mcg/dl). CT-guided core needle biopsy of right adrenal gland was consistent with metastatic hepatocellular carcinoma. CT pelvis with contrast re-demonstrated the right adrenal mass now measuring 11.4 x 10 x 10 cm with new enlarged retrocaval lymph node and no focal arterially enhancing lesions. During embolization of adrenal lesion/hepatic angiogram, multiple liver lesions not previously identified were reported with the largest of 2.9cm size and enhancing lesions in the sacrum and bilateral iliac bones; decrease in size of the necrotic right adrenal mass measuring 8.2 x 9.1 x 9.1 cm 1-month post-embolization. Patient following with Oncology.
Conclusion:Unilateral isolated adrenal metastasis from occult hepatocellular carcinoma (HCC) is extremely rare. Adrenal gland is the second most common site of hematogenous spread from HCC after the lung and has been found in up to 8.4% of cases at autopsy. In our case, the adrenal metastasis was the first clinical presentation of HCC with no evident hepatic lesion until 9 months of adrenal finding; few cases have been reported. Fine needle aspiration/needle biopsy of suspected malignancy is useful to detect primary tumor in case of metastatic disease that is silent at this stage. Adrenal metastasis in HCC are seldom treated by surgery as by the time of diagnosis the tumor is usually far advanced and/or patients are poor surgical candidates. This case highlights the importance of suspecting underlying HCC in isolated adrenal mass in a patient with high risk factors.

Reproductive Endocrinology

MALE REPRODUCTIVE HEALTH - FROM HORMONES TO GAMETES

The Short-Term Effect of Multiple Kinase Inhibitor (Lenvatinib) on Spermatogenesis in Mice

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SAT-039

Lenvatinib, a multi-kinase inhibitor, is used in the treatment of solid malignancies. Lenvatinib belongs to a family of tyrosine kinase inhibitors and targets VEGF receptors 1-3, FGF receptors 1-4, PDGF receptor alpha, RET and KIT. However, it is not known whether Lenvatinib like other chemotherapeutic drugs affects spermatogenesis. The objective of this study was to examine whether Lenvatinib induces damage to spermatogenesis in mice. Twenty adult mice (C57BL/6) were randomly divided into 2 groups to receive daily gavage of either water (as control) or Lenvatinib (10 mg/kg) for 6 weeks. All mice were euthanized at the end of the study. We identified that Lenvatinib significantly ($p<0.05$) decreased testis weight (TW: 91.75±1.49mg) compared to control mice (TW: 111.9±3.07mg). This difference in testis weight however, became non-significant after correcting for body weight. The cauda epididymal sperm count was significantly ($p<0.01$) decreased in the Lenvatinib treated (0.82±0.04 million/mg cauda) as compared to control (1.26±0.07 million/mg cauda) mice. There were no differences in plasma testosterone concentrations between Lenvatinib treated (29.76±7.67ng/dl) and control (31.72±6.89ng/dl) mice. Lenvatinib did not induce notable morphological changes in testicular histology. We conclude that 6 weeks of Lenvatinib treatment had minimal effect if any on mouse spermatogenesis. The long-term treatment effect of Lenvatinib on spermatogenesis remains to be determined.

Adrenal

ADRENAL - TUMORS

New Data on High Prevalence and Time of Occurrence of New Onset Hypothyroidism Associated with Mitotane Therapy in a Cohort of Adrenocortical Cancer

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SAT-158

Context. Mitotane is a steroidogenesis inhibitor and an adrenocorticolytic drug used to treat adrenocortical cancer (ACC). Central hypothyroidism is recognized in mitotane-treated patients and recent data suggested that mitotane could have an inhibitory effect on TSH-secreting cells in the pituitary gland. Moreover, mitotane may lead to induction of thyroid hormone metabolism. Clinical data on hypothyroidism related to mitotane such as prevalence and time of occurrence was described in a limited number of patients.
Objective. To better characterize clinically secondary hypothyroidism in patients with ACC treated with mitotane therapy.
Methods. We reviewed retrospectively paper charts and electronic records from patients with histologically confirmed diagnosis of ACC evaluated at our center from 1995-2019. We analysed the pattern of TSH and thyroid function, but also mitotane timing and levels at baseline and during treatment of patients under mitotane therapy. Thyroid hormone assessment including TSH, FT4 and FT3 was performed at least every 3 months during follow-up.
Results. Our cohort of 104 patients with ACC includes 84 patients that received mitotane therapy. Among them, thyroid function data was incomplete for 39 cases. Complete data was retrieved from 45 patients. Ten out of 45 (22.2%) patients were already known for primary hypothyroidism and were receiving L-T4 replacement before the initiation of mitotane. Two of 45 (4.4%) patients maintained a normal thyroid function during complete follow up (4.5 years) and 33/45 (73.3%) had new onset hypothyroidism requiring levothyroxine treatment. Of these 33 patients, 22 were females and 11 were males, ranging from 22-74 yo with a median of 46 yo. The number of patients with ENSAT stage I, II, III and IV of disease were 1, 8, 11 and 13 respectively. Thyroid profiles were compatible with central hypothyroidism (low T4 with low or inappropriately normal TSH) in 22/33 patients (66.7%). Interestingly, 6/33 patients (18.2%) developed a TSH elevation with a normal lower-limit or low T4 level. The timeline distribution of the occurrence of hypothyroidism was 21.2% (n:7) at <3 months, 15.2% (n:5) between 3-6 months, 21.2% (n:7) between