1/1,000,000 and highly variable prognosis dependent on subclassification as seminomatous or non-seminomatous. Non-seminomatous germ cell tumors can cause significant enough elevations in hCG to induce thyrotoxicosis via structural homology allowing for cross-reactivity with the TSH-receptor. Limited cases involving EGCTs inducing thyrotoxicosis have been studied.

Case: A 27-year-old male presented to the emergency department with intractable abdominal and back pain. He reported night sweats, nausea, dizziness, and a 10 lb weight loss in 1 week. He was resting comfortably and only complaining of pain. He was moderately tachycardic, tachypneic and hypertensive, with a physical exam only remarkable for tenderness to palpation of the abdomen. Abdominal CT revealed mesenteric and retroperitoneal lymphadenopathy, bilateral adrenal enlargement, a mass in the head of the pancreas, as well as gallbladder and common bile duct distention. Lymph node biopsy was conducted for a suspected lymphoma; however, pathology found a poorly differentiated carcinoma. A diagnosis of a non-seminomatous EGCT was made when ultrasound of the testes was negative for masses and labs revealed elevations in hCG (74842 mIU/ml), and LDH (1421 U/L) with normal AFP (6.98 ng/mL). Further workup showed a slightly elevated T4 Free Thyroxine (1.55 ng/dl) with normal TSH (0.555 mIU/L); thus his thyrotoxicosis was secondary to the high HCG. Treatment for thyrotoxicosis was deferred with the expectation that symptoms would resolve when the tumor burden was decreased. Our patient had numerous other complications requiring management from nephrology, GI and urology teams in addition to endocrinology and hematology-oncology. Bleomycin, Etoposide and Cisplatin (BEP) combination chemotherapy was initiated after recovery from acute complications. Further pathology evaluation suggested tumor susceptibility to the biologics nivolumab and pembrolizumab.

Conclusion: Patients with thyrotoxicosis secondary to metastatic non-seminomatous germ cell tumors often present with widespread metastasis and relatively few symptoms of thyrotoxicosis that resolve as the hCG levels decrease with chemotherapy without specific antithyroid medication. This case highlights the importance of considering clinically occult thyrotoxicosis in patients who have elevated hCG secondary to germ cell tumors. Early detection of germ cell tumor and recurrence is crucial for chemotherapeutic success. Thus, patients should be closely followed for thyrotoxicosis relapse which could potentially herald a carcinoma relapse and aid in early diagnosis.

Thyroid

THYROID CANCER CASE REPORTS II

The Case of a Rare Anaplastic Thyroid Cancer Variant with Rhabdoid Features

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Introduction: We present a very rare case of a variant of anaplastic carcinoma, a high-grade thyroid carcinoma with rhabdoid features. Less than 15 cases have been reported in English literature over the last 20 years. The prognosis of thyroid cancer with this variant phenotype is unfortunately very poor with a mean survival time of only 6 months after diagnosis. Treatment includes surgery, often a total thyroidectomy due to the rapid rate of growth of this tumor type. The benefits of chemotherapy and radiation are not yet apparent.

Case presentation: A 49 year old female with history of breast cancer status-post recent chemoradiation therapy presented to the emergency department for a rapidly enlarging, right-sided neck mass. The mass had been present for approximately one month, but it was estimated to have grown from 3cm to 5cm within the two weeks prior. The patient was being followed by her ENT specialist and had a recent outpatient CT scan done. The results of the CT revealed a large thyroid tumor partially obstructing the esophagus and given the rapid progression of symptoms, she was instructed to go straight to the ED for emergent admission. Upon arrival, the patient reported not having consumed any solids or liquids for the past day due to concerns of aspiration and increasing neck pain. She had complaints of worsening dysphagia. Initial lab work revealed low thyroglobulin (1.4 ng/mL), elevated T4 (15.42 nmol/L) presumably due to Tamoxifen exposure, and elevated PTH (96.9 pg/mL), likely primary hyperparathyroidism. She was admitted and endocrine was consulted for further evaluation. The patient underwent a fine-needle aspiration biopsy showing high-grade anaplastic carcinoma with extensive necrosis and rhabdoid features. The tumor was eventually classified as stage 4B with gross extra thyroidal extension to the adventitial layers of the esophagus, thus it was determined to be unresectable. It was recommended at that time she have a percutaneous tracheostomy and feeding tube to protect her airway. However, the patient requested to be discharged so that she could obtain a second opinion regarding treatment options and prognosis. She subsequently underwent a total thyroidectomy at another hospital.

Conclusion: It remains unclear whether this patient's history of breast cancer treated with chemoradiation therapy played a role in the development of this rare thyroid carcinoma. Some cases of the rhabdoid phenotype are documented to have transformed from papillary thyroid carcinoma, for which radiation therapy is a well-known risk factor. Future studies should use molecular markers, such as BRAF V600E mutations common to papillary and anaplastic thyroid carcinomas, to help differentiate between types of thyroid cancers and avoid delayed treatment options for rapidly metastasizing thyroid tumors.

Diabetes Mellitus and Glucose Metabolism

PREGNANCY, LIPIDS, AND CV RISK — IMPACT OF DIABETES ACROSS THE SPECTRUM

Differences in Advanced Lipoprotein Profile Between Rabson-Mendenhall Syndrome and Lipodystrophy