Sep 3. pii: S1743-9191(13)01030-3. doi: 10.1016/j.ijssu.2013.08.004.

●● Enlace al texto completo (gratis o de pago) [1016/j.ijssu.2013.08.004](#)

**AUTORES / AUTHORS:** - Wang Z; Zhang Z; Huang Q; Yang J; Wu H

**INSTITUCIÓN / INSTITUTION:** - Department of Otolaryngology Head and Neck Surgery, Xinhua Hospital, Shanghai Jiaotong University, School of Medicine, Shanghai, China; Ear Institute, Shanghai Jiaotong University, Shanghai, China. Electronic address: [wzyent@gmail.com](mailto:wzyent@gmail.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: Jugular paraganglioma (JP) is a rare vascular lesion. Surgical treatment is challenging as differing degrees of skull base invasion and cranial nerve infiltration complicate the procedure. The infra-temporal fossa type A (IFTA) approach has been advocated as the primary surgical strategy. However, due to the small number of cases in each report and the different categories of JP, no study has provided concrete results about the effectiveness and safety of IFTA in treating different categories of JP. METHODS: We reviewed our institutional experience in the management of patients with JP. RESULTS: Records of 89 JP patients were reviewed. The IFTA procedure appears equally effective in preserving lower cranial nerve function for both extradural and intracranial extension JP. Use of the IFTA approach for intracranial JP poses a significant risk of post-operative morbidity including facial nerve dysfunction, tumor recurrence and CSF leak. CONCLUSION: Improvements in the standard IFTA approach are necessary for improved outcomes in patients with intracranial extension JP.

[152]

**TÍTULO / TITLE:** - Plasticity of neuropeptidergic neoplasm cells in the primary and metastatic Merkel cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Folia Histochem Cytobiol. 2013;51(2):168-73. doi: 10.5603/FHC.2013.0015.

●● Enlace al texto completo (gratis o de pago) [5603/FHC.2013.0015](#)

**AUTORES / AUTHORS:** - Godlewski J; Kowalczyk A; Koziol Z; Pidsudko Z; Kmiec A; Siedlecka-Kroplewska K

**INSTITUCIÓN / INSTITUTION:** - Department of Human Histology and Embryology, Faculty of Medical Sciences, University of Warmia and Mazury, Olsztyn, Poland.

[janusz350@poczta.onet.pl](mailto:janusz350@poczta.onet.pl)

**RESUMEN / SUMMARY:** - Merkel cell carcinoma (MCC) is a rare and highly aggressive cutaneous carcinoma with characteristics of neuroendocrine tumor. We performed immunohistochemical analysis to demonstrate the presence of various neuropeptides within cells of MCC resected from a 75-year old woman. The cells of primary tumor of cheek were compared with the cells of regional right submandibular metastatic tumor which was found eight months later. A double- staining IHC for the pan-neuronal marker, PGP 9.5, and selected neuropeptides in the tissue material obtained from both locations was performed. Single multipolar cells in the main mass of primary tumor stained positively for PGP 9.5 and such neuropeptides as GAL, VIP, PACAP, NPY and CGRP. Moreover, we demonstrated for the first time the presence of neuropeptides in metastatic MCC cells. In the metastatic tumor, cells showing the co-localization of PGP-9.5 and neuropeptides were more numerous, mostly of oval shape, and significantly smaller than in the primary tumor. Thus, the progression of MCC may be associated with the acquisition by its cells of new morphological and biological features.

[153]

**TÍTULO / TITLE:** - Rapid development of thymic neuroendocrine carcinoma despite transcervical thymectomy in a patient with multiple endocrine neoplasia type 1.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Indian J Endocrinol Metab. 2013 Jul;17(4):743-6. doi: 10.4103/2230-8210.113774.

●● [Enlace al texto completo \(gratis o de pago\) 4103/2230-8210.113774](#)

**AUTORES / AUTHORS:** - Sadacharan D; Reddy SV; Agrawal V; Agarwal G

**INSTITUCIÓN / INSTITUTION:** - Department of Endocrine and Breast Surgery, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India.

**RESUMEN / SUMMARY:** - Thymic neuroendocrine (NE) tumors are a rare manifestation of multiple endocrine neoplasia syndrome type 1 (MEN-1). They are malignant and aggressive tumors and form a major cause of mortality in MEN-1. Transcervical thymectomy (TCT) at the time of parathyroid surgery for primary hyperparathyroidism (PHPT) in MEN-1 usually prevents thymic NE tumors. We report a 56-year-old nonsmoker male with sporadic MEN-1 who presented with thymic NE carcinoma developing rapidly within a span of 8 months after subtotal parathyroidectomy and TCT for PHPT. We present a brief review of literature on this rare NE malignancy, focusing on its occurrence despite TCT. This case highlights the fact that thymic NE carcinoma may develop even after TCT in MEN-1. Regular surveillance for these aggressive thymic NE tumors is mandatory even after TCT in MEN-1 setting.

[154]

**TÍTULO / TITLE:** - Mature ovarian teratoma with carcinoid tumor in a 28-year-old patient.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Case Rep Obstet Gynecol. 2013;2013:108582. doi: 10.1155/2013/108582. Epub 2013 Jul 25.

●● Enlace al texto completo (gratis o de pago) [1155/2013/108582](#)

**AUTORES / AUTHORS:** - Petousis S; Kalogiannidis I; Margioulas-Siarkou C; Traianos A; Miliaras D; Kamparoudis A; Mamopoulos A; Rousso D

**INSTITUCIÓN / INSTITUTION:** - 3rd Department of Obstetrics and Gynaecology, Aristotle University of Thessaloniki, Konstantinoupoleos 49, 54642, Greece.

**RESUMEN / SUMMARY:** - Introduction. Coexistence of carcinoid tumor inside a mature cystic teratoma is an extremely rare phenomenon, especially in young women. We present the case of a 28-year-old woman diagnosed with a right ovarian carcinoid and treated uneventfully with conservative surgical approach. Case Report. A 28-year-old woman, gravid 0, parity 0, presented to our department for her annual gynecological examination and Pap smear test. During her examination, a mobile cystic mass was detected in the right lower abdomen. Ultrasound indicated a right ovarian mass 10.5 x 6.3 cm, confirmed by CT scan. Further investigation revealed AFP levels (1539 ng/mL). The ovarian mass was excised by laparoscopy, leaving intact the remaining right ovary. Frozen sections showed a mature cystic teratoma. However, paraffin sections revealed the presence of a small carcinoid within the teratoma's gastric-type mucosa. The patient was set to a close followup. Nine months postoperatively, ultrasound pelvis imaging and CT scan of the abdomen as well as serum tumor markers have shown no evidence of recurrence disease. Conclusion. Despite the weak evidence, fertility spare surgical approach for women wanting to preserve their genital tract might be a reasonable option.

[155]

**TÍTULO / TITLE:** - The association of a panel of biomarkers with the presence and severity of carcinoid heart disease: a cross-sectional study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - PLoS One. 2013 Sep 12;8(9):e73679. doi: 10.1371/journal.pone.0073679.

●● Enlace al texto completo (gratis o de pago) [1371/journal.pone.0073679](#)

**AUTORES / AUTHORS:** - Dobson R; Burgess MI; Banks M; Pritchard DM; Vora J; Valle JW; Wong C; Chadwick C; George K; Keevil B; Adaway J; Ardill JE; Anthony A; Hofmann U; Poston GJ; Cuthbertson DJ

**INSTITUCIÓN / INSTITUTION:** - Neuroendocrine Tumour Group, University Hospital Aintree, Liverpool, Merseyside, United Kingdom ; Department of Obesity and Endocrinology, Institute of Ageing and Chronic Disease, University of Liverpool, Liverpool Merseyside, United Kingdom.

**RESUMEN / SUMMARY:** - PURPOSE: Metastatic neuroendocrine tumors secrete serotonin and other vasoactive substances that are responsible for carcinoid syndrome and carcinoid heart disease. We sought to evaluate the discriminatory utility of diagnostic biomarkers in determining the presence and severity of carcinoid heart disease in patients with metastatic neuroendocrine tumors. PATIENTS AND METHODS: A cross-sectional study of patients with neuroendocrine tumors with documented liver metastases and/or carcinoid syndrome between April 2009-October 2012 in 5 tertiary referral centers. Serum was analyzed for Chromogranin A, Chromogranin B and N-terminal pro Brain Natriuretic Peptide (NT-proBNP). Plasma was analyzed for Neurokinin A and 5-Hydroxyindoleacetic acid (5HIAA). Echocardiography was used to determine the presence and severity of carcinoid heart disease. Non-parametric receiver operating characteristic curves were constructed for biomarkers, and the area under the curve determined. The severity of cardiac involvement was correlated with the concentration of each biomarker. RESULTS: A total of 187 patients were identified of whom 37 (20%) had carcinoid heart disease. Significantly higher median values of all biomarkers were found in the patients with cardiac involvement. NT-proBNP and plasma 5HIAA had the highest areas under the curve for the prediction of carcinoid heart disease [NT-proBNP 0.82 (95% confidence interval 0.74-0.90,  $p < 0.0001$ ) and 5HIAA 0.85 (95% confidence interval 0.78-0.92,  $p < 0.0001$ ]. NT-proBNP was moderately correlated ( $r = 0.48$ ,  $p < 0.001$ ) whereas plasma 5HIAA was only weakly correlated ( $r = 0.34$ ,  $p < 0.001$ ) with the echocardiographic severity score. CONCLUSION: NT-proBNP and plasma 5HIAA are both sensitive and specific biomarkers for the presence of carcinoid heart disease whereas only NT-proBNP is moderately correlated with disease severity.

-----

[156]

**TÍTULO / TITLE:** - A Retrospective Study of Capecitabine/Temozolomide (CAPTEM) Regimen in the Treatment of Metastatic Pancreatic Neuroendocrine Tumors (pNETs) after Failing Previous Therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - JOP. 2013 Sep 10;14(5):498-501. doi: 10.6092/1590-8577/1589.

**AUTORES / AUTHORS:** - Saif MW; Kaley K; Brennan M; Garcon MC; Rodriguez G; Rodriguez T

**INSTITUCIÓN / INSTITUTION:** - Section of GI Cancers and Experimental Therapeutics, Tufts University School of Medicine. Boston, MA, USA. [wsaif@tuftsmedicalcenter.org](mailto:wsaif@tuftsmedicalcenter.org).

**RESUMEN / SUMMARY:** - CONTEXT: Pancreatic neuroendocrine tumors (pNETs) are notoriously resistant to currently available chemotherapy agents. Preclinical data has suggested synergy between temozolomide and capecitabine. OBJECTIVE: To report a retrospective data on the efficacy and safety of capecitabine and temozolomide (CAPTEM regimen) in patients with metastatic pancreatic neuroendocrine tumors (pNETs) who have failed prior therapies. METHODS: We reviewed the medical records

of 7 patients with metastatic pNETs who had had progressive cancer prior to treatment despite therapy, including long-acting release octreotide (60 mg/month), chemotherapy and hepatic chemoembolization. Capecitabine was administered at a flat dose of 1,000 mg orally twice daily on days 1-14 and temozolomide 200 mg/m<sup>2</sup> was given in two divided doses daily on days 10-14 of a 28-day cycle. Tumor assessments were repeated every two cycles and serum tumor markers were measured every cycle. Response to treatment was assessed using Response Evaluation Criteria in Solid Tumors (RECIST) parameters, and toxicity was graded using the National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE), version 3.0. RESULTS: Among 7 patients treated, three patients achieved a partial response, and two patients had stable disease. Total response rate was 43%, and clinical benefit (responders and stable disease) was 71%. Median duration of response was 8 months (range: 4-12 months). Grade 3 and 4 toxicities included grade 3 thrombocytopenia in one patient and grade 3 fatigue in one patient. The most common toxicities were grade 1 and 2 neutropenia, grade 1 fatigue, grade 1 and 2 hand-foot syndrome. CONCLUSIONS: Our retrospective study showed that modified CAPTEM regimen was well-tolerated and produced comparable response to historical data in neuroendocrine tumors, including pNETs. Our study is unique as it only included patients with pNETs. Further prospective studies are warranted to evaluate the combination of CAPTEM regimen with targeted therapies in pNETs.

[157]

**TÍTULO / TITLE:** - Prolonged clinical benefit of everolimus therapy in the management of high-grade pancreatic neuroendocrine carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Case Rep Oncol. 2013 Aug 24;6(2):441-9. doi: 10.1159/000354754.

●● [Enlace al texto completo \(gratis o de pago\) 1159/000354754](#)

**AUTORES / AUTHORS:** - Fonseca PJ; Uriol E; Galvan JA; Alvarez C; Perez Q; Villanueva N; Berros JP; Izquierdo M; Vieitez JM

**INSTITUCIÓN / INSTITUTION:** - Medical Oncology Department, Hospital Universitario Central de Asturias, Oviedo, España.

**RESUMEN / SUMMARY:** - Treatment options for patients with high-grade pancreatic neuroendocrine tumors (pNET) are limited, especially for those with progressive disease and for those who experience treatment failure. Everolimus, an oral inhibitor of mammalian target of rapamycin (mTOR), has been approved for the treatment of patients with low- or intermediate-grade advanced pNET. In the randomized phase III RADIANT-3 study in patients with low- or intermediate-grade advanced pNET, everolimus significantly increased progression-free survival (PFS) and decreased the relative risk for disease progression by 65% over placebo. This case report describes a heavily pretreated patient with high-grade pNET and liver and peritoneal metastases who achieved prolonged PFS, clinically relevant partial radiologic tumor response, and

resolution of constitutional symptoms with improvement in Karnofsky performance status while receiving a combination of everolimus and octreotide long-acting repeatable (LAR). Radiologic and clinical responses were maintained for 19 months, with minimal toxicity over the course of treatment. This case supports the findings that the combination of everolimus plus octreotide LAR may be considered for use in patients with high-grade pNET and progressive disease. Although behavior and aggressiveness are different between low- or intermediate-grade and high-grade pNET, some high-grade pNET may express mTOR; hence, everolimus should be considered in a clinical trial.

