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Abstracts



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PS-02-033

A case of ectopic Cushing's syndrome: Neuroendocrine tumor of the cecum

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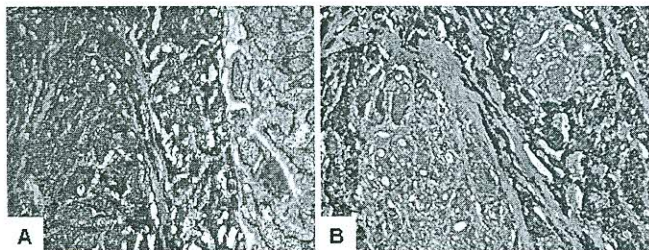
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Objective: Neuroendocrine tumors (NETs) of cecum are considered rare tumors. The prevalence of cecum's NETs is 3,47 % of all gastrointestinal NETs. More rare these NETs have hormone's hyper secretion. In the available literature, we did not find a case report about a NET of the cecum with ectopic ACTH secretion (EAS).

Method: A 52-year-old woman with EAS after computer tomography of the organs of the abdominal cavity the formation has been revealed in ilcocecal corner. Right hemicolectomy with the tumor and lymphadenectomy were made.

Results: Microscopic examination of the tumor showed NET of the cecum, with the infiltration of all its layers, valvula Bauhini and the mesenteric adipose tissue. The metastasis of a similar structure was found in 4 mesentery lymph nodes. The immunohistochemistry was positive for synaptophysin and chromogranin, ACTH, serotonin. There were 2 types of cells: one with the expression of serotonin, and the other ACTH. Tumor cells were negative for calcitonin, prolactin, corticotrophin-releasing, luteinizing and follicle-stimulating, parathyroid and growth hormones. Index of Ki-67 was equal to 0, despite the aggressive behavior of the tumor. That is why we have not shown the grade of the NET.

Conclusion: In the future we observed for the patient for 1 year with disease remission

NET of the cecum with ectopic Cushing's syndrome. Expression ACTH (Fig. A) and serotonin (Fig. B) in tumor cells $\times 20$:

PS-02-034

Galectin-3, cyclin D3 immunohistochemistry and tumour dimensions in oncocyctic follicular lesions of the thyroid: Definitve results of retrospective study

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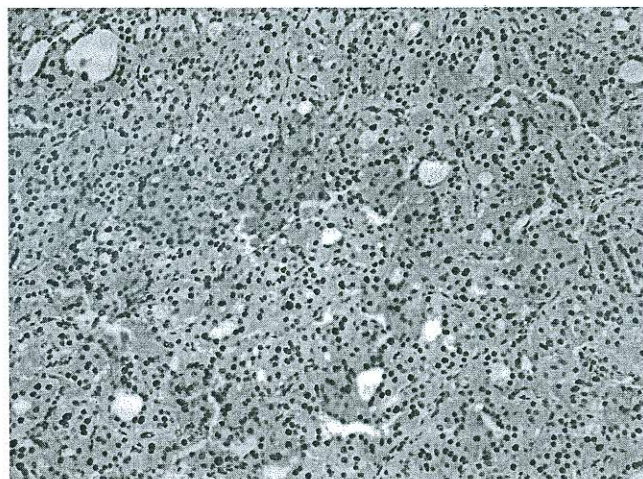
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Objective: The differential diagnosis between oncocyctic follicular adenomas (OAs) and oncocyctic follicular carcinoma (OCs) may be challenging on the routine practice. The aim of this study was to evaluate the hypothesis that a combination of the factors tumour-diameter, immunohistochemical expression of Cyclin D3 and Gal-3 is helpful to distinguish between OCs and OAs.

Method: We retrieved, re-examined and reordered the diameter of 40 cases (14 OCs and 26 OAs) from 1995 to 2007. Immunohistochemical analysis with Galectin-3 and Cyclin-D3 antibody was performed for each lesion.

Results: The mean value (in cm) of OCs was greater than in OAs (4.1 ± 2.3 vs. 2 ± 0.8) ($P < 0,001$). OCs and OAs differ in the percent of positive cells for Galectin-3 25 ± 25 vs. 3 ± 8 ($P < 0,001$) and for Cyclin D3 46 ± 37 vs. 8 ± 13 ($P < 0,001$). A combination of the two markers (Gal-3 + OR Cyclin D3+) demonstrated an excellent sensitivity (100 %) and a good specificity (85 %).

Conclusion: OCs and OAs differ from tumor dimension. Moreover, our study indicates that the association of Gal-3 and cyclin D3 has an excellent sensitivity and a good specificity, (100 % and 85 % respectively) and suggest these as helpful indicators to distinguish OCs from OAs.

Cyclin D3 in Follicular Oncocyctic Carcinomas:

PS-02-035

Sitagliptin treatment prevented pancreatic lesions evolution in a rat model of type 2 diabetes—proposal of antioxidant, antiapoptotic, anti-inflammatory and proproliferative mechanism

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Objective: This study aimed to elucidate mechanisms underlying the protective effects of sitagliptin, a dipeptidyl peptidase-4 (DPP-4) inhibitor, against pancreatic lesions, in an animal model of T2DM.

Method: Male obese diabetic ZDF (fa/fa) rats, 20-weeks-old, were treated with vehicle or sitagliptin (10 mg/kg BW/day) for 6 weeks, and compared with lean control littermates ($n=8$ /each). Biochemical parameters and lipid peroxidation were evaluated in serum/blood/tissues. Pancreatic lesions were assessed semiquantitatively by routine histopathological and PAS staining methods. Expression in mRNA of apoptotic (Bax, Bcl2, caspase 9), inflammatory (TNF α , IL-1 β , IL6), proliferative (PCNA) and angiogenic (VEGF) mediators was assessed by RT-qPCR. Immunohistochemical methods were used to confirm Bax/Bcl2 protein expression. Results are means \pm s.e.m. ANOVA and Post-hoc tests were used ($P < 0.05$ was considered statistically significant).

Results: Sitagliptin treatment of diabetic ZDF (fa/fa) rats, ameliorated biochemical serum/blood parameters, pancreatic lipid peroxidation and diabetic lesions. Immunohistochemistry confirmed antiapoptotic effect observed by reduced expression of Bax/Bcl2 ratio by RT-qPCR. Caspase 9, IL-1 β mRNA expression was decreased and proliferative and angiogenic factors overexpressed.

Conclusion: Sitagliptin, in this animal model of T2DM, may derive its protective pancreatic effect by antioxidant, antiapoptotic, anti-inflammatory and proproliferative/proangiogenic mechanisms.

PS-02-036

Erythrocytes as target cells of diabetes types 1 and 2

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Objective: Is to provide morphofunctional characteristics of erythrocytes in case of diabetes mellitus (DM) (types 1 and 2).