and HDL-cholesterol levels. **Conclusion:** Increased serum hs-CRP levels in the GH-deficient patients with NFPTs suggested the contribution of GH deficiency to pathogenesis of inflammation associated with cardiovascular diseases.

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Low Risk for All-Cause Mortality Among Patients With Lung Neuroendocrine Tumors Co-Diagnosed With Pituitary Adenoma

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Context: Lung neoplasm often co-occur with pituitary adenoma (PA). However, whether co-diagnosis of lung neuroendocrine tumors (LNET) and PA constitute unique entity, and the impact of such co-diagnosis on patients outcome is yet to be defined. **Objective:** To compare the clinical characteristics of patients with LNET to those co-diagnosed with PA. **Design:** Retrospective, case-control study including patients diagnosed with LNET or PA between 2000 and 2016. **Setting:** The Surveillance, Epidemiology and End Results database. **Patients:** 2,947 patients had LNET, including 2,913 with LNET alone ("Sporadic") and 34 patients with both LNET and PA ("MENx"). **Main Outcome Measure(s):** All-cause mortality (ACM). **Results:** PA preceded LNET diagnosis in 85.3% of patients and had higher rates among LNET patients (34/2,947) than with any cancer (p<0.00001) and compared to patients with non-small cell lung cancer (NSCLC) (15/2,378, p=0.047). MENx patients were younger at diagnosis compared with NSCLC patients and PA (p=0.04). Among patients<60 years with LNET, co-diagnosis with PA was associated with lower ACM risk (Log-rank test, p=0.03). Adjusted ACM risk of patients with "MENx" was lower than sporadic LNET (hazard ratio 0.553, 95% confidence interval 0.309-0.99, p=0.046), especially among Caucasians, and a lower overall-mortality risk in patients <60 years with borderline statistical significance (p=0.071). **Conclusions:** Patients with both LNET and PA constitute a distinct morbidity and mortality profile compared with sporadic LNET possibly suggesting an undefined MEN syndrome. Additional studies to further investigate the natural course and genetic profile of patients with these neoplasms are needed.

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Markers of Aggressiveness in Craniopharyngiomas

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Craniopharyngiomas (CP) are rare tumors that may be locally aggressive. The presence of functional estrogen receptors (ER) has been reported in CP and might be related to risk of recurrence. Our aim is to ascertain if the expression estrogen and progesterone receptor (PR) might be associated with to recurrence in CP. Material and **Methods:** Descriptive retrospective observational study of patients with confirmed histology of CP and tissue sample available admitted to Virgen Del Rocio University Hospital (Seville, Spain) from January 1967 to October 2020 were included. Estrogen and progesterone receptor expression was analyzed by Immunohistochemistry. Ki-67 levels were also analyzed. Two CP groups were considereded according to Ki67 levels: Group A (Ki67<10%) and group B (Ki67>10%). As all variables followed a non-parametric distribution, U Mann Whitney, Chi-Square, and Z-test with Benjamini-Hochberg correction were used when needed. **Results:** Our study population includes 80 patients (46 male and 34 female), with a median age at diagnosis of 34 years [10-50.00]. Twenty-six patients were under 18 years old (children) with a median age of 7 years [4.5-10.00], and 54 were adults (aged 18 and above) with a median age of 45 years [33-58.50]. Our data shows higher recurrence rates when Ki67 levels staining were higher than 10%: 8/14 (57.2%) in comparison with Ki67<10% (6/14, 42.9%, p=0.018). In children we found 6 samples with Ki67<10% and 6 samples with Ki67 >10%; recurrences were observed in 2/6 (33,3%) in the first group and in 6/6 (100%) in the second, respectively (p= 0,199). In adults, we found 9 and 3 patients for high and low Ki67 levels, respectively. Recurrences were observed in 4/9 (44,4%) in the group A and in 2/3 (66,7%) in the group B, respectively (p= 0,28). There were no differences between age groups. In patients with positive ER, we observed an increased rate of recurrence: 12/23 (52.17%) versus 2/13 (15,38%) in patients with negative ER stain but it was no significant. (p=0,21). No association between PR and recurrence was observed. Conclusions: In our series, patients with CP with high Ki67 levels are more likely to recur. No clear association between ER, PR expression and recurrence was observed. These findings support the use of Ki67 as a marker of recurrence in CP. **Sources of Research Support:** Spanish Ministry of Health, ISCIII co-funded with Fondos FEDER (PI16/00175) and Novartis Oncology Spain.

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New Transcriptional Insights into Silent and Active Corticotroph Pituitary Tumors at Single Cell Resolution

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