---

[158]

**TÍTULO / TITLE:** - Antifreeze Protein Prolongs the Life-Time of Insulinoma Cells during Hypothermic Preservation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - PLoS One. 2013 Sep 17;8(9):e73643. doi: 10.1371/journal.pone.0073643.

●● Enlace al texto completo (gratis o de pago) [1371/journal.pone.0073643](https://doi.org/10.1371/journal.pone.0073643)

**AUTORES / AUTHORS:** - Kamijima T; Sakashita M; Miura A; Nishimiya Y; Tsuda S

**INSTITUCIÓN / INSTITUTION:** - Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Sapporo, Hokkaido, Japan.

**RESUMEN / SUMMARY:** - It is sometimes desirable to preserve mammalian cells by hypothermia rather than freezing during short term transplantation. Here we found an ability of hypothermic (+4 degrees C) preservation of fish antifreeze protein (AFP) against rat insulinoma cells denoted as RIN-5F. The preservation ability was compared between type I-III AFPs and antifreeze glycoprotein (AFGP), which could be recently mass-prepared by a developed technique utilizing the muscle homogenates, but not the blood serum, of cold-adapted fishes. For AFGP, whose molecular weight is distributed in the range from 2.6 to 34 kDa, only the proteins less than 10 kDa were examined. The viability rate was evaluated by counting of the preserved RIN-5F cells unstained with trypan blue. Significantly, either AFPI or AFPIII dissolved into Euro-Collins (EC) solution at a concentration of 10 mg/ml could preserve approximately 60% of the cells for 5 days at +4 degrees C. The 5-day preserved RIN-5F cells retained the ability to secrete insulin. Only 2% of the cells were, however, preserved for 5 days without AFP. Confocal photomicroscopy experiments further showed the significant binding ability of AFP to the cell surface. These results suggest that fish AFP enables 5-day quality storage of the insulinoma cells collected from a donor without freezing.

---

[159]

**TÍTULO / TITLE:** - Severe posterior reversible encephalopathy in pheochromocytoma: importance of susceptibility-weighted MRI.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Korean J Radiol. 2013 Sep;14(5):849-53. doi: 10.3348/kjr.2013.14.5.849. Epub 2013 Aug 30.

●● Enlace al texto completo (gratis o de pago) [3348/kjr.2013.14.5.849](https://doi.org/10.3348/kjr.2013.14.5.849)

**AUTORES / AUTHORS:** - Serter A; Alkan A; Aralasmak A; Kocakoc E

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Bezmialem Vakif University School of Medicine, Istanbul 34093, Turkey.

**RESUMEN / SUMMARY:** - Pheochromocytoma is a rare cause of hypertension in children. Hypertension is one of the common reasons of posterior reversible encephalopathy. Intracerebral hemorrhage is a serious and unexpected complication of hypertensive encephalopathy due to pheochromocytoma, and very rarely seen in the childhood. Intracerebral hemorrhages should be searched if there are hypertensive reversible signal changes on the brain. Susceptibility weighted imaging (SWI) is a more sensitive method than conventional MRI when demonstrating cerebral microhemorrhagic foci. This is the first report of SWI findings on intracerebral hemorrhages in basal ganglia, brain stem and periventricular white matter due to hypertensive encephalopathy in a child with pheochromocytoma.

[160]

**TÍTULO / TITLE:** - Menin/PRMT5/hedgehog signaling: a potential target for the treatment of multiple endocrine neoplasia type 1 tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Epigenomics. 2013 Oct;5(5):469-71. doi: 10.2217/epi.13.47.

●● Enlace al texto completo (gratis o de pago) [2217/epi.13.47](https://doi.org/10.2217/epi.13.47)

**AUTORES / AUTHORS:** - Gurung B; Hua X

**INSTITUCIÓN / INSTITUTION:** - Abramson Family Cancer Research Institute, Department of Cancer Biology, University of Pennsylvania Perelman School of Medicine, 421 Curie Boulevard, BRB II/III, Philadelphia, PA 19104, USA.

[161]

**TÍTULO / TITLE:** - A case of carcinoid pericardial metastases and massive effusion.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Kardiol Pol. 2013;71(8):881. doi: 10.5603/KP.2013.0208.

●● Enlace al texto completo (gratis o de pago) [5603/KP.2013.0208](https://doi.org/10.5603/KP.2013.0208)

**AUTORES / AUTHORS:** - Lepska L; Pisiak S; Dudziak M

**INSTITUCIÓN / INSTITUTION:** - Division of Noninvasive Cardiac Diagnostics, Division of Cardiology and Electrotherapy, Medical University of Gdansk, Gdansk, Poland.

[llepska@poczta.onet.pl](mailto:llepska@poczta.onet.pl).

[162]

**TÍTULO / TITLE:** - A case of elderly-onset type 1 diabetes mellitus: negative for antiglutamic acid dehydrogenase antibody and positive insulinoma-associated tyrosine phosphatase-like protein-2 antibody.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nihon Ronen Igakkai Zasshi. 2013;50(3):404-8.

**AUTORES / AUTHORS:** - Chiba Y; Ynie J; Kimbara Y; Tamura Y; Mori S; Ito H; Araki A

**INSTITUCIÓN / INSTITUTION:** - Department of Endocrinology and Metabolism, Tokyo Metropolitan Geriatric Hospital.

**RESUMEN / SUMMARY:** - An 83-year-old Japanese woman given a diagnosis of type 2 diabetes mellitus 3 years previously was hospitalized for markedly elevated plasma glucose (386 mg/dl) and glycated hemoglobin (9.3%) levels. Laboratory study results showed urinary connecting peptide immunoreactivity (CPR) concentrations of 8.9 mug/day and serum CPR levels <0.2 ng/ml before and 0.3 ng/ml 6 min after glucagon administration, indicating decreased insulin secretion. Although antiglutamic acid dehydrogenase (GAD) antibody levels were negative, insulinoma-associated tyrosine phosphatase-like protein-2 (IA-2) antibody levels were positive (50 U/ml), leading to a diagnosis of type 1 diabetes mellitus. Furthermore, human leukocyte antigen (HLA) typing revealed DRB1(\*)0901, a diabetes-susceptibility gene. Intensive insulin therapy was initiated. This was a rare case of elderly-onset type 1 diabetes.

[163]

**TÍTULO / TITLE:** - Imaging spectrum of peripheral primitive neuroendocrine tumours.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Singapore Med J. 2013 Aug;54(8):463-2.

**AUTORES / AUTHORS:** - Gupta P; Hari S; Thulkar S

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, All India Institute of Medical Sciences, New Delhi 110029, India. [pankajgupta959@gmail.com](mailto:pankajgupta959@gmail.com).

**RESUMEN / SUMMARY:** - Primitive neuroectodermal tumours (PNETs) arise from pluripotent neural crest cells and are classified as either central or peripheral. Peripheral PNETs (pPNETs) arise outside the central nervous system and sympathetic chain. These rare neoplasms comprise only 1% of all sarcomas and have highly aggressive biological behaviour and dismal prognosis. Adolescents and young adults are typically affected. Only isolated case reports on pPNETs appearing in both typical and atypical sites can be found in the literature. Timely diagnosis of pPNETs is a challenge to clinicians and radiologists due to the disease's insidious onset and variable locations, coupled with the limited studies that focus on the imaging features of pPNETs. Hence, this article serves to review the imaging features of this rare tumour.

[164]

**TÍTULO / TITLE:** - Refractory thrombocytopenia responds to octreotide treatment in a case of Evans syndrome with gastric neuroendocrine tumor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Case Rep Hematol. 2013;2013:391086. doi: 10.1155/2013/391086. Epub 2013 Jul 31.

●● Enlace al texto completo (gratis o de pago) [1155/2013/391086](#)

**AUTORES / AUTHORS:** - Chung-Delgado K; Revilla-Montag A; Guillen-Bravo S; Rios-Diaz H; Alva-Munoz JC

**INSTITUCIÓN / INSTITUTION:** - Escuela de Medicina, Universidad Peruana de Ciencias Aplicadas, Lima 33, Peru.

**RESUMEN / SUMMARY:** - A 37-year-old woman with history of Evans Syndrome with poor response to high-dose corticoid treatment presented to the emergency department with gastrointestinal and vaginal bleeding. The patient was later diagnosed with severe thrombocytopenia and a stage G1, well-differentiated gastric neuroendocrine tumor, confirmed by a biopsy. A total gastrectomy was performed to eradicate the tumor. After being treated with a total splenectomy for her Evans Syndrome with no clinical or laboratory improvement, she began regular treatment with octreotide on the basis of a possible hepatic metastasis. Days after the initiation of the octreotide, an increase in the platelet count was evidenced by laboratory findings, from 2,000 platelets/mm<sup>3</sup> to 109,000 platelets/mm<sup>3</sup>. Weeks later, the hepatic metastasis is discarded by a negative octreotide-body scan, and the octreotide treatment was interrupted. Immediately after the drug interruption, a progressive and evident descent in the platelet count was evidenced (4000 platelets/mm<sup>3</sup>). The present case report highlights the possible association between octreotide treatment and a severe thrombocytopenia resistant to conventional treatment.

[165]

**TÍTULO / TITLE:** - Chemotherapy for the treatment of malignant peripheral nerve sheath tumors in neurofibromatosis 1: a 10-year institutional review.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Orphanet J Rare Dis. 2013 Aug 23;8(1):127.

●● Enlace al texto completo (gratis o de pago) [1186/1750-1172-8-127](#)

**AUTORES / AUTHORS:** - Zehou O; Fabre E; Zelek L; Sbidian E; Ortonne N; Banu E; Wolkenstein P; Valeyrie-Allanore L

**RESUMEN / SUMMARY:** - BACKGROUND: Neurofibromatosis 1 (NF1) is the most common autosomal dominant disorder, with an incidence of 1 in 2,500-3,300 live births. NF1 is associated with significant morbidity and mortality because of complications, especially malignant peripheral nerve sheath tumors (MPNSTs), which mainly develop during adulthood. We evaluated our experience with management of NF1 with MPNSTs by standard chemotherapy with anthracycline and/or ifosfamide in terms of time to treatment failure and overall survival. METHODS: We performed a

retrospective review of consecutive patients with NF1 and a diagnosis of MPNSTs between 1993 and 2003 in our referral center for NF1. Prognostic factors were evaluated by univariate analysis. RESULTS: We evaluated data for 21 patients with grade 1 (n=1), grade 2 (n=8) and grade 3 (n=12) MPNST; 16 presented localized disease and underwent surgery: margins for 6 were tumor-free (including 3 patients with amputation), 2 showed microscopic residual disease and 8 showed macroscopic residual disease. All patients received chemotherapy and 9 radiotherapy. Median time to treatment failure and overall survival were 7.8 and 17 months, respectively. Two patients were still alive at 138 and 167 months. We found no significant relationship between type of chemotherapy and time to treatment failure or overall survival. CONCLUSIONS: MPNSTs are highly aggressive in NF1. Conventional chemotherapy does not seem to reduce mortality, and its role must be questioned. Recent advances in the molecular biology of MPNSTs may provide new prognostic factors and targeted therapies.

[166]

**TÍTULO / TITLE:** - Mammary neuroendocrine carcinoma with mucinous differentiation: A clinicopathological study of 15 cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Breast Dis. 2013 Jan 1;34(2):87-93. doi: 10.3233/BD-130356.

●● [Enlace al texto completo \(gratis o de pago\) 3233/BD-130356](#)

**AUTORES / AUTHORS:** - Charfi S; Ayed CB; Mnif H; Ellouze S; Chaabane K; Feki J; Frikha M; Daoud J; Boudawara-Sellami T

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, CHU Habib Bourguiba, Sfax, Tunisia.

**RESUMEN / SUMMARY:** - BACKGROUND: Mammary neuroendocrine carcinoma (NEC) displays morphological features including mucinous type. OBJECTIVE: To describe clinicopathological of NEC with mucinous differentiation. METHODS: A total of 15 cases of mammary NEC with mucinous differentiation were reviewed. RESULTS: All patients in this study were women aged from 37 to 78 year olds (median 68.1 years). The tumors ranged in size from 1.2 cm to 16 cm (mean 3.74 cm). The amount of extracellular mucin varied from 10% to 90%. Histological grade was I in 7 cases and II in 8 cases. Immunohistochemically, estrogen receptor (ER) and progesteron receptor (PR) were expressed in 12 and 14 cases, respectively. All tumors were negative for Her-2. Ki-67 proliferative index was lesser than 1% in all cases and no cases had demonstrated p53 overexpression. Three patients died of disease with a follow-up of 3 to 6 months. One patient was alive with metastasis at 96 months. Ten patients were disease free (follow-up range from 15 to 125 months). CONCLUSIONS: Mammary NEC with mucinous differentiation affects mostly older women. All tumors were low grade and immunoreactive for ER/PR and negative for Her-2. Mammary NEC with mucinous differentiation seems associated with well survival parameters.

[167]

**TÍTULO / TITLE:** - Biomarkers of medullary thyroid cancer in the prediction of cure after thyroidectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Formos Med Assoc. 2013 Jul 29. pii: S0929-6646(13)00220-9. doi: 10.1016/j.jfma.2013.06.016.

●● Enlace al texto completo (gratis o de pago) [1016/j.ifma.2013.06.016](#)

**AUTORES / AUTHORS:** - Nien FJ; Chang TC

**INSTITUCIÓN / INSTITUTION:** - Division of Endocrinology and Metabolism, Department of Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan.

[168]

**TÍTULO / TITLE:** - Neuroendocrine markers and sustentacular cell count in benign and malignant pheochromocytomas - a comparative study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pol J Pathol. 2013;64(2):129-35.

**AUTORES / AUTHORS:** - Bialas M; Okon K; Dyduch G; Ciesielska-Milian K; Buziak M; Hubalewska-Dydejczyk A; Sobrinho-Simoes M

**INSTITUCIÓN / INSTITUTION:** - Magdalena Bialas MD, Department of Pathomorphology, ul. Grzegorzeczka 16, 31-351 Krakow, tel. +48 12 421 15 64, e-mail: [mbialas7@gmail.com](mailto:mbialas7@gmail.com).

**RESUMEN / SUMMARY:** - Pheochromocytomas are rare tumours with uncertain clinical behaviour. Histological separation between benign and malignant pheochromocytomas is usually difficult. The utilization of PASS criteria (Pheochromocytoma of the Adrenal Gland Scaled Score) has not provided a solid basis for separating benign from malignant tumours. The aim of this study was to investigate immunohistochemical markers (chromogranin, synaptophysin, S-100 and Ki-67) to find out if they could provide useful diagnostic and/or prognostic data in a series of 62 pheochromocytomas (5 cases followed an aggressive clinical course). Chromogranin and synaptophysin immunoreactivity proved to be diagnostically useful, allowing, together with the absence of immunoreactivity for inhibin and melan A, an unequivocal diagnosis of pheochromocytoma. The pattern of staining did not provide, however, significant prognostic information. The mean count of sustentacular S-100 positive cells was lower in malignant than in benign pheochromocytomas but the frequent architectural variability and the haemorrhagic and cystic changes make it very difficult to achieve a precise and reproducible count in the majority of tumours. Without questioning that the occurrence of metastases and/or recurrent disease still remains the only unquestionable criterion for diagnosing a malignant pheochromocytoma, we think that the combined use of the PASS score and Ki-67 index provides useful information for diagnosing malignancy.

[169]

**TÍTULO / TITLE:** - Primary Paraganglioma of Thyroid Gland: A Clinicopathologic and Immunohistochemical Analysis of Three Cases with a Review of the Literature.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Head Neck Pathol. 2013 Aug 13.

●● Enlace al texto completo (gratis o de pago) [1007/s12105-013-0467-7](#)

**AUTORES / AUTHORS:** - Yu BH; Sheng WQ; Wang J

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Fudan University Shanghai Cancer Center, Fudan University, Shanghai, 200032, China, [yubh@shca.org.cn](mailto:yubh@shca.org.cn).

**RESUMEN / SUMMARY:** - Thyroid paraganglioma is an extremely rare tumor and frequently mistaken for other thyroid neoplasms. Increased awareness of its potential presentation in thyroid and its characteristic features is essential for avoiding diagnostic and therapeutic pitfalls. We describe here three additional cases of primary thyroid paraganglioma and analyze their clinical findings and pathological characteristics. Patients included two women and one man presenting with asymptomatic thyroid nodules. Radiological examinations were nonspecific and none had been diagnosed correctly before surgery. On intraoperative frozen section consultation they were all misdiagnosed as carcinomas, either primary or metastatic. However, the permanent sections showed features consistent with paraganglioma. Of note, two cases displayed extension into adjacent thyroid tissues, one of which exhibited increased mitotic activity, confluent tumor necrosis and vascular invasion. Immunohistochemically, the neoplastic chief cells expressed chromogranin, synaptophysin, neuron-specific enolase and CD56, whereas the sustentacular cells were highlighted by S100 protein. All three patients were well with normal hormone secretion, without local recurrence or distant metastasis at last follow-up (range 10-47 months). We further reviewed the literature to summarize the characteristics of this distinctive entity. Albeit being very rare, paraganglioma should be included in the differential diagnosis of hypervascular thyroidal neoplasms. Accurate diagnosis relies on the histopathological findings and adjunctive immunohistochemical studies. To date, all the reported cases have pursued a benign course. Although atypical features seem to have no association with clinical behavior, long time postoperative surveillance with biochemical screening of hormone secretion, cervical ultrasonography and whole-body CT scan is recommended.

[170]

**TÍTULO / TITLE:** - Large B-cell lymphoma mimicking adrenal pheochromocytoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Indian J Med Res. 2013 Aug;138(2):276.

**AUTORES / AUTHORS:** - Caliskan S; Yencilek E

**INSTITUCIÓN / INSTITUTION:** - Urology Clinics, Haydarpasa Numune Training & Research Hospital, Uskudar/Istanbul, Turkey.

---

[171]

**TÍTULO / TITLE:** - Ultrasound predictors of thyroid cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Med Assoc Thai. 2013 Feb;96(2):225-30.

**AUTORES / AUTHORS:** - Wiratkapun C; Jaiyen R; Lertsithichai P; Wedsart B; Jatchavala J; Jaovisidha S; Chirappapha P; Pongtippan A; Aroonroch R

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand. [cholattipp@gmail.com](mailto:cholattipp@gmail.com)

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To identify ultrasound (US) features associated with cancer in thyroid nodules. **MATERIAL AND METHOD:** During a two and a half-year period, medical charts, US images, and pathological findings in 629 consecutive patients with thyroid nodules who underwent US examination as well as fine needle aspiration biopsy (FNAB) or surgical excision or both were retrospectively reviewed. Clinical and US findings associated with thyroid cancer were identified using statistical models. **RESULTS:** Unequivocal cytological or pathological findings were available for 578 patients. Forty-eight patients (8%) had thyroid cancer. Independent clinical and US features associated with thyroid cancer included younger age, symptoms other than palpable mass, solid nodules, fewer number of nodules, presence of calcifications, and enlarged cervical lymph nodes. The combination of all these features was most specific for the diagnosis of thyroid cancer. The absence of all these features could rule out all thyroid cancers. **CONCLUSION:** The risk of the thyroid cancer in patients with thyroid nodules could be estimated by using relevant clinical and US features.

---

[172]

**TÍTULO / TITLE:** - Octreotide-functionalized and resveratrol-loaded unimolecular micelles for targeted neuroendocrine cancer therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nanoscale. 2013 Sep 26;5(20):9924-33. doi: 10.1039/c3nr03102k.

●● [Enlace al texto completo \(gratis o de pago\) 1039/c3nr03102k](#)

**AUTORES / AUTHORS:** - Xu W; Burke JF; Pilla S; Chen H; Jaskula-Sztul R; Gong S

**RESUMEN / SUMMARY:** - Medullary thyroid cancer (MTC) is a neuroendocrine tumor (NET) that is often resistant to standard therapies. Resveratrol suppresses MTC growth in vitro, but it has low bioavailability in vivo due to its poor water solubility and rapid metabolic breakdown, as well as lack of tumor-targeting ability. A novel unimolecular micelle based on a hyperbranched amphiphilic block copolymer was designed, synthesized, and characterized for NET-targeted delivery. The hyperbranched

amphiphilic block copolymer consisted of a dendritic Boltorn® H40 core, a hydrophobic poly(l-lactide) (PLA) inner shell, and a hydrophilic poly(ethylene glycol) (PEG) outer shell. Octreotide (OCT), a peptide that shows strong binding affinity to somatostatin receptors, which are overexpressed on NET cells, was used as the targeting ligand. Resveratrol was physically encapsulated by the micelle with a drug loading content of 12.1%. The unimolecular micelles exhibited a uniform size distribution and spherical morphology, which were determined by both transmission electron microscopy (TEM) and dynamic light scattering (DLS). Cellular uptake, cellular proliferation, and Western blot analyses demonstrated that the resveratrol-loaded OCT-targeted micelles suppressed growth more effectively than non-targeted micelles. Moreover, resveratrol-loaded NET-targeted micelles affected MTC cells similarly to free resveratrol in vitro, with equal growth suppression and reduction in NET marker production. These results suggest that the H40-based unimolecular micelle may offer a promising approach for targeted NET therapy.

-----

[173]

**TÍTULO / TITLE:** - Therapeutic pulmonary artery stenting for metastatic bronchial carcinoid.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - British Medical J (BMJ). %8?(3k+]3s <http://bmj.com/search.dtl>

●● British Medical J. (BMJ): <> Case Rep. 2013 Sep 24;2013. pii: bcr2013201123. doi: 10.1136/bcr-2013-201123.

●● [Enlace al texto completo \(gratis o de pago\) 1136/bcr-2013-201123](#)

**AUTORES / AUTHORS:** - Vawdrey DB; Fitzsimmons S; Veldtman GR; Carpenter JP

**INSTITUCIÓN / INSTITUTION:** - Wessex Cardiothoracic Centre, Southampton, UK.

**RESUMEN / SUMMARY:** - We present a case of a middle-aged man with a 3-month history of progressive shortness of breath and peripheral oedema. Ten years prior to this, he had undergone a left pneumonectomy for metastatic bronchial carcinoid. Clinical examination revealed significant right heart failure, supported by transthoracic echocardiography. CT pulmonary angiogram revealed the cause to be marked progression of the bronchial carcinoid causing severe external compression of right pulmonary artery (RPA). In view of the distressing symptoms, a palliative endovascular intervention to the RPA was attempted to relieve obstruction, improve blood flow through the right lung and offload the right ventricle. This was performed under general anaesthesia involving interventional cardiology and radiology specialists together with a specialist anaesthetic team with extensive experience of managing carcinoid patients. The result was a marked improvement in symptoms and right heart function and the patient was discharged 2 days later.

-----

[174]

**TÍTULO / TITLE:** - Simultaneous medullary carcinoma, papillary carcinoma and granulomatous inflammation of the thyroid.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Singapore Med J. 2013 Jul;54(7):e146-8.

**AUTORES / AUTHORS:** - Kataria K; Yadav R; Sarkar C; Karak AK

**INSTITUCIÓN / INSTITUTION:** - Room No. 334, Resident Doctors Hostel, Masjid Moth, All India Institute of Medical Sciences, New Delhi 110029, India.

**RESUMEN / SUMMARY:** - Thyroid tumours with both papillary and medullary carcinoma features are rare and represent less than 1% of all thyroid malignancies. These tumours have a different clinical presentation and biological behaviour from tumours that have only papillary or medullary carcinoma features. The phenomenon of mixed thyroid tumours can be observed in two settings—a mixed tumour showing dual differentiation, or a collision tumour. For a precise diagnosis of this rare mixed thyroid carcinoma, fine needle aspiration cytology results should be correlated with serum calcitonin and thyroglobulin levels. The diagnosis should also be confirmed using immunocytochemistry. Surgery is the treatment of choice, and the role of postoperative radioiodine is controversial. We herein report the case of a 35-year-old man with a mixed medullary-papillary carcinoma of the thyroid, which presented with C-cell hyperplasia, granulomatous inflammation and metastasis to the cervical lymph nodes. The patient was treated with total thyroidectomy and nodal clearance. This case highlights the need for awareness of coexistent entities as they warrant separate treatments.

[175]

**TÍTULO / TITLE:** - Neuroendocrine tumor metastatic to the orbit treated with radiotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Gastrointest Oncol. 2013 Aug 15;5(8):177-80. doi: 10.4251/wjgo.v5.i8.177.

●● [Enlace al texto completo \(gratis o de pago\) 4251/wjgo.v5.i8.177](#)

**AUTORES / AUTHORS:** - Peixoto RD; Lim HJ; Cheung WY

**INSTITUCIÓN / INSTITUTION:** - Renata D'Alpino Peixoto, Howard John Lim, Winson Y Cheung, Department of Medical Oncology, BC Cancer Agency, Vancouver, BC V5Z 4E6, Canada.

**RESUMEN / SUMMARY:** - Neuroendocrine tumors are rare neoplasms that infrequently metastasize to the orbit. Given that patients with these tumors may have prolonged survival despite dissemination, maintaining quality of life by providing early diagnosis and effective treatment to preserve vision and comfort is a fundamental issue. We report the case of a 79-year old woman who presented with well-differentiated metastatic neuroendocrine tumor to the liver with no carcinoid syndrome and was

started on intramuscular long-acting octreotide with disease stabilization. Two years later she developed right-sided diplopia associated with mild eye discomfort, proptosis and reddening. An magnetic resonance imaging showed a 2.1 cm mass in the right orbit and further biopsy confirmed a neuroendocrine tumor metastasis. The patient was treated with a four-week course of stereotactic radiotherapy to the right orbital metastasis (4000 cGy in 20 fractions) with minor conjunctivitis as the only side effect. Eighteen months later, she remains well with no visual loss.

---

[176]

**TÍTULO / TITLE:** - Cabozantinib (XL184) for the treatment of locally advanced or metastatic progressive medullary thyroid cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Future Oncol. 2013 Aug;9(8):1083-92. doi: 10.2217/fon.13.128.

●● Enlace al texto completo (gratis o de pago) [2217/fon.13.128](#)

**AUTORES / AUTHORS:** - Viola D; Cappagli V; Elisei R

**INSTITUCIÓN / INSTITUTION:** - Endocrinology Unit, Department of Clinical & Experimental Medicine, WHO Collaborating Center for the Study & Treatment of Thyroid Diseases & other Endocrine & Metabolic Disorders, University of Pisa, Via Paradisa 2, Pisa 56124, Italy.

**RESUMEN / SUMMARY:** - Cabozantinib (XL184) is an oral multiple receptor tyrosine kinase inhibitor manufactured by Exelixis Inc., CA, USA. It mainly inhibits three tyrosine kinase receptors: MET, VEGFR2 and RET. In both preclinical and clinical studies it has been shown to inhibit tumor angiogenesis, invasiveness and metastases. The most frequent side effects are fatigue, diarrhea, decreased appetite, nausea, weight loss and palmar-plantar erythrodysesthesia. A Phase III clinical trial (EXAM study) of XL184 versus placebo in advanced and progressive medullary thyroid cancer showed a 28 versus 0% overall response rate and a progression-free survival of 11.2 versus 4.0 months (hazard ratio: 0.28; 95% CI: 0.19-0.40; p < 0.0001) in patients treated with cabozantinib and placebo, respectively. The drug has been approved by the US FDA for the treatment of advanced/progressive metastatic medullary thyroid cancer in the USA. The EMA is now evaluating its approval in Europe.

---

[177]

**TÍTULO / TITLE:** - Advances in the treatment of neurofibromatosis-associated tumours.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Rev Clin Oncol. 2013 Aug 13. doi: 10.1038/nrclinonc.2013.144.

●● Enlace al texto completo (gratis o de pago) [1038/nrclinonc.2013.144](#)

**AUTORES / AUTHORS:** - Lin AL; Gutmann DH

**INSTITUCIÓN / INSTITUTION:** - Department of Neurology, Washington University School of Medicine, Box 8111, 660 S. Euclid Avenue, St Louis, MO 63110, USA.

