

**A RARE CASE OF DUAL ECTOPIA THYROID**

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*Article History: Received 3rd September, 2015, Accepted 29<sup>th</sup> September, 2015, Published 30<sup>th</sup> September, 2015*

**ABSTRACT**

ETT is the presence of thyroid tissue in a site rather than the normal anatomical location of the gland. It is very rare to have two ectopic foci of thyroid tissue, and only a very few cases of dual ectopia have been reported in the world literature.

**Keywords:** Dual Ectopia Thyroid

**1. INTRODUCTION**

Thyroid is the first endocrine gland to develop embryologically around 3-4 weeks of gestation. Developmental structural abnormalities of thyroid gland are relatively rare. The prevalence of Ectopic thyroