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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 thryomegaly. 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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considered in females of childbearing age. Methimazole is an effective agent to control the hyperthyroidism while waiting for treatment of the underlying cancer.

Thyroid
THYROID DISORDERS CASE REPORT
A Rapidly Enlarging Thyroid Nodule- Aspergillus Abscess
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Introduction: Acute suppurative thyroiditis is a rare thyroid disorder with high mortality often due to bacterial or fungal infection. Here we present a case of a rapidly enlarging thyroid nodule in the setting of disseminated aspergillosis.

Case: A 31 year old female with lupus on immunosuppressants first presented with weakness to the emergency department with workup finding multiple pulmonary, intracranial and vertebral lesions and a left thyroid nodule. On thyroid ultrasound the nodule was solid, hypoechoic, 1.5x2.3x2.7cm with irregular margins and no echogenic foci. Thyroid function tests: Total T3 52ng/dL (80-210ng/dL), Free T4 2.26ng/dL (0.6-1.12ng/dL), TSH 0.015μIU/mL (0.45-4.12μIU/mL). The patient was started on voriconazole for disseminated aspergillosis with plan for outpatient thyroid workup. However with further brain lesion growth, the patient was readmitted with incidental finding of thyroid nodule developing into a multiloculated, septated, fluid filled 5x2.9x4cm lesion after 3 months. Fine needle aspiration of the thyroid lesion resulted in negative bacterial and fungal cultures, no malignant cells, positive fungal elements consistent with aspergillus on cytology. The patient was continued on antifungal therapy (switched to cresemba due to voriconazole side effects) with thyroid peroxidase antibodies obtained to assess cause of her disease was unknown. She began taking levothyroxine 50mcg every morning after her diagnosis. She reported compliance and proper pill taking technique.

Discussion: Thyroid infections are limited due to the thyroid’s high iodine content, capsular encapsulation and rich vascularity. Acute suppurative thyroiditis (AST) due to aspergillus is a rare finding that can present solo or as a part of disseminated infection especially in immunocompromised individuals. Early presentation is often asymptomatic with possible thyroid function test abnormalities that self resolve in a couple weeks. Occasionally patients present with obstructive symptoms or findings of thyroid storm. Diagnosis is done through fine needle aspiration or autopsy, with treatment options including surgery, antifungals or both. Due to the high mortality of fungal AST, with improved outcomes with early diagnosis, it is important to consider AST as a part of the differential diagnosis in immunocompromised patients with systemic illness.

Thyroid
THYROID DISORDERS CASE REPORT
A Rare Case of Anaphylaxis to Methimazole in a Patient With Graves’ Disease
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Introduction: A hyperfunctional thyroid nodule can lead to symptoms of overt or subclinical hyperthyroidism but the association between a hyperfunctional thyroid nodule and hypothyroidism has not been well reported. We present a patient with a prior history of hypothyroidism previously controlled on Levothyroxine who later presented with an enlarging hot nodule. Case Presentation: A 62-year-old female with a history of factor V Leiden, hypothyroidism on levothyroxine therapy, and a meningioma presented to an outpatient clinic with complaints of fatigue, constipation, and 37-pound weight loss in one year. She was diagnosed with hypothyroidism 7 years ago after delivering her third child, but the underlying cause of her disease was unknown. She began taking levothyroxine 50mcg every morning after her diagnosis.

Thyroid
THYROID DISORDERS CASE REPORT
A Rare Case of a Toxic Thyroid Nodule Found in a Hypothyroid Patient on Levothyroxine Therapy
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Introduction: Hypothyroid Patient on Levothyroxine Therapy is a rare case of a toxic thyroid nodule found in a patient with Hashimoto's Thyroiditis but the prevalence of hyperfunctional nodules in hypothyroid patients has not been well reported. We present a patient with a prior history of hypothyroidism previously controlled on Levothyroxine who later presented with an enlarging hot nodule. Case Presentation: A 31 year old female with lupus on immunosuppressants first presented with weakness to the emergency department with workup finding multiple pulmonary, intracranial and vertebral lesions and a left thyroid nodule. On thyroid ultrasound the nodule was solid, hypoechoic, 1.5x2.3x2.7cm with irregular margins and no echogenic foci. Thyroid function tests: Total T3 52ng/dL (80-210ng/dL), Free T4 2.26ng/dL (0.6-1.12ng/dL), TSH 0.015μIU/mL (0.45-4.12μIU/mL). The patient was started on voriconazole for disseminated aspergillosis with plan for outpatient thyroid workup. However with further brain lesion growth, the patient was readmitted with incidental finding of thyroid nodule developing into a multiloculated, septated, fluid filled 5x2.9x4cm lesion after 3 months. Fine needle aspiration...