**RESUMEN / SUMMARY:** - Neurofibromatosis (NF) comprises two distinct genetic disorders-neurofibromatosis type 1 and 2 (NF1 and NF2)-in which affected individuals develop both benign and malignant tumours. NF1 results from germline mutations in the NF1 gene that encodes neurofibromin, while NF2 results from germline mutations in the NF2 gene that encodes merlin (or schwannomin). The major tumour types arising in individuals with NF1 include neurofibromas, malignant peripheral nerve sheath tumours, and gliomas, whereas NF2 is characterized by the formation of schwannomas, meningiomas, and ependymomas. With the identification of the NF1 and NF2 genes and the generation of robust preclinical mouse models of NF-associated neoplasms, novel treatments that specifically target the growth control pathways deregulated in these tumours have been discovered, some of which are now being tested in clinical trials in individuals with NF1 and NF2. In this Review, we will highlight the key clinical features of NF1 and NF2 and the advances in future clinical management based on an improved understanding of the function of the NF1 and NF2 genes and the development of small-animal models.

---

[178]

**TÍTULO / TITLE:** - Pancreatic neuroendocrine tumors: approach to treatment with focus on sunitinib.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Therap Adv Gastroenterol. 2013 Sep;6(5):396-411. doi: 10.1177/1756283X13493878.

- Enlace al texto completo (gratis o de pago) [1177\\_1756283X13493878](#) [pii]
- Enlace al texto completo (gratis o de pago) [1177/1756283X13493878](#)

**AUTORES / AUTHORS:** - Vinik AI; Raymond E

**INSTITUCIÓN / INSTITUTION:** - Director of Research and Neuroendocrine Unit, EVMS Strelitz Diabetes Research Center, Eastern Virginia Medical School, 855 West Brambleton Avenue, Norfolk, VA 23510-1001, USA.

**RESUMEN / SUMMARY:** - Pancreatic neuroendocrine tumors (pNETs) are relatively rare malignancies. With secretory tumors such as insulinomas, vasoactive intestinal peptideomas, and gastrinomas, the hormone produced causes the symptom complex (e.g. hypoglycemia, peptic ulcer disease). With nonsecretory NETs, the clinical condition is determined by tumoral growth and metastasis. The course of metastatic pNETs may be indolent for several years but progression is often more rapid at later stages, leading to significant disability and a markedly negative impact on quality of life. Until recently, there were few effective systemic treatments for pNETs. Standard chemotherapy produces limited responses and has considerable toxicity. Somatostatin analogues control symptoms in some types of pNETs, but have not yet demonstrated antitumor activity. The recent introduction of targeted therapies, including the tyrosine kinase inhibitor sunitinib and the mammalian target of rapamycin inhibitor everolimus, yielded new opportunities for patients with advanced/metastatic pNETs.

These drugs, which target key pathways in tumor proliferation and angiogenesis, provided clear clinical benefits in phase III clinical trials, including delayed tumor progression. The pivotal sunitinib phase III trial was discontinued prematurely due to higher rates of death and serious adverse events with placebo and greater progression-free survival (PFS) with sunitinib. In this trial, sunitinib demonstrated encouraging long-term responses as well as PFS and overall survival benefits, and an acceptable safety profile that allowed patients to preserve their quality of life. In every patient subgroup, including secretory and nonsecretory tumors, the hazard ratio for progression or death favored sunitinib. Circulating biomarkers are being investigated for the prediction and monitoring of responses to sunitinib. Although not fully evaluated in pNETs, biomarkers associated with response to sunitinib in several tumor types include soluble vascular endothelial growth factor receptor 2 and 3, interleukin 8, and stromal cell-derived factor 1alpha. Based on recent data, treatment algorithms have been updated for advanced and metastatic pNETs.

-----

[179]

**TÍTULO / TITLE:** - Giant metastatic Merkel cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Skinmed. 2013 May-Jun;11(3):179-80.

**AUTORES / AUTHORS:** - Bognet R; Thompson C; Campanelli C

**INSTITUCIÓN / INSTITUTION:** - Department of Dermatology, Jefferson Medical College, Sewell, NJ, USA.

**RESUMEN / SUMMARY:** - A 68-year-old man presented with a rapidly growing, asymptomatic mass on his left mid-back for the past 3 months. The patient's medical history revealed an intentional 60-pound weight loss over the previous 2 years along with smoking approximately 1 pack of cigarettes per day. On physical examination, a fungating, 11-cm red tumor with palpable broader underlying extension (23 cm total) was present on the left mid-back with distinct red dermal nodules in a dermatomal distribution. In close proximity were two ulcerated nodules, proven histologically to be basal cell carcinomas. In the left groin was massive, fixed lymphadenopathy. A punch biopsy of the tumor was performed, which showed a dense infiltrate of small, round hyperchromatic blue cells that stained positive for CD 56 and pancytokeratin in a perinuclear dot pattern. Tumor cells were negative for CK20, TTF, CK7, and LCA.

-----

[180]

**TÍTULO / TITLE:** - Pattern and Clinical Predictors of Lymph Node Involvement in Nonfunctioning Pancreatic Neuroendocrine Tumors (NF-PanNETs).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - JAMA. %8?(3k+]3s <http://jama.ama-assn.org/search.dtl> ●●

JAMA: <> Surg. 2013 Aug 28. doi: 10.1001/jamasurg.2013.3376.

●● Enlace al texto completo (gratis o de pago) [1001/jamasurg.2013.3376](http://jamasurg.2013.3376)

**AUTORES / AUTHORS:** - Partelli S; Gaujoux S; Boninsegna L; Cherif R; Crippa S; Couvelard A; Scarpa A; Ruzsiewicz P; Sauvanet A; Falconi M

**INSTITUCIÓN / INSTITUTION:** - Departments of Surgery and Pathology, University of Verona, Verona, Italy.

**RESUMEN / SUMMARY:** - **IMPORTANCE** Nonfunctioning pancreatic neuroendocrine tumors (NF-PanNETs) are often indolent neoplasms without lymph node (LN) metastasis at diagnosis. Therefore, in patients with low risk of LN metastasis, the extent of surgery and lymphadenectomy could be limited and follow-up adjusted to the very low risk of relapse. **OBJECTIVE** To construct a predicting model to assess the risk of pN+ prior to surgical resection for NF-PanNETs using preoperative retrievable variables. **DESIGN** Retrospective review using multiple logistic regression analysis to construct predictive model of pN+ based on preoperatively available data. **SETTING** The combined prospective databases of the Surgical Departments of the University of Verona, Verona, Italy, and Beaujon Hospital, Clichy, France, were queried for clinical and pathological data. **PARTICIPANTS** All patients with resected (R0 or R1), pathologically confirmed NF-PanNETs between January 1, 1993 and December 31, 2009. **MAIN OUTCOME AND MEASURE** Risk of lymph node metastases in patients with pancreatic neuroendocrine tumors. **RESULTS** Among 181 patients, nodal metastases were reported in 55 patients (30%) and were associated with decreased 5-year disease-free survival (70% vs 97%,  $P < .001$ ). Multivariable analysis showed that independent factors associated with nodal metastasis were radiological nodal status (rN) (odds ratio [OR], 5.58;  $P < .001$ ) and tumor grade (NET-G2 vs NET-G1: OR, 4.87;  $P < .001$ ) (first model). When the tumor grade was excluded, rN (OR, 4.73;  $P = .001$ ) and radiological tumor size larger than 4 cm (OR, 2.67;  $P = .03$ ) were independent predictors of nodal metastasis (second model). The area under the receiver operating characteristic curve for the first and second models were 80% and 74%, respectively. **CONCLUSIONS AND RELEVANCE** Patients with NF-PanNET-G1 have a very low risk of pN+ in the absence of radiological signs of node involvement. When preoperative grading assessment is not achieved, the radiological size of the lesion is a powerful alternative predictor of pN+. The risk of pathological nodal involvement in patients with NF-PanNETs can be accurately estimated by a clinical predictive model.

[181]

**TÍTULO / TITLE:** - The merkel cell polyomavirus minor capsid protein.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - PLoS Pathog. 2013 Aug;9(8):e1003558. doi: 10.1371/journal.ppat.1003558. Epub 2013 Aug 22.

●● [Enlace al texto completo \(gratis o de pago\) 1371/journal.ppat.1003558](#)

**AUTORES / AUTHORS:** - Schowalter RM; Buck CB

**INSTITUCIÓN / INSTITUTION:** - Tumor Virus Molecular Biology Section, Laboratory of Cellular Oncology, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, United States of America.

**RESUMEN / SUMMARY:** - The surface of polyomavirus virions is composed of pentameric knobs of the major capsid protein, VP1. In previously studied polyomavirus species, such as SV40, two interior capsid proteins, VP2 and VP3, emerge from the virion to play important roles during the infectious entry process. Translation of the VP3 protein initiates at a highly conserved Met-Ala-Leu motif within the VP2 open reading frame. Phylogenetic analyses indicate that Merkel cell polyomavirus (MCV or MCPyV) is a member of a divergent clade of polyomaviruses that lack the conserved VP3 N-terminal motif. Consistent with this observation, we show that VP3 is not detectable in MCV-infected cells, VP3 is not found in native MCV virions, and mutation of possible alternative VP3-initiating methionine codons did not significantly affect MCV infectivity in culture. In contrast, VP2 knockout resulted in a >100-fold decrease in native MCV infectivity, despite normal virion assembly, viral DNA packaging, and cell attachment. Although pseudovirus-based experiments confirmed that VP2 plays an essential role for infection of some cell lines, other cell lines were readily transduced by pseudovirions lacking VP2. In cell lines where VP2 was needed for efficient infectious entry, the presence of a conserved myristoyl modification on the N-terminus of VP2 was important for its function. The results show that a single minor capsid protein, VP2, facilitates a post-attachment stage of MCV infectious entry into some, but not all, cell types.

[182]

**TÍTULO / TITLE:** - Child with bilateral pheochromocytoma and a surgically solitary kidney: Anesthetic challenges.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Saudi J Anaesth. 2013 Apr;7(2):197-9. doi: 10.4103/1658-354X.114051.

●● Enlace al texto completo (gratis o de pago) [4103/1658-354X.114051](#)

**AUTORES / AUTHORS:** - Prabhu M; Joseph TT; Shetty N; Chaudhuri S

**INSTITUCIÓN / INSTITUTION:** - Department of Anesthesiology, Kasturba Medical College, Manipal, Karnataka, India.

**RESUMEN / SUMMARY:** - Pheochromocytoma is a rare neuroendocrine tumor of childhood. We present a 14-year-old boy with bilateral pheochromocytoma, post nephrectomy in view of a non-functioning kidney presenting with severe hypertension and end organ damage. Diagnosis was confirmed with 24-hour urinary VMA, catecholamines, and CT scan. Preoperative blood pressure (BP) was controlled with prazosin, propranolol, nicardipine, and HCT-spirolactone. Anesthesia was given with general endotracheal anesthesia with epidural analgesia. Intraoperative BP rise was managed

with infusion of NTG, MgSO<sub>4</sub>, esmolol, and dexmedetomidine which was especially challenging on account of bilateral tumor.

---

[183]

**TÍTULO / TITLE:** - Role of rapid sequence whole-body MRI screening in SDH-associated hereditary paraganglioma families.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Fam Cancer. 2013 Aug 11.

●● Enlace al texto completo (gratis o de pago) [1007/s10689-013-9639-6](http://1007/s10689-013-9639-6)

**AUTORES / AUTHORS:** - Jasperson KW; Kohlmann W; Gammon A; Slack H; Buchmann L; Hunt J; Kirchhoff AC; Baskin H; Shaaban A; Schiffman JD

**INSTITUCIÓN / INSTITUTION:** - Huntsman Cancer Institute, University of Utah, 2000 Circle of Hope, Rm 1166, Salt Lake City, UT, 84112, USA, [kory.jasperson@hci.utah.edu](mailto:kory.jasperson@hci.utah.edu).

**RESUMEN / SUMMARY:** - Patients with germline mutations in one of the SDH genes are at substantially increased risk of developing paragangliomas, pheochromocytomas (pheos), and other tumors (all combined referred to as SDH-related tumors). However, limited data exist on screening in SDH mutation carriers and no studies have evaluated whole-body MRI as a screening tool in asymptomatic patients. This was a single-center observational study. We evaluated the results of screening in 37 SDH carriers who underwent 45 whole-body MRIs and 47 biochemical tests. Screening included annual biochemical testing (catecholamines, metanephrines and chromogranin A) and biennial or annual rapid sequence whole-body MRI from the base of the skull to the pelvis beginning at age 10 years old. Six tumors (paragangliomas of the organ of Zuckerkandl, the aortocaval/vas deferens, of the carotid body times three, and a renal cell carcinoma) were diagnosed in five patients. In total, 13.5 % of all patients screened were diagnosed with SDH-related tumors. Whole-body MRI missed one tumor, while biochemical testing was normal in five patients with SDH-related tumors. The sensitivity of whole-body MRI was 87.5 % and the specificity was 94.7 %, while the sensitivity of biochemical testing was 37.5 % and the specificity was 94.9 %. Whole-body MRI had a higher sensitivity for SDH-related tumors than biochemical testing in patients undergoing screening due to their SDHB or SDHC mutation status. Whole-body MRI reduces radiation exposure compared to computed tomography scan and time compared to dedicated MRI of the head/neck, thorax, and abdomen/pelvis.

---

[184]

**TÍTULO / TITLE:** - Merkel Cell Polyomavirus Small T Antigen Controls Viral Replication and Oncoprotein Expression by Targeting the Cellular Ubiquitin Ligase SCF(Fbw7.).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cell Host Microbe. 2013 Aug 14;14(2):125-35. doi: 10.1016/j.chom.2013.06.008.

