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## INTRODUCTION

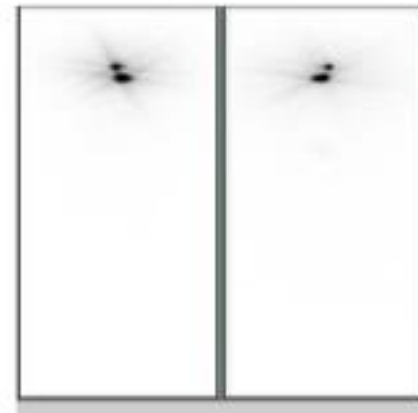
- Ectopic thyroid tissue is the result of abnormal gland migration from the foramen caecum to its normal pretracheal position.
- An ectopic thyroid can be lingual (at the base of the tongue), sublingual (below the tongue), prelaryngeal (in front of the larynx), or can be found at other rare sites. The most frequent noncervical location for ectopic thyroid tissue is the thoracic cavity.
- Here we discuss about a rare case of mediastinal ectopic thyroid tissue presenting with a superior mediastinal mass compressing the brachiocephalic truncus without any symptom in a patient with breast cancer.

## CASE

- An 61-year-old nonsmoker female patient with an incidental finding of a mediastinal mass on Thorax computerized tomography (CT) scan for following up of breast cancer had consulted us from medical oncology department.
- Her previous medical history included chronic obstructive pulmonary disease, hypertension, type 2 diabetes mellitus. She had two operation for breast cancer and multinodular goiter before.
- Thyroid stimulating hormone (TSH), free thyroxine (fT4) and the titers of serum thyroid auto-antibodies were within the normal range. She had history of chest radiation and chemotherapy because of breast cancer.
- Her thyroid was not palpable, and there was no evidence of cervical lymphadenopathy. An ultrasound of the remnant thyroid identified only two solid nodules.
- A CT scan of the thorax revealed a 4.7×3.0cm heterogeneously enhanced mass in the superior mediasten.

- The mass was located at the intersection of the caudal margin of the left brachiocephalic vein and ascending aorta, and it compressed the brachiocephalic truncus. However, there were no symptoms related to the compression.
- Tc-99m pertechnetate thyroid and mediastinal scintigraphy revealed a mass which was 4 cm and increased uptake in superior mediasten (Ectopic thyroid or metastatic lesion?). As it can be the mediastinal metastasis of the breast cancer that can uptake technetium, total body scanning with I-131 revealed which showed increase uptake of iodide in the superior mediastinal mass with 4.5x4.0x5.5 cm dimensions.
- The mass was resected totally. Histopathological examination revealed nodular colloid goiter.

**Picture.** Radioiodine anterior and posterior whole body images



## CONCLUSION

- Ectopic thyroid is a rare condition, and its location in the mediastinum is even rarer.
- Although entirely intrathoracic ectopic thyroids are rare, they must be considered in the differential diagnosis of all mediastinal masses. Thoracotomy or sternotomy is required for resection of the mass and prognosis is excellent following a successful excision.