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Thyroid

THYROID DISORDERS CASE REPORT

A Killian-Jamieson Diverticulum Masquerading as a Thyroid Nodule

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Background: A Killian-Jamieson diverticulum is a rare outpouching in the cervical esophagus, just below the cricopharyngeus muscle, that can be easily mistaken for a thyroid nodule on ultrasonography (1).

Clinical Case: A 65-year-old woman underwent a thyroid ultrasound after her primary care physician noted left-sided thyromegaly. The ultrasound described a 33 mm solid, hypoechoic, wider-than-tall nodule in the left mid gland with an obscured posterior margin as well as macro- and microcalcifications. Given the size and highly suspicious features on ultrasound, she was referred to endocrinology clinic for a fine needle aspiration (FNA). She underwent ultrasound-guided FNA of what appeared to be the previously described thyroid nodule. Surprisingly, the pathology report noted degenerative changes with amorphous debris and possible foreign materials (vegetable or food) without any thyroid tissue. She was sent for an MRI neck, which showed the left neck mass communicating with the esophagus, favoring a left lateral projecting Killian-Jamieson esophageal diverticulum with internal debris. She was referred to head and neck surgery. Given only minimal symptoms of dysphagia, there are no current plans for surgery.

Conclusion: This case illustrates the possibility of mistaking a Killian-Jamieson diverticulum as a thyroid nodule. Recognition of this rare disease process in the differential diagnosis of thyroid nodules with high risk ultrasound characteristics may prompt more advanced imaging with MRI or CT, and lead to an accurate diagnosis prior to subjecting patients to unnecessary and potentially harmful FNAs (2).

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Thyroid

THYROID DISORDERS CASE REPORT

A Million Reasons for Hyperthyroidism. Reporting a Case of Thyrotoxicosis in a Setting of Metastatic Choriocarcinoma

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Background: Human chorionic gonadotropin (hCG) induced transient hyperthyroidism is often seen during pregnancy. Other rare causes of beta hCG induced hyperthyroidism include trophoblastic tumors (hydatidiform mole and choriocarcinoma) and in men, germ cell tumors. The mechanism for hCG induced thyrotoxicosis lies in the structural similarity between TSH and hCG molecules leading to the direct stimulation of the TSH receptors. In regard to treatment, while gestational thyrotoxicosis is usually mild, self-limited and does not need medications, the hyperthyroidism of trophoblastic tumors may require antithyroid medications in addition to treating the underlying tumor. Thionamide use is reserved for moderate to severe cases of hyperthyroidism and for presurgical optimization. In our case report, we present a 22-year-old African American female with choriocarcinoma induced thyrotoxicosis requiring thionamide therapy. **Clinical Case:** A 22-year-old African American female presented to our emergency room after a witnessed generalized tonic-clonic seizure. Her brain CT scan showed a 4 CM mass concerning for AVM malformation with a subsequent brain MRI confirming parenchymal hematoma with surrounding vasogenic edema. Past medical history was significant for molar pregnancy managed with dilation and curettage followed by laparotomy to remove the pelvic mass. Given her history of molar pregnancy, pelvic ultrasound was performed which showed complex heterologous structure of uterine origin concerning for malignancy. Additional imaging studies of the lung, brain, abdomen and pelvis were performed, which showed possible metastasis to the lung, adnexa, and to the brain. Her clinical exam showed heart rate of 130 beats/min with a normal rhythm, fine tremors, aphasia, and a decrease grip strength in her right upper extremity. Her thyroid gland was slightly enlarged with no tenderness. Laboratory tests showed hCG of >1,000,000 mIU/mL, TSH of < 0.01mcU/mL, free T4 of 5.1ng/dL. Her TPO and TSI were negative. With a diagnosis of hyperthyroidism due to trophoblastic disease, she was treated with methimazole and propranolol resulting in rapid clinical and biochemical improvement. Later, left frontal craniotomy and hematoma evacuation was performed with histology confirming the diagnosis of metastatic choriocarcinoma. She was later transferred to a specialized center where she received chemotherapy. Her hCG subsequently dropped down to 699 mIU/mL. **Conclusion:** We report a rare case of metastatic choriocarcinoma causing symptomatic hyperthyroidism. The diagnosis is made by excluding other common causes of hyperthyroidism and it should be