●● Enlace al texto completo (gratis o de pago) [1016/j.chom.2013.06.008](http://1016/j.chom.2013.06.008)

**AUTORES / AUTHORS:** - Kwun HJ; Shuda M; Feng H; Camacho CJ; Chang Y

**INSTITUCIÓN / INSTITUTION:** - Cancer Virology Program, University of Pittsburgh, Pittsburgh, PA 15213, USA.

**RESUMEN / SUMMARY:** - Merkel cell polyomavirus (MCV) causes an aggressive human skin cancer, Merkel cell carcinoma, through expression of small T (sT) and large T (LT) viral oncoproteins. MCV sT is also required for efficient MCV DNA replication by the multifunctional MCV LT helicase protein. We find that LT is targeted for proteasomal degradation by the cellular SCF(Fbw7) E3 ligase, which can be inhibited by sT through its LT-stabilization domain (LSD). Consequently, sT also stabilizes cellular SCF(Fbw7) targets, including the cell-cycle regulators c-Myc and cyclin E. Mutating the sT LSD decreases LT protein levels and eliminates synergism in MCV DNA replication as well as sT-induced cell transformation. SCF(Fbw7) knockdown mimics sT-mediated stabilization of LT, but this knockdown is insufficient to fully reconstitute the transforming activity of a mutant LSD sT protein. Thus, MCV has evolved a regulatory system involving SCF(Fbw7) that controls viral replication but also contributes to host cell transformation.

[185]

**TÍTULO / TITLE:** - Pancreatic glucagonoma metastasising to the right ovary five years after initial surgery: a case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - JOP. 2013 Sep 10;14(5):510-4. doi: 10.6092/1590-8577/1622.

**AUTORES / AUTHORS:** - Watt DG; Pandanaboyana S; Herrington CS; Tait IS

**INSTITUCIÓN / INSTITUTION:** - General Surgery, Ninewells Hospital and Medical School. Dundee, Scotland, United Kingdom. [davidwatt1@nhs.net](mailto:davidwatt1@nhs.net).

**RESUMEN / SUMMARY:** - CONTEXT: Glucagonomas of the pancreas are neuroendocrine tumours (NETs) that arise from well-differentiated neuroendocrine cells within the pancreatic islets. They are considered to be aggressive NETs and often have metastases at initial presentation. In contrast localised glucagonoma without metastatic spread may have prolonged disease free survival with radical resectional surgery. CASE REPORT: The authors present a case of a glucagonoma that initially presented with classical necrolytic migratory erythema and a large solitary mass in the body and tail of the pancreas that was surgically resected. Five years after surgery the patient presented with increased serum glucagon levels and a mass in the right ovary. Pathology of the resected ovary after oophorectomy identified this as an isolated metastatic glucagonoma. CONCLUSION: Glucagonoma is a rare pancreatic NET that has significant malignant potential. This is the first case of a pancreatic glucagonoma metastasising to the ovary 5 years after radical distal pancreatectomy.

[186]

**TÍTULO / TITLE:** - Primary hepatic neuroendocrine tumor: gadoxetic acid (Gd-EOB-DTPA)-enhanced magnetic resonance imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Radiol Short Rep. 2013 Mar 18;2(2):2047981613482897. doi: 10.1177/2047981613482897.

●● Enlace al texto completo (gratis o de pago) [1177\\_2047981613482897](#) [pii]

●● Enlace al texto completo (gratis o de pago) [1177/2047981613482897](#)

**AUTORES / AUTHORS:** - Baek SH; Yoon JH; Kim KW

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology.

**RESUMEN / SUMMARY:** - We present a case of a 71-year-old man with prostate cancer who had no prior underlying liver disease. During metastatic evaluation, a solid mass in the liver was identified by computed tomography and ultrasound. Gadoxetic acid (Gd-EOB-DTPA)-enhanced magnetic resonance imaging demonstrated a well-defined, peripheral enhancing hepatic mass containing small cystic component. This lesion was diagnosed as hepatic neuroendocrine tumor. Primary neuroendocrine tumors of the liver are extremely rare. This case is interesting because of the rarity of this neoplasm and the unique radiologic findings despite its small size. Reviews of previously reported cases in the literature are also presented.

[187]

**TÍTULO / TITLE:** - Combined large cell neuroendocrine carcinoma with giant cell carcinoma of the lungs: a case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Surg Oncol. 2013 Aug 19;11(1):205. doi: 10.1186/1477-7819-11-205.

●● Enlace al texto completo (gratis o de pago) [1186/1477-7819-11-205](#)

**AUTORES / AUTHORS:** - Hayashi S; Kitada M; Ishibashi K; Matsuda Y; Miyokawa N

**INSTITUCIÓN / INSTITUTION:** - Respiratory Center, Asahikawa Medical University Hospital, Midorigaoka-Higashi 2-1-1-1, Asahikawa, Hokkaido, Japan. [shayashi@asahikawa-med.ac.jp](mailto:shayashi@asahikawa-med.ac.jp).

**RESUMEN / SUMMARY:** - Combined large cell neuroendocrine carcinoma of the lungs (combined LCNEC) with giant cell carcinoma is extremely rare. A 65-year-old man was found to have an abnormal shadow in his left lung field. Computed tomography revealed a solid, round mass measuring 2.8 x 2.2 cm that was located in the left S9. The patient underwent left lower lobectomy and mediastinal lymph node dissection. Histopathological examination revealed an LCNEC, combined with giant cell carcinoma. The patient received by S-1 (TS-1, an oral fluoropyrimidine) chemotherapy, and he has been disease-free for over 8 months. Combined LCNEC with giant cell carcinoma is an extremely rare tumor with high malignant potential, and thus, multidisciplinary therapy and close follow-up are advised.

[188]

**TÍTULO / TITLE:** - Gastric collision tumor: Case report of a rare adenocarcinoma and a typical carcinoid tumor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Lett. 2013 Jul;6(1):212-214. Epub 2013 Apr 19.

●● Enlace al texto completo (gratis o de pago) [3892/ol.2013.1313](#)

**AUTORES / AUTHORS:** - Unal B; Elpek GO; Gelen T; Gurkan A; Yildirim B

**INSTITUCIÓN / INSTITUTION:** - Departments of Pathology, Akdeniz University Medical School, Antalya 07070, Turkey.

**RESUMEN / SUMMARY:** - We report a case with features of gastric adenocarcinoma colliding with a typical carcinoid component. A 51-year-old female was admitted to the Department of Internal Medicine with complaints of epigastric pain. On physical examination of the patient there was significant epigastric tenderness and the CA19-9 level was higher than the normal titer value. An upper gastrointestinal endoscopy showed an ulcerated polypoid mass located on the cardiac region of the stomach. Pathological and immunohistochemical findings diagnosed as a collision tumor comprising both adenocarcinoma and carcinoid tumor. Metastasis of adenocarcinoma was found in 7 perigastric lymph nodes, while metastasis of the carcinoid was not detected. The admixture of neoplastic endocrine and nonendocrine cells, have been found infrequently in gastric tumors. The mixed tumors can be further classified into composite tumors that show an admixture of two histological components with histological transitions and collision tumors where the two components are not intermixed. In general it is not easy to morphologically distinguish a collision tumor, from composite tumor. Microscopically, hematoxylin and eosin-stained tissue sections from two different areas of the mass revealed two different types of tumor; an intestinal type adenocarcinoma and a carcinoid tumor. We report a case with features of adenocarcinoma colliding with a typical carcinoid component, along with a review of the literature.

-----

[189]

**TÍTULO / TITLE:** - Recurrence of thymic neuroendocrine carcinoma 24 years after total excision: A case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Lett. 2013 Jul;6(1):147-149. Epub 2013 May 1.

●● Enlace al texto completo (gratis o de pago) [3892/ol.2013.1327](#)

**AUTORES / AUTHORS:** - Toyokawa G; Taguchi K; Kojo M; Toyozawa R; Inamasu E; Morodomi Y; Shiraishi Y; Takenaka T; Hirai F; Yamaguchi M; Seto T; Takenoyama M; Ichinose Y

**INSTITUCIÓN / INSTITUTION:** - Department of Thoracic Oncology, Institute for Clinical Research, National Kyushu Cancer Center, Fukuoka 811-1395, Japan.

**RESUMEN / SUMMARY:** - A 77-year-old male presented with chest pain in March 2012. The individual had undergone surgery for an anterior mediastinal tumor 24 years earlier and the pathological diagnosis was that of a thymoma. The patient underwent a medical check-up every 6 months for the next 20 years. However, approximately 3 years following the final check-up, sudden chest pain was reported and the patient was referred again. Computed axial tomography revealed a mediastinal mass adjacent to the left lung, pericardium and sternum. There was no apparent invasion to the adjacent structures. The patient underwent surgical resection following a diagnosis of recurrent thymoma. A posterolateral thoracotomy was performed under video-assisted thoracoscopy. Severe adhesions were observed around the tumor, which appeared to invade the left lung and pericardium, but not the chest wall. The tumor was extirpated in combination with partial resection of the left lung and pericardium. The pathological diagnosis of the tumor was of a well-differentiated neuroendocrine carcinoma (NEC) of the thymus. The specimen that was excised 24 years earlier was re-examined by a pathologist and was reported to exhibit the same histology. Primary NECs of the thymus are rare among anterior mediastinal tumors and the 5-year survival rate is approximately 30%. The present case study reports a case of a thymic NEC and describes the pathological and clinical features.

---

[190]

**TÍTULO / TITLE:** - An Extra-adrenal Pheochromocytoma Presenting as Malignant Hypertension-A Report of two cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Diagn Res. 2013 Jun;7(6):1177-9. doi: 10.7860/JCDR/2013/5139.3046. Epub 2013 Jun 1.

●● Enlace al texto completo (gratis o de pago) [7860/JCDR/2013/5139.3046](#)

**AUTORES / AUTHORS:** - Kumar U M; Pande P; Savita S; Pk A; Yelikar BR

**INSTITUCIÓN / INSTITUTION:** - Associate Professor, Department of Pathology, Pratima Institute of Medical Sciences , Karimnagar, India .

**RESUMEN / SUMMARY:** - Malignant hypertension is a complication of hypertension characterized by elevated blood pressure (200mm/140mm Hg), is considered a medical emergency and is rarely secondary to paraganglioma. Malignant hypertension is unique in its relationship to a catecholamine secreting paraganglioma. We present two rare cases of malignant hypertension associated with paraganglioma of tonsil and urinary bladder.

---

[191]

**TÍTULO / TITLE:** - Advanced composite of large cell neuroendocrine carcinoma and squamous cell carcinoma: a case report of uterine cervical cancer in a virgin woman.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Case Rep Obstet Gynecol. 2013;2013:921384. doi: 10.1155/2013/921384. Epub 2013 Aug 24.

●● Enlace al texto completo (gratis o de pago) [1155/2013/921384](https://doi.org/10.1155/2013/921384)

**AUTORES / AUTHORS:** - Murakami R; Kou I; Date K; Nakayama H

**INSTITUCIÓN / INSTITUTION:** - Department of Obstetrics and Gynecology, Hiroshima General Hospital of West Japan Railway Company, 3-1-36 Futabanosato, Higashiku, Hiroshima 732-0057, Japan.

**RESUMEN / SUMMARY:** - Large cell neuroendocrine carcinoma (LCNEC) of the uterine cervix is very rare and aggressive. The prognosis is very poor despite multimodal treatment. We report a virgin woman with FIGO stage 4b LCNEC of uterine cervix coexisting with squamous cell carcinoma. An early thirties virgin woman presented with 2-month history of abdominal pain. A chest X-ray showed multiple lung metastatic tumors. A vaginal smear showed malignant cells, and a biopsy specimen had features of LCNEC. The tumor showed trabecular patterns. Tumor cells possessed a moderate amount of cytoplasm, prominent nucleoli, and large nuclei. The tumor cells are stained positive for synaptophysin, chromogranin A, and neuron specific enolase (NSE). The invasive tumor cells in connection with cervical squamous epithelium were focally positive for 34bE12. We made a diagnosis of composite LCNEC and nonkeratinizing squamous cell carcinoma. High-risk HPV test was negative with hybridized captured method 2.

[192]

**TÍTULO / TITLE:** - Primary cervical spine carcinoid tumor in a woman with arm paresthesias and weakness: a case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Med Case Rep. 2013 Aug 23;7(1):214.

●● Enlace al texto completo (gratis o de pago) [1186/1752-1947-7-214](https://doi.org/10.1186/1752-1947-7-214)

**AUTORES / AUTHORS:** - Narayanan M; Serban D; Tender GC

**RESUMEN / SUMMARY:** - INTRODUCTION: Carcinoid tumors are neuroendocrine neoplasms derived from the enterochromaffin cells. Central nervous system involvement is rare and has been reported either as metastases to the brain and spine or primary tumors involving the sacrococcygeal spine. We report the first case of a primary carcinoid tumor of the cervical spine. CASE PRESENTATION: A 50-year-old African-American woman presented with a 4-month history of numbness, paresthesias, and mild left-hand weakness. Magnetic resonance imaging of her cervical spine revealed a homogeneously enhancing extradural mass, indenting the cervical cord and expanding the left neural foramen at C7--T1. A C7 corpectomy, en bloc resection of the tumor, and anterior C6--T1 fusion were performed to decompress the spinal cord and nerves and provide stability. Postoperative histopathologic examination and immunohistochemical analysis were consistent with carcinoid tumor. There has been no recurrence at the 6-year follow-up visit. CONCLUSIONS: Primary cervical carcinoid

tumor is extremely rare, but should be included in the differential diagnosis of enhancing expansile extradural masses compressing the spinal cord and nerves. Surgical resection may provide a definitive cure.

---

[193]

**TÍTULO / TITLE:** - Small cell neuroendocrine carcinoma of the urinary tract successfully managed with neoadjuvant chemotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Case Rep Urol. 2013;2013:598325. doi: 10.1155/2013/598325. Epub 2013 Aug 18.

●● [Enlace al texto completo \(gratis o de pago\) 1155/2013/598325](#)

**AUTORES / AUTHORS:** - Ahsaini M; Riyach O; Tazi MF; El Fassi MJ; Farih MH; Elfatmi H; Amarti A

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University Hospital Center Hassan II, 30000 Fez, Morocco.

**RESUMEN / SUMMARY:** - Introduction. Small cell neuroendocrine carcinomas of the urinary tract is an extremely rare entity and very few cases have been reported in the literature. Small cell neuroendocrine carcinoma of the urinary tract (SCC-UT) is the association between bladder and urinary upper tract-small cell carcinoma (UUT-SCC). It is characterized by an aggressive clinical course. The prognosis is poor due to local or distant metastases, and usually the muscle of the bladder is invaded. Case Presentation. We report a rare case of a 54-year-old Arab male native of Morocco; he is a smoker and was referred to our institution for intermittent hematuria. Following a diagnosis of small cell neuroendocrine carcinomas of the ureter and the bladder, thoracoabdominal-pelvic CT was done, and the staging of the tumor was done in the bladder (T2N0M0) and (T1N0M0) in the ureter. Neoadjuvant alternating doublet chemotherapy with ifosfamide/doxorubicin and etoposide/cisplatin was realized, and nephroureterectomy associated to a cystoprostatectomy was carried out. After 24 months of followup, no local or distant metastasis was detected. Conclusion. The purpose of this review is to present a rare case of pure small cell neuroendocrine carcinoma of the urinary tract and review the literature about the place of neoadjuvant chemotherapy in these rare tumors.

[194]

**TÍTULO / TITLE:** - Medullary carcinoma of the breast: A brief report from a tertiary care center.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J BUON. 2013 Jul-Sep;18(3):798.

**AUTORES / AUTHORS:** - Petekkaya I; Babacan T; Sarici F; Gezgen G; Roach EC; Kizilarсланoglu MC; Altundag K

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Oncology, Hacettepe University Institute of Oncology, Ankara, Turkey.

---

[195]

**TÍTULO / TITLE:** - Complexin-2 (CPLX2) as a potential prognostic biomarker in human lung high grade neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Biomark. 2013;13(3):171-80. doi: 10.3233/CBM-130336.

●● Enlace al texto completo (gratis o de pago) [3233/CBM-130336](#)

**AUTORES / AUTHORS:** - Komatsu H; Kakehashi A; Nishiyama N; Izumi N; Mizuguchi S; Yamano S; Inoue H; Hanada S; Chung K; Wei M; Suehiro S; Wanibuchi H

**INSTITUCIÓN / INSTITUTION:** - Department of Thoracic Surgery, Osaka City University Graduate School of Medicine, Asahi-machi, Abeno-ku, Osaka, Japan.

**RESUMEN / SUMMARY:** - The present study aimed to identify novel useful clinical biomarker of high grade lung neuroendocrine tumors (LNETs). Based on the results of QSTAR LC-MS/MS analysis, we selected complexin-2 (CPLX2) (upregulated 8.7-fold) as a potential biomarker in high grade human LNETs, and validated its expression immunohistochemically in comparison with non-small cell lung carcinomas (NSCLCs). CPLX2 was strongly positive in 16.3% of examined LNETs, but completely negative in all adjacent non-cancerous tissues and NSCLCs. Importantly, positive CPLX2 expression was associated with lymph vessel invasion (P=0.016), pathological stage (P=0.031), and poor disease-specific survival (P=0.004) of patients with LNETs. Preoperative serum CPLX2 level measured by ELISA was significantly elevated in high grade LNETs as compared with %NCs non-cancer controls (NCs) (P=0.002) and NSCLCs (P< 0.001). Receiver operating characteristic (ROC) curve analysis was used for separating high-grade LNET patients from NSCLC patients. The area under the ROC curve (AUC) was 0.825. The calculated optimal cut-off point for CPLX2 level in the serum was 17.8 pg/ml (Youden index=0.591), while sensitivity and specificity was 94.1% and 65.0%, respectively. CPLX2 is suggested as a novel potential clinically useful biomarker for the diagnosis, prognosis and adequate choice of therapy for patients with high grade LNETs.

---

[196]

**TÍTULO / TITLE:** - Mammalian target of rapamycin signaling activation patterns in pancreatic neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Hepatobiliary Pancreat Sci. 2013 Sep 3. doi: 10.1002/jhbp.26.

●● Enlace al texto completo (gratis o de pago) [1002/jhbp.26](#)

**AUTORES / AUTHORS:** - Komori Y; Yada K; Ohta M; Uchida H; Iwashita Y; Fukuzawa K; Kashima K; Yokoyama S; Inomata M; Kitano S

**INSTITUCIÓN / INSTITUTION:** - Department of Gastroenterological and Pediatric Surgery, Oita University Faculty of Medicine, 1-1 Idaigaoka, Hasama-machi, Yufu, Oita, 879-5593, Japan. [komorin@oita-u.ac.jp](mailto:komorin@oita-u.ac.jp).

**RESUMEN / SUMMARY:** - BACKGROUND: Phosphatidylinositol 3-kinase/Akt/mammalian target of rapamycin (mTOR) pathway dysregulation has been implicated in the development of various human cancers. However, expression of mTOR cascade components in pancreatic neuroendocrine tumors (PNETs) has not been fully explored. The aim of this study was to assess the expression of mTOR pathway in PNETs using immunohistochemistry. METHODS: From December 1984 to April 2012, we surgically treated 42 patients with PNETs. We used immunohistochemistry to evaluate expression of mTOR, phosphorylated mTOR (p-mTOR), p70S6 kinase (S6K), phosphorylated S6 ribosomal protein (p-S6rp), eukaryotic initiation factor 4E-binding protein 1 (4E-BP1), and phosphorylated 4E-BP1 (p-4E-BP1) in the resected specimens. The relation between the expression of these molecules and clinicopathological characteristics was investigated. RESULTS: We identified the expression of mTOR (28.6%), p-mTOR (52.4%), S6K (52.4%), p-S6rp (40.5%), 4E-BP1 (81.0%), and p-4E-BP1 (26.2%) in PNETs. The expression of mTOR, p-mTOR, S6K, and p-S6rp was significantly associated with tumor invasion, proliferation, and an advanced-stage. Particularly, the expression of p-mTOR was related to clinically relevant factors such as tumor size, vascular invasion, extrapancreatic invasion, lymph node and/or distant metastasis, mitotic count, and European Neuroendocrine Tumor Society TNM staging as well as the 2004 and 2010 World Health Organization (WHO) classification. In addition, p-S6rp expression was related to vascular invasion, extrapancreatic invasion, lymph node and distant metastasis, mitotic count, and the 2010 WHO classification. In contrast, no significant relation between 4E-BP1 activation and clinicopathological factors was observed. The expression of p-mTOR was strongly correlated with that of p-S6rp ( $r = 0.474$ ,  $P = 0.002$ ). CONCLUSIONS: Our results suggest that activation of the mTOR/S6K signaling pathway plays a significant role in tumorigenesis and progression of PNET.

-----

[197]

**TÍTULO / TITLE:** - Pancreatic neuroendocrine tumours: hypoenhancement on arterial phase computed tomography predicts biological aggressiveness.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - HPB (Oxford). 2013 Aug 29. doi: 10.1111/hpb.12139.

●● [Enlace al texto completo \(gratis o de pago\) 1111/hpb.12139](#)

**AUTORES / AUTHORS:** - Worhunsky DJ; Krampitz GW; Poullos PD; Visser BC; Kunz PL; Fisher GA; Norton JA; Poultides GA

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Division of Oncology, Stanford University Medical Center, Stanford, CA, USA.

**RESUMEN / SUMMARY:** - BACKGROUND: Contrary to pancreatic adenocarcinoma, pancreatic neuroendocrine tumours (PNET) are commonly hyperenhancing on arterial

phase computed tomography (APCT). However, a subset of these tumours can be hypoenhancing. The prognostic significance of the CT appearance of these tumors remains unclear. METHODS: From 2001 to 2012, 146 patients with well-differentiated PNET underwent surgical resection. The degree of tumour enhancement on APCT was recorded and correlated with clinicopathological variables and overall survival. RESULTS: APCT images were available for re-review in 118 patients (81%). The majority had hyperenhancing tumours (n = 80, 68%), 12 (10%) were isoenhancing (including cases where no mass was visualized) and 26 (22%) were hypoenhancing. Hypoenhancing PNET were larger, more commonly intermediate grade, and had higher rates of lymph node and synchronous liver metastases. Hypoenhancing PNET were also associated with significantly worse overall survival after a resection as opposed to isoenhancing and hyperenhancing tumours (5-year, 54% versus 89% versus 93%). On multivariate analysis of factors available pre-operatively, only hypoenhancement (HR 2.32, P = 0.02) was independently associated with survival. DISCUSSION: Hypoenhancement on APCT was noted in 22% of well-differentiated PNET and was an independent predictor of poor outcome. This information can inform pre-operative decisions in the multidisciplinary treatment of these neoplasms.

[198]

**TÍTULO / TITLE:** - Endoscopic resection for gastrointestinal neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Gastroenterol Hepatol. 2013 Aug;7(6):559-69. doi: 10.1586/17474124.2013.816117.

●● Enlace al texto completo (gratis o de pago) [1586/17474124.2013.816117](#)

**AUTORES / AUTHORS:** - Boskoski I; Volkanovska A; Tringali A; Bove V; Familiari P; Perri V; Costamagna G

**INSTITUCIÓN / INSTITUTION:** - Digestive Endoscopy Unit, Gemelli University Hospital, Università Cattolica del Sacro Cuore, Rome, Italy.

**RESUMEN / SUMMARY:** - Gastrointestinal (GI) and neuroendocrine tumors (NETs) can be treated by mini-invasive endoscopic resection when localized in the superficial layers of the bowel wall and their size is <20 mm. Endoscopic diagnosis of NETs is usually incidental or suspected after clinical, laboratory or imaging findings. Endoscopic mucosal resection is the most commonly used technique for NET removal, endoscopic submucosal dissection is indicated in selected cases, while papillectomy is feasible for ampullary lesions. Histopathologic assessment of the resection margin (circumferential and deep) is important for staging. Incidence of endoscopic mucosal resection-/endoscopic submucosal dissection-related complications for removal of GI NETs are similar to those reported for other GI lesions. Endoscopic follow-up is based on histopathologic characteristics of the resected NETs and its site. NETs >20 mm in size, with penetration of the muscle layer and/or serosa are at high risk for metastases and surgical approach is recommended when feasible.

[199]

**TÍTULO / TITLE:** - Single incision laparoscopic distal pancreatectomy with splenectomy for neuroendocrine tumor of the tail of pancreas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Minim Access Surg. 2013 Jul;9(3):132-5. doi: 10.4103/0972-9941.115377.

●● Enlace al texto completo (gratis o de pago) [4103/0972-9941.115377](#)

**AUTORES / AUTHORS:** - Srikanth G; Shetty N; Dubey D

**INSTITUCIÓN / INSTITUTION:** - Department of Surgical Gastroenterology, MILDD, Manipal Hospital, Bangalore, India.

**RESUMEN / SUMMARY:** - Laparoscopic resection is becoming the standard of care for tumors located in the body and tail of pancreas. We herein report a patient with neuroendocrine tumor in the tail of pancreas who underwent single incision laparoscopic distal pancreatectomy with splenectomy without the use of a commercial port device.

[200]

**TÍTULO / TITLE:** - Uncommon testicular metastasis of a primary neuroendocrine tumour of the lung.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Can Urol Assoc J. 2013 Sep;7(9-10):E614-7. doi: 10.5489/cuaj.398.

●● Enlace al texto completo (gratis o de pago) [5489/cuaj.398](#)

**AUTORES / AUTHORS:** - Birker IL; van der Zee JA; Keizer KM

**INSTITUCIÓN / INSTITUTION:** - St. Lucas Andreas Hospital, Amsterdam, The Netherlands;

**RESUMEN / SUMMARY:** - A 52-year-old male presented with an asymptomatic palpable mass of the right testicle. Ultrasound confirmed the presence of a testicular tumour and a hemicastration was performed. None of the testis cancer-related tumour markers were elevated and histological findings revealed a neuroendocrine carcinoma, possibly a metastasis from another primary site. The radiological findings showed a lesion in the lung, and a positron emission tomography (PET)-scan was made. The PET scan revealed an increased fluorodeoxyglucose (FDG) uptake in the pulmonary lesion. It also showed lymphatic and hepatic metastases. The patient had no complaints besides a palpable testicular mass and was diagnosed with a cT1aN3M1b neuroendocrine carcinoma of the lower left field of the lung, stage IV. To our knowledge, the presentation of testicular metastasis of a neuroendocrine carcinoma of the lung has not been described in the literature. No curative options were available and the patient is being treated with salvage chemotherapy.

[201]

**TÍTULO / TITLE:** - Gangliocytic paraganglioma of duodenum.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Case Rep Pathol. 2013;2013:378582. doi: 10.1155/2013/378582. Epub 2013 Aug 29.

●● Enlace al texto completo (gratis o de pago) [1155/2013/378582](#)

**AUTORES / AUTHORS:** - Narang V; Behl N; Sood N; Puri H

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Dayanand Medical College Hospital, Ludhiana 141001, India.

**RESUMEN / SUMMARY:** - Gangliocytic paragangliomas are rare benign tumors which are usually encountered in the second portion of the duodenum. Histogenesis of these tumors is incompletely understood. Patients usually present with upper gastrointestinal bleeding. The endoscopic features of gangliocytic paraganglioma do not differ from those of other submucosal tumors. Therefore, they can be diagnosed histologically by the presence of epithelioid, spindle, and ganglion cells, which is similar to that observed for paraganglioma. We herein report a case of gangliocytic paraganglioma due to the rarity of the lesion and the characteristic histopathologic findings.

[202]

**TÍTULO / TITLE:** - Small bowel carcinoid: a rare cause of bowel obstruction.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - British Medical J (BMJ). %8?(3k+]3s <http://bmj.com/search.dtl>

●● British Medical J. (BMJ): <> Case Rep. 2013 Sep 24;2013. pii: bcr2013200875. doi: 10.1136/bcr-2013-200875.

●● Enlace al texto completo (gratis o de pago) [1136/bcr-2013-200875](#)

**AUTORES / AUTHORS:** - Rodrigues G; Prabhu R; Ravi B

**INSTITUCIÓN / INSTITUTION:** - Department of General Surgery, Kasturba Medical College, Manipal University, Manipal, Karnataka, India.

**RESUMEN / SUMMARY:** - Carcinoid tumours though commonly affect the appendix, are a rare cause of small bowel obstruction, causing a diagnostic dilemma. We presented a 70-year-old man with small bowel obstruction, not responding to conservative management, which required an emergency laparotomy and was found to have a mass encasing the mid-jejunal loops and mesentery that was resected and reported to be a carcinoid tumour.

[203]

**TÍTULO / TITLE:** - Small bowel carcinoid: Location isn't everything!

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Gastrointest Surg. 2013 Aug 27;5(8):239-44. doi: 10.4240/wjgs.v5.i8.239.

●● Enlace al texto completo (gratis o de pago) [4240/wjgs.v5.i8.239](#)

**AUTORES / AUTHORS:** - Hari DM; Goff SL; Reich HJ; Leung AM; Sim MS; Lee JH; Wolin E; Amersi F

**INSTITUCIÓN / INSTITUTION:** - Danielle M Hari, Anna M Leung, Gastrointestinal Research Program, John Wayne Cancer Institute at Saint John's Health Center, Santa Monica, CA 90404, United States.

**RESUMEN / SUMMARY:** - AIM: To investigate the prognostic significance of the primary site of disease for small bowel carcinoid (SBC) using a population-based analysis. METHODS: The Surveillance, Epidemiology and End Results (SEER) database was queried for histologically confirmed SBC between the years 1988 and 2009. Overall survival (OS) and disease-specific survival (DSS) were analyzed using the Kaplan-Meier method and compared using Log rank testing. Log rank and multivariate Cox regression analyses were used to identify predictors of survival using age, year of diagnosis, race, gender, tumor histology/size/location, tumor-node-metastasis stage, number of lymph nodes (LNs) examined and percent of LNs with metastases. RESULTS: Of the 3763 patients, 51.2% were male with a mean age of 62.13 years. Median follow-up was 50 mo. The 10-year OS and DSS for duodenal primaries were significantly better when compared to jejunal and ileal primaries (P = 0.02 and < 0.0001, respectively). On multivariate Cox regression analysis, after adjusting for multiple factors, primary site location was not a significant predictor of survival (P = 0.752 for OS and P = 0.966 DSS) while age, number of primaries, number of LNs examined, T-stage and M-stage were independent predictors of survival. CONCLUSION: This 21-year, population-based study of SBC challenges the concept that location of the primary lesion alone is a significant predictor of survival.

[204]

**TÍTULO / TITLE:** - Atypical carcinoid presenting as dumb-bell-shaped tumour in the normal kidney.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - British Medical J (BMJ). %8?(3k+]3s <http://bmj.com/search.dtl>

●● British Medical J. (BMJ): <> Case Rep. 2013 Sep 24;2013. pii: bcr2013008624. doi: 10.1136/bcr-2013-008624.

●● Enlace al texto completo (gratis o de pago) [1136/bcr-2013-008624](http://1136/bcr-2013-008624)

**AUTORES / AUTHORS:** - Verma R; Gupta P

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India.

**RESUMEN / SUMMARY:** - Carcinoid tumours are low-grade malignant neoplasms with neuroendocrine differentiation and occur frequently in the gastrointestinal and respiratory tracts. Primary carcinoid tumours of the kidney are rare and a majority of these tumours occur in anomalous kidney and exhibit typical renal carcinoid morphology. We reported a middle-aged man with primary atypical carcinoid tumour occurring in a normal kidney. The patient was diagnosed as having renal cell carcinoma

owing to a lack of neuroendocrinal clinical features. Immunohistochemical staining of the nephrectomy specimen helped in the diagnosis of atypical renal carcinoid.

[205]

**TÍTULO / TITLE:** - Merkel cell carcinoma of the retroperitoneum with no identifiable primary site.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Case Rep Oncol Med. 2013;2013:131695. doi: 10.1155/2013/131695. Epub 2013 Sep 1.

●● Enlace al texto completo (gratis o de pago) [1155/2013/131695](#)

**AUTORES / AUTHORS:** - Rossini D; Caponnetto S; Lapadula V; De Filippis L; Del Bene G; Emiliani A; Longo F

**INSTITUCIÓN / INSTITUTION:** - Department of Clinical Oncology A, Sapienza University of Rome, Policlinico Umberto Primo, Viale Regina Elena 324, 00161 Rome, Italy.

**RESUMEN / SUMMARY:** - Merkel cell carcinoma (MCC) is an extremely rare primary neuroendocrine neoplasm of the skin that shows aggressive behavior and a poor prognosis. We report a case of a 67-year-old male with a Merkel cell carcinoma which initially presented itself as a large retroperitoneal mass. Pathological and immunohistochemical analysis revealed tissue consistent with neuroendocrine carcinoma. Despite complete medical workup, no other primary MCC could be detected. While being an atypical presentation, the tumor mass showed an excellent response to the combination of chemotherapy followed by radiotherapy.

[206]

**- CASTELLANO -**

**TÍTULO / TITLE:** Mesanenin "Saf" Primer Buyuk Hucreli Noroendokrin Karsinomu.

**TÍTULO / TITLE:** - "Pure" Primary Large Cell Neuroendocrine Carcinoma of the Urinary Bladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Turk Patoloji Derg. 2013;29(3):241-245. doi: 10.5146/tjpath.2013.01189.

●● Enlace al texto completo (gratis o de pago) [5146/tjpath.2013.01189](#)

**AUTORES / AUTHORS:** - Pusiol T; Zorzi MG; Morichetti D; Sari A

**INSTITUCIÓN / INSTITUTION:** - S. Maria del Carmine Hospital, Anatomic Pathology, ROVERETO, ITALY.

[207]

**TÍTULO / TITLE:** - Primary neuroendocrine carcinoma breast: Our experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Breast Dis. 2013 Sep 4.

●● Enlace al texto completo (gratis o de pago) [3233/BD-130357](#)

**AUTORES / AUTHORS:** - Suhani; Ali S; Desai G; Thomas S; Aggarwal L; Meena K; Kumar J; Jain M; Tudu SK

**INSTITUCIÓN / INSTITUTION:** - Department of General Surgery, Lady Hardinge Medical College and SSK Hospital, New Delhi, India.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** This retrospective study was designed to present the clinical characteristics and histopathological features of Primary neuroendocrine carcinoma (PNEC) of breast, and to evaluate the impact on outcome following its management on the line of more common primary adenocarcinoma of breast. **MATERIALS AND METHODS:** Records of four patients diagnosed with PNEC of breast were retrospectively reviewed. Data were obtained from medical record from January 2008 to December 2012. Diagnosis of PNEC was confirmed by histopathological examination (HPE) and immunohistochemical (IHC) staining of tissue obtained from Trucut biopsy of the breast lump in all four patients. PNEC of breast was defined by the presence of more than 50% of invasive tumor cells with cytoplasmic immunoreaction for neuroendocrine (NE) markers synaptophysin, chromogranin or neuron specific enolase as per WHO classification. All patients were treated with Modified Radical Mastectomy (MRM), six cycle of Cyclophosphamide, Adriamycin and 5-Flurouracil (CAF) based adjuvant chemotherapy, radiotherapy and hormonal therapy. **RESULTS:** There were four female patients. The mean age was 58~years (50-65 years). Breast lump was the presenting complaint in all patients. The result of HPE showed tumor size ranging from 4 to 6.5 cm in diameter. Axillary lymph node metastasis was detected in three (75%) patients. ER and PR expression was positive in four (100%) and three patients (75%) respectively. None of the patients expressed her-2-neu. IHC staining was positive for NE markers chromogranin in three (75%) patients, synoptophysin in two patients (50%) and Neuron specific enolase three (75%) patients. The mean follow-up time was 27.7 months (range 48-9). All four patients survived without any loco-regional or metastatic recurrence with one patient developing lymphedema of arm. **CONCLUSIONS:** Breast lump is the most common presentation of PNEC of the breast with characteristic expression of NE markers by the tumor. Management of this rare tumor may include surgery, chemotherapy, radiotherapy and hormonal therapy depending on the size of the tumor, lymph node and hormone receptor status. However, most appropriate treatment plan has yet to be established.

[208]

**TÍTULO / TITLE:** - Neurofibromatosis type 1 (NF1) with vocal cord palsy: baffling presentation of a benign tumour.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - British Medical J (BMJ). %8?(3k+]3s <http://bmj.com/search.dtl>

●● British Medical J. (BMJ): <> Case Rep. 2013 Aug 1;2013. pii: bcr2013009202. doi: 10.1136/bcr-2013-009202.

●● Enlace al texto completo (gratis o de pago) [1136/bcr-2013-009202](http://1136/bcr-2013-009202)

**AUTORES / AUTHORS:** - Rajasekharan C; Thomas V; Parvathy R; Meera R

**INSTITUCIÓN / INSTITUTION:** - Department of Internal Medicine, Medical College Hospital, Thiruvananthapuram, Kerala, India. [drcejasekharan@yahoo.com](mailto:drcejasekharan@yahoo.com)

[209]

**TÍTULO / TITLE:** - Dual tracer functional characterization of metastatic gastric carcinoid.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Indian J Nucl Med. 2013 Jan;28(1):39-41. doi: 10.4103/0972-3919.116817.

●● Enlace al texto completo (gratis o de pago) [4103/0972-3919.116817](https://doi.org/10.4103/0972-3919.116817)

**AUTORES / AUTHORS:** - Naswa N; Sharma P; Agarwal S; Kumar R; Bal C

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine, All India Institute of Medical Sciences, New Delhi, India.

**RESUMEN / SUMMARY:** - Because of the increasing clinical importance of gastric carcinoids and the difficulty in diagnosing them, the need for non-invasive diagnostic methods is growing. Currently, the only reliable method is upper gastrointestinal endoscopy with biopsy. We report the case of a 32-year-old male where a combination of functional imaging studies ((18)F-fluorodeoxyglucose-positron emission tomography/computed tomography [PET/CT] and (68)Ga-DOTA-NOC PET/CT) not only helped in the correct staging, but also highlighted certain important biological aspects of these tumors, which are important from the management point of view and can prognosticate the patients.

[210]

**TÍTULO / TITLE:** - Simultaneous presentation of giant pheochromocytoma, primary hyperparathyroidism, and mixed-medullary-papillary thyroid cancer in MEN 2<sup>a</sup>.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Indian J Endocrinol Metab. 2013 Jul;17(4):751-5. doi: 10.4103/2230-8210.113776.

●● Enlace al texto completo (gratis o de pago) [4103/2230-8210.113776](https://doi.org/10.4103/2230-8210.113776)

**AUTORES / AUTHORS:** - Gupta V

**INSTITUCIÓN / INSTITUTION:** - Consultant Endocrine, Diabetes and Metabolic Physician Department of Endocrinology, Jaslok Hospital and Research Centre, Mumbai, India.

**RESUMEN / SUMMARY:** - The aim of this study was to describe a young man with probably the largest pheochromocytoma associated with MEN 2<sup>a</sup>, described till date. The patient, a non-vegetarian, fifth of eight siblings, married, having five children, presented with episodes of difficult-to-control hypertension requiring over five antihypertensives. He was referred to us with an abdominal CT scan that revealed a 16 cm left-sided adrenal mass. Biochemical testing confirmed a catecholamine secreting pathology. Histopathology confirmed the mass as a pheochromocytoma weighing 1.8 kg. Further evaluation suggested a parathormone-dependent hypercalcemia and a left-

sided thyroid mass. Histopathology confirmed parathyroid hyperplasia and medullary carcinoma of the thyroid mixed with papillary carcinoma of thyroid. Putting all the findings together showed that the patient was suffering from multiple endocrine neoplasia 2. Multiple endocrine neoplasia 2<sup>a</sup> is a rare syndrome. The case is unique in the way it presented, with all the three tumors at the same time. The management was bold and addressed all the three lesions in the same hospital admission. We are also reporting the largest described case of pheochromocytoma from India.

-----

[211]

**TÍTULO / TITLE:** - Primary renal carcinoid tumor: A rare cystic renal neoplasm.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Radiol. 2013 Aug 28;5(8):328-33. doi: 10.4329/wjr.v5.i8.328.

●● Enlace al texto completo (gratis o de pago) [4329/wjr.v5.i8.328](#)

**AUTORES / AUTHORS:** - Yoon JH

**INSTITUCIÓN / INSTITUTION:** - Jung-Hee Yoon, Department of Radiology, Haeundae Paik Hospital, Inje University College of Medicine, Busan 612-030, South Korea.

**RESUMEN / SUMMARY:** - We present the case of a 21-year-old man with an incidentally detected cystic renal mass. A well-defined, solid mass measuring approximately 8 cm x 6 cm with a cystic component was identified in the left kidney by abdominal multidetector computed tomography (CT) and ultrasonography. The mass was well-enhanced on the corticomedullary CT phase and washout of enhancement occurred on the nephrographic phase. The mass contained peripheral wall and septal calcifications in the cystic component. The lesion was resected and diagnosed as a primary renal carcinoid tumor. Primary carcinoid tumors of the kidney are extremely rare. This case is notable because of the rarity of this neoplasm and its unique radiologic and pathologic findings. A review of previously reported cases in the literature is also presented.

-----

[212]

**TÍTULO / TITLE:** - Combination of carbonic anhydrase inhibitor, acetazolamide, and sulforaphane, reduces the viability and growth of bronchial carcinoid cell lines.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BMC Cancer. 2013 Aug 8;13(1):378.

