

# Ectopic thyroid tissue in the adrenal gland: report of a case

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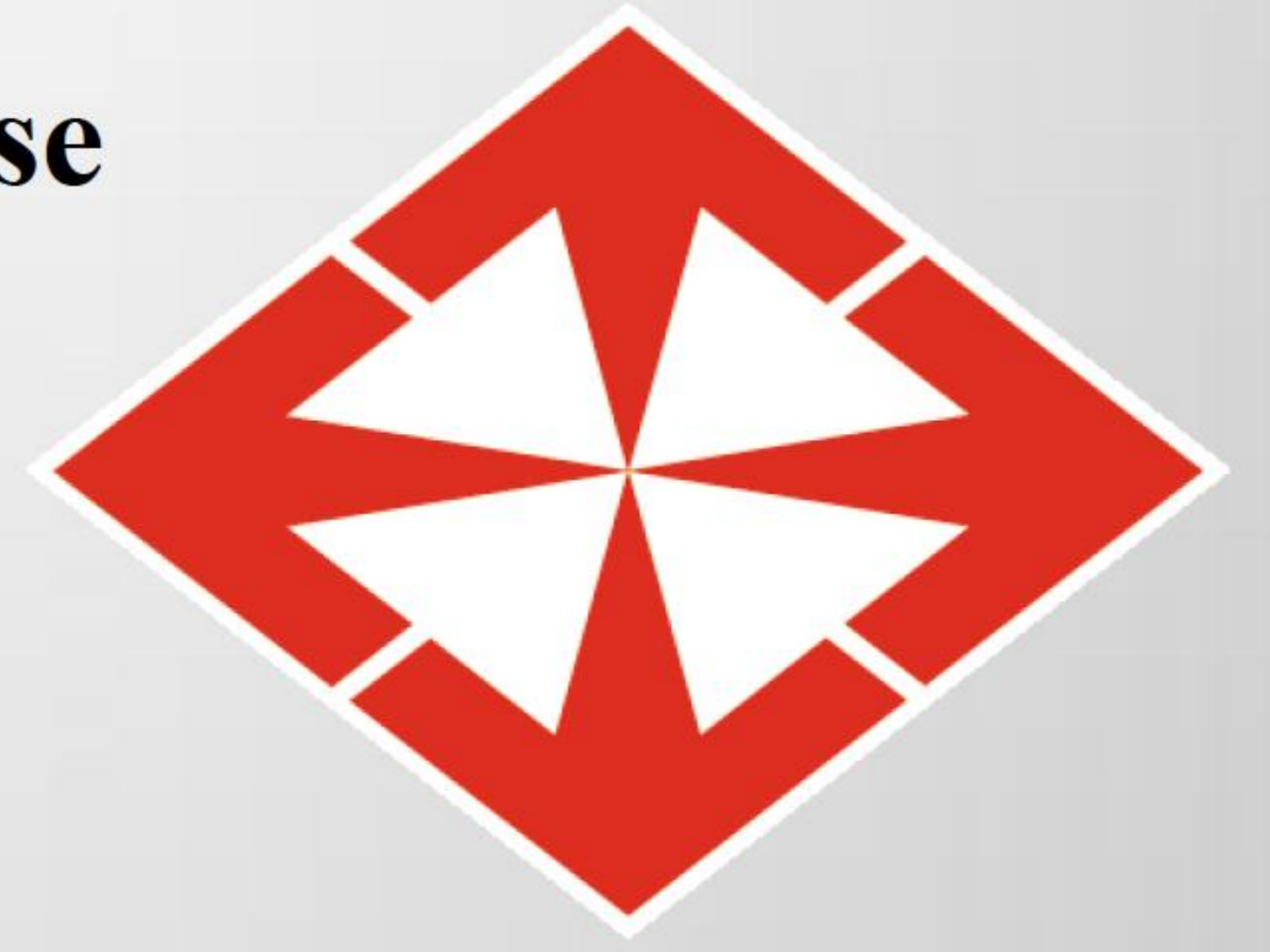
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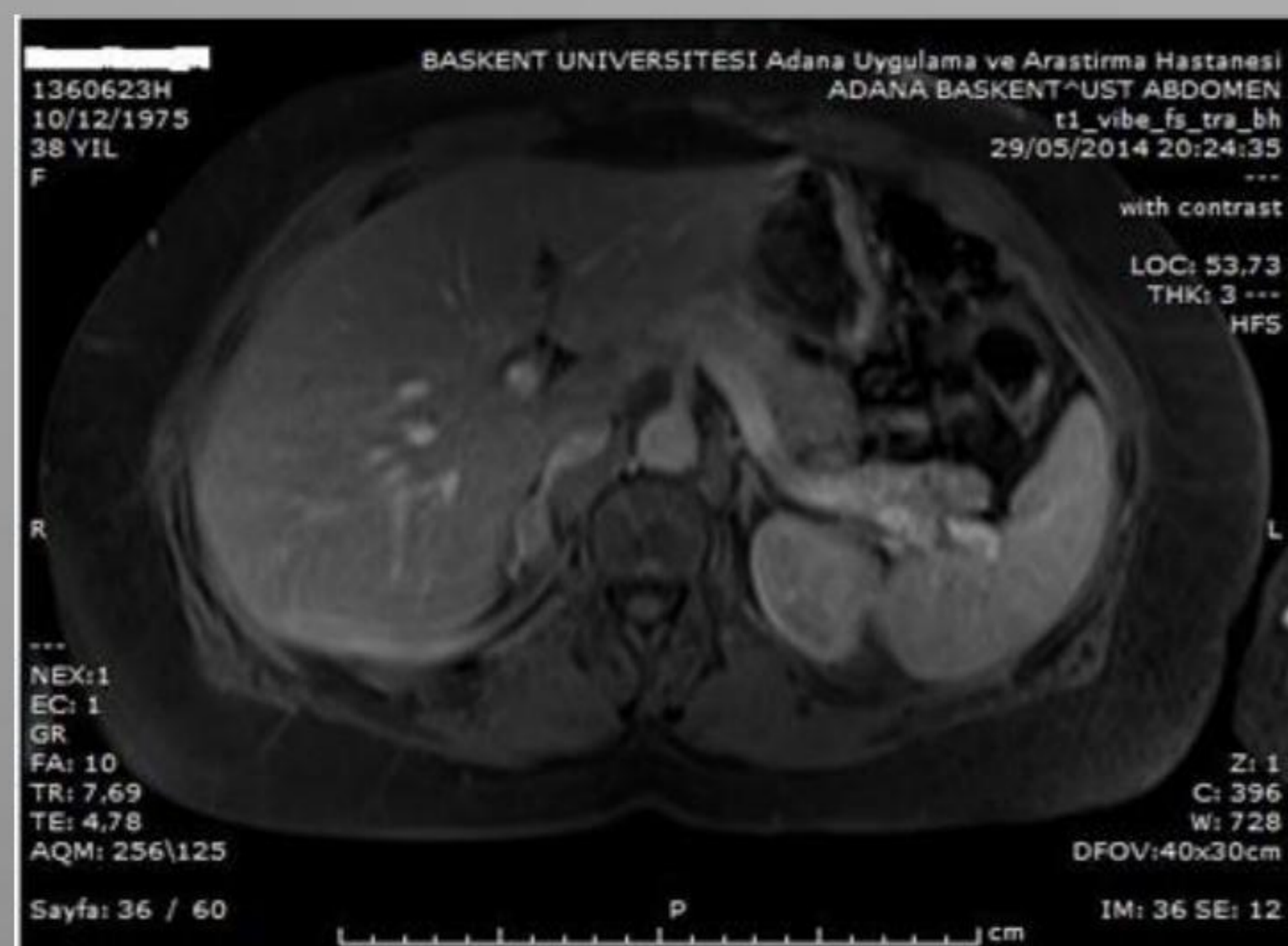
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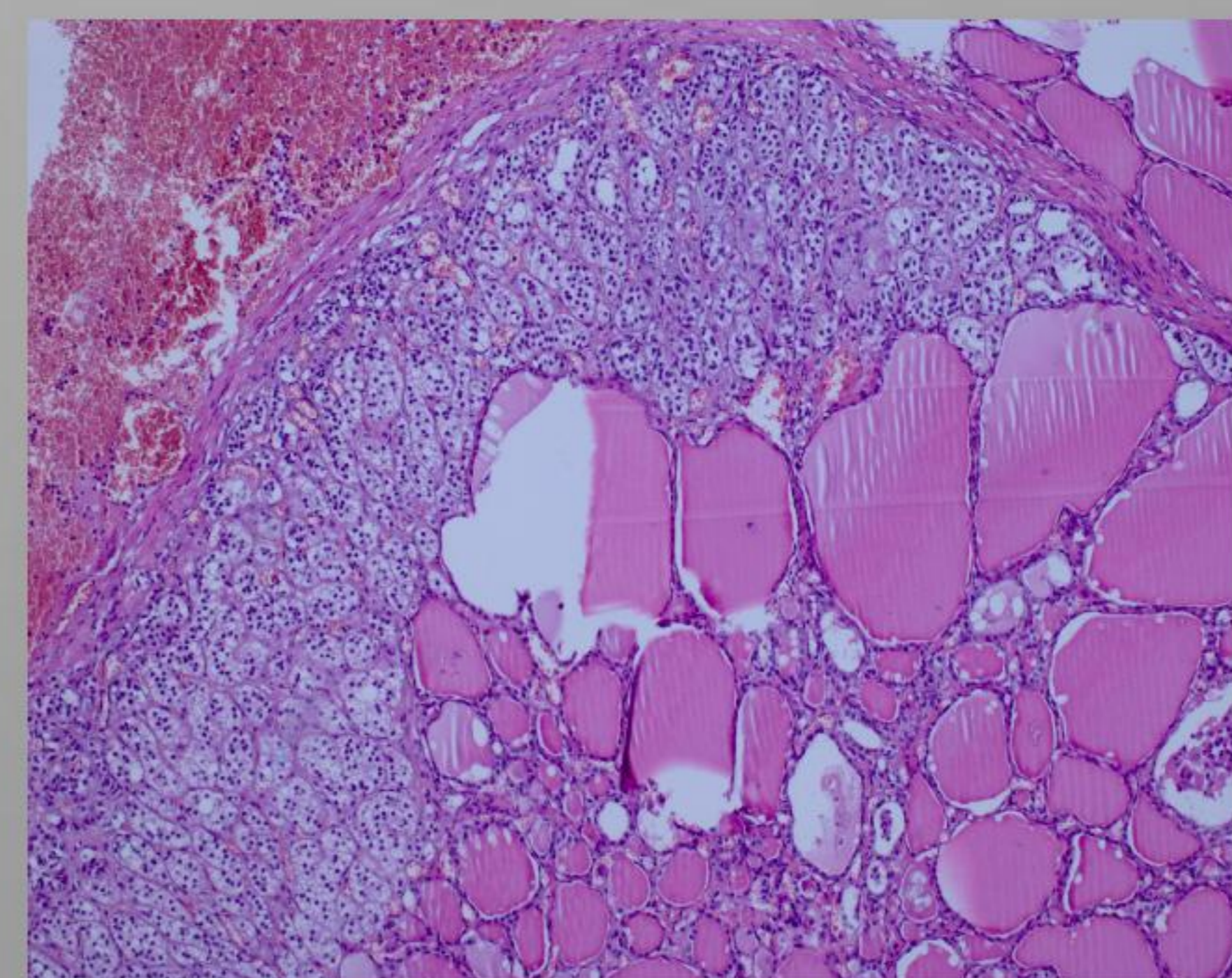
**Background:** Ectopic thyroid tissue (ETT) can be explained as the localisation of thyroid parenchyma outside the orthotopic position of the thyroid gland. It can be more easily found in the tongue, neck, mediastinum, great vessels, heart and anywhere along Wölfler area, but presentation in the adrenal glands is absolutely very rare (1-2).