●● Enlace al texto completo (gratis o de pago) [1186/1471-2407-13-378](#)

**AUTORES / AUTHORS:** - Bayat Mokhtari R; Kumar S; Islam SS; Yazdanpanah M; Adeli K; Cutz E; Yeger H

**RESUMEN / SUMMARY:** - BACKGROUND: Bronchial carcinoids are pulmonary neuroendocrine cell-derived tumors comprising typical (TC) and atypical (AC) malignant phenotypes. The 5-year survival rate in metastatic carcinoid, despite multiple current therapies, is 14-25%. Hence, we are testing novel therapies that can

affect the proliferation and survival of bronchial carcinoids. METHODS: In vitro studies were used for the dose-response (AlamarBlue) effects of acetazolamide (AZ) and sulforaphane (SFN) on clonogenicity, serotonin-induced growth effect and serotonin content (LC-MS) on H-727 (TC) and H-720 (AC) bronchial carcinoid cell lines and their derived NOD/SCID mice subcutaneous xenografts. Tumor ultra structure was studied by electron microscopy. Invasive fraction of the tumors was determined by matrigel invasion assay. Immunohistochemistry was conducted to study the effect of treatment(s) on proliferation (Ki67, phospho histone-H3) and neuroendocrine phenotype (chromogranin-A, tryptophan hydroxylase). RESULTS: Both compounds significantly reduced cell viability and colony formation in a dose-dependent manner (0-80 µM, 48 hours and 7 days) in H-727 and H-720 cell lines. Treatment of H-727 and H-720 subcutaneous xenografts in NOD/SCID mice with the combination of AZ + SFN for two weeks demonstrated highly significant growth inhibition and reduction of 5-HT content and reduced the invasive capacity of H-727 tumor cells. In terms of the tumor ultra structure, a marked reduction in secretory vesicles correlated with the decrease in 5-HT content. CONCLUSIONS: The combination of AZ and SFN was more effective than either single agent. Since the effective doses are well within clinical range and bioavailability, our results suggest a potential new therapeutic strategy for the treatment of bronchial carcinoids.

---

[213]

**TÍTULO / TITLE:** - Catecholamine induced cardiomyopathy in pheochromocytoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Indian J Endocrinol Metab. 2013 Jul;17(4):733-5. doi: 10.4103/2230-8210.113771.

●● Enlace al texto completo (gratis o de pago) [4103/2230-8210.113771](#)

**AUTORES / AUTHORS:** - Varghese RT; John AM; Paul TV

**INSTITUCIÓN / INSTITUTION:** - Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, Tamil Nadu, India.

**RESUMEN / SUMMARY:** - Catecholamine induced cardiomyopathy in the setting of pheochromocytoma is an unusual clinical entity. Earlier studies have reported left ventricular dysfunction in around 10% of subjects with pheochromocytoma.[1] Catecholamine induced vasoconstriction, direct toxic effect of byproducts of catecholamine degradation and direct receptor-mediated mechanisms are thought to contribute to cardiomyopathy in subjects with pheochromocytoma. The presentation remains a diagnostic challenge as patients may already have hypertensive heart disease and acute coronary syndrome on account of uncontrolled secondary hypertension. We report a case of a 42-year-old male, who presented with features of pheochromocytoma induced cardiomyopathy.

---

[214]

**TÍTULO / TITLE:** - Iodine-131MIBG SPECT/CT in neuroendocrine tumours: An institutional experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Indian J Nucl Med. 2012 Oct;27(4):246-8. doi: 10.4103/0972-3919.115396.

●● Enlace al texto completo (gratis o de pago) [4103/0972-3919.115396](#)

**AUTORES / AUTHORS:** - Verma P; Chanadana; Hephzibah J; Shanthly N; Oommen R

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine, Christian Medical College, Vellore, Tamil Nadu, India.

**RESUMEN / SUMMARY:** - CONTEXT: Radiolabelled metaiodobenzylguanidine (MIBG) is commonly used for imaging of neuroendocrine tumors (NETs). The hybrid imaging with single photon emission computerized tomography/computerized tomography (SPECT/CT) co-registration can give that additional edge to this functional imaging modality. AIMS: To study the additional value of (131)I-MIBG SPECT/CT scintigraphy in evaluation of NETs. SETTINGS AND DESIGN: We performed a retrospective study of the scintigraphic data of patients referred to our department for detection and follow-up of NETs from 2004 to 2008. MATERIALS AND METHODS: Total number of studies were 370. Twenty-eight patients with equivocal findings on planar imaging had undergone additional SPECT/CT imaging. The contribution made by SPECT/CT imaging in these studies was analyzed. RESULTS: In 27 of 28 cases, SPECT/CT provided vital additional information. CONCLUSIONS: We concluded that SPECT/CT co-registration helps in exclusion, identification, and localization of primary and metastatic NETs. It differentiates physiological from pathological tracer distribution. It helps increase the confidence in reporting, especially in equivocal findings on planar imaging.

[215]

**TÍTULO / TITLE:** - Primary paraganglioma of seminal vesicle.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Surg Case Rep. 2013;4(10):822-4. doi: 10.1016/j.ijscr.2013.07.009. Epub 2013 Jul 26.

●● Enlace al texto completo (gratis o de pago) [1016/j.ijscr.2013.07.009](#)

**AUTORES / AUTHORS:** - Alharbi B; Al-Ghamdi A

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Prince Sultan Military Medical City, Riyadh, Saudi Arabia. Electronic address: [dr\\_badr@hotmail.com](mailto:dr_badr@hotmail.com).

**RESUMEN / SUMMARY:** - INTRODUCTION: Paragangliomas are rare tumors arising from neural crest tissue located outside the adrenal gland. Primary seminal vesicle paraganglioma is extremely rare entity. PRESENTATION OF CASE: A 26-year-old male patient presented with symptoms and signs of acute appendicitis where a CT of abdomen and pelvis showed an inflamed appendix and incidental finding of left seminal vesicle mass. The patient underwent uneventful laparoscopic appendectomy followed by transrectal ultrasound (TRUS) guided seminal vesicle biopsies.

Histopathology revealed a neuroendocrine neoplasm consistent with paraganglioma. Surgical excision of the left seminal vesicle was carried out. **DISCUSSION:** Paraganglioma of genitourinary tract is rare. The urinary bladder is the most common site, followed by the urethra, pelvis and ureter. Seminal vesicle paragangliomas were reported in association with other genitourinary organ involvement such as bladder and prostate. Isolated seminal vesicle paraganglioma is extremely rare and surgical excision remains the standard treatment for localized paraganglioma. **CONCLUSION:** Primary tumors of seminal vesicle are rare and represent a diagnostic challenge. Differential diagnosis includes a list of benign and malignant tumors. Primary seminal vesicle paraganglioma is a rare but important diagnosis to be included in the differential diagnosis.

---

[216]

**TÍTULO / TITLE:** - NeuroD1 regulation of migration accompanies the differential sensitivity of neuroendocrine carcinomas to TrkB inhibition.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogenesis. 2013 Aug 19;2:e63. doi: 10.1038/oncsis.2013.24.

●● Enlace al texto completo (gratis o de pago) [1038/oncsis.2013.24](#)

**AUTORES / AUTHORS:** - Osborne JK; Larsen JE; Gonzales JX; Shames DS; Sato M; Wistuba II; Girard L; Minna JD; Cobb MH

**INSTITUCIÓN / INSTITUTION:** - Department of Pharmacology, University of Texas Southwestern Medical Center, Dallas, TX, USA.

**RESUMEN / SUMMARY:** - The developmental transcription factor NeuroD1 is anomalously expressed in a subset of aggressive neuroendocrine tumors. Previously, we demonstrated that TrkB and neural cell adhesion molecule (NCAM) are downstream targets of NeuroD1 that contribute to the actions of neurogenic differentiation 1 (NeuroD1) in neuroendocrine lung. We found that several malignant melanoma and prostate cell lines express NeuroD1 and TrkB. Inhibition of TrkB activity decreased invasion in several neuroendocrine pigmented melanoma but not in prostate cell lines. We also found that loss of the tumor suppressor p53 increased NeuroD1 expression in normal human bronchial epithelial cells and cancer cells with neuroendocrine features. Although we found that a major mechanism of action of NeuroD1 is by the regulation of TrkB, effective targeting of TrkB to inhibit invasion may depend on the cell of origin. These findings suggest that NeuroD1 is a lineage-dependent oncogene acting through its downstream target, TrkB, across multiple cancer types, which may provide new insights into the pathogenesis of neuroendocrine cancers.

---

[217]

**TÍTULO / TITLE:** - Coexistence of pheochromocytoma with abdominal aortic aneurysm: an untold association.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Med Health Sci Res. 2013 Apr;3(2):258-61. doi: 10.4103/2141-9248.113672.

●● Enlace al texto completo (gratis o de pago) [4103/2141-9248.113672](https://doi.org/10.4103/2141-9248.113672)

**AUTORES / AUTHORS:** - Kota S; Kota S; Meher L; Jammula S; Mohapatra S; Modi K

**INSTITUCIÓN / INSTITUTION:** - Department of Anesthesia, Central Security Hospital, Riyadh, Saudi Arabia.

**RESUMEN / SUMMARY:** - Pheochromocytomas have been described in association with rare vascular abnormalities, most common of them being renal artery stenosis. A 45-year-old woman was admitted to our hospital with complaints of headache, sweating, anxiety, dizziness, nausea, vomiting and severe hypertension. For the last several days, she was having a dull aching abdominal pain with a palpable, pulsatile, expansile and non-tender mass in the epigastric region. Hypertension was confirmed biochemically to result from excess catecholamine production. Abdominal computed tomography revealed the presence of a right adrenal pheochromocytoma. Magnetic resonance imaging of the abdomen demonstrated an abdominal aortic aneurysm (AAA) of maximum transverse diameter of 4.5 cm with 3 cm lumen. Surgical removal of pheochromocytoma resulted in normalization of blood pressure to normal. Because of the asymptomatic 4.5 cm aneurysm, our patient was advised for periodic follow-up. To our belief, this is the first such case report emanating from India, citing this rare association between pheochromocytoma and AAA. It is concluded that when the two diseases occur simultaneously, both must be diagnosed accurately and treated adequately. Possible mechanisms of such an uncommon association are also discussed.

[218]

**TÍTULO / TITLE:** - Papilloedema secondary to a spinal paraganglioma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pract Neurol. 2013 Aug 5. doi: 10.1136/practneurol-2013-000620.

●● Enlace al texto completo (gratis o de pago) [1136/practneurol-2013-000620](https://doi.org/10.1136/practneurol-2013-000620)

**AUTORES / AUTHORS:** - Bush K; Bateman DE

**INSTITUCIÓN / INSTITUTION:** - Neurology Department, Chester Lodge, Sunderland Royal Hospital, , Sunderland, UK.

**RESUMEN / SUMMARY:** - An asymptomatic 72-year-old man presented with bilateral papilloedema. Cranial CT imaging was normal, but lumbar puncture found an opening pressure of 320 mmH<sub>2</sub>O (120-250) with raised cerebrospinal fluid protein, increased red blood cells and xanthochromia. MR scan of spine showed a cauda equina tumour, histologically defined as a paraganglioma. The papilloedema resolved after surgery.

[219]

**TÍTULO / TITLE:** - Paraganglioma of urinary bladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - British Medical J (BMJ). %8?(3k+]3s <http://bmi.com/search.dtl>

●● British Medical J. (BMJ): <> Case Rep. 2013 Aug 5;2013. pii: bcr2013010063. doi: 10.1136/bcr-2013-010063.

●● Enlace al texto completo (gratis o de pago) [1136/bcr-2013-010063](http://1136/bcr-2013-010063)

**AUTORES / AUTHORS:** - Malik AA; Afandi B; Jamil G; Akhter SM

**INSTITUCIÓN / INSTITUTION:** - Division of Endocrinology, Tawam Hospital, Al-ain, Abu Dhabi, UAE. [aamalik\\_06@yahoo.com](mailto:aamalik_06@yahoo.com)

**RESUMEN / SUMMARY:** - Paraganglioma of the urinary bladder is extremely rare. In this report of a young man, hypertensive crisis and ventricular arrhythmia was provoked during cystoscopic evaluation of a bladder mass. A diagnosis of pheochromocytoma was considered following detection of high serum and urinary catecholamine levels. A preoperative meta-iodobenzylguanidine scan was, however, negative. The bladder mass was surgically removed following initiation of antihypertensive therapy. Pathological confirmation of extraadrenal pheochromocytoma was established. During a serial follow-up, serum and urine catecholamine levels were persistently elevated. This was explained by abnormalities on fluorodeoxyglucose positron emission tomography scan, which were considered to represent a metastatic malignant neuroendocrine tumour. The patient is on palliative chemotherapy for malignant paraganglioma. This case highlights variable presentation of pheochromocytoma, importance of having a high index of clinical suspicion for early recognition and prompt management and serious adverse consequence of a delayed diagnosis.

[220]

**TÍTULO / TITLE:** - Advancements in pancreatic neuroendocrine tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Gastroenterol Hepatol. 2013 Jul;7(5):477-90. doi: 10.1586/17474124.2013.811058.

●● Enlace al texto completo (gratis o de pago) [1586/17474124.2013.811058](http://1586/17474124.2013.811058)

**AUTORES / AUTHORS:** - Sadaria MR; Hruban RH; Edil BH

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, University of Colorado Anschutz Medical Campus, Division of GI, Tumor and Endocrine Surgery, Academic Office One, 12631 East 17th Avenue, C311, Aurora, CO 80045, USA.

**RESUMEN / SUMMARY:** - Pancreatic neuroendocrine tumors (PanNETs) have increased in incidence in the USA over the last 20 years. Although PanNETs are often misconceived as being indolent tumors as they have a far more favorable prognosis over pancreatic adenocarcinoma, roughly 60-70% of patients have metastatic disease at the time of diagnosis due to presentation late in the disease process. While improvements in imaging modalities allow for early detection and better tumor localization, recent advancements in basic science, as well as surgical and medical management of PanNETs have further improved the prognosis. The mainstay of therapy for localized PanNETs is surgical intervention, which has become safer and is slowly shifting

towards a more minimally invasive approach. However, the prognosis still remains relatively bleak for patients with unresectable disease. Fortunately, novel molecular targeted therapies, such as everolimus and sunitinib, have recently come into the limelight and have shown significant promise for the treatment of locally advanced and metastatic disease.

[221]

**TÍTULO / TITLE:** - Primary renal carcinoid tumor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Saudi J Kidney Dis Transpl. 2013 Sep;24(5):988-90.

**AUTORES / AUTHORS:** - Kanodia KV; Vanikar AV; Patel RD; Suthar KS; Kute VB; Modi PR; Trivedi HL

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Dr. H. L. Trivedi Institute of Transplantation Sciences, Gujarat, India. [kamalkanodia@yahoo.com](mailto:kamalkanodia@yahoo.com)

**RESUMEN / SUMMARY:** - Primary renal carcinoid tumor is extremely rare and, therefore, its pathogenesis and prognosis is not well known. We report a primary renal carcinoid in a 26-year-old man treated by radical nephrectomy.