**Case:** A 39-year-old woman was referred to our Endocrinology outpatient clinic with an incidental adrenal mass which was seen in abdomen CT performed because of a nonspecific abdominal pain. Her abdomen CT revealed a 13x18 mm non-adenoma solid mass in the right adrenal gland which showed 43 Hounsfield units(HU) in precontrast series,71HU in portal phase and 67HU in late phase(Figure1). Endocrinologic evaluation showed that it was a non-functional tumour. Her PET CT scan revealed a hypermetabolic nodular lesion in the right adrenal gland and physiological FDG uptake in bilateral adnexal regions. The patient underwent surgery and histological examination showed thyroid tissue in the adrenal gland seen as large islets (Figure 2). No sign of atypia was observed. Immunohistochemical studies were negative for CK-19, HBME-1 and GAL-3. Patient's thyroglobulin level was within normal ranges as 23.80 ng/mL(1.60-55). She had a subtotal thyroidectomy history and her current neck USG revealed several benign appearing thyroid nodules with the largest as 12x9 mm in diameter. A thyroid fine needle aspiration biopsy was performed and found as benign.

**Conclusion:** To date, intraadrenal ETT has been reported in 10 cases in the literature. Only one of them was solid like our case, and the remaining were cystic lesions. Clinicians and pathologists must be careful during distinguishing it from metastatic thyroid cancer. For our case we planned a complementary thyroidectomy to exclude a metastatic thyroid cancer. However her PET CT scan results, thyroglobulin level, benign appearance of thyroid nodules, benign biopsy result and absence of any other solid organ metastasis may propose an existence of ETT in the adrenal gland.



**Figure 1:** Non-adenoma solid mass in the right adrenal gland.



**Figure 2:** Thyroid tissue in the adrenal gland.

**REFERENCES:** 1. Gian Piero Casadei et al. Ectopic thyroid tissue in the adrenal gland. Int J Surg Pathol, DOI:10.1177/1066896914541001

2. Alfredo Romero-Rojas et al. Ectopic thyroid tissue in the adrenal gland: a report of two cases with pathogenetic implications. Thyroid 2013;23(12):1644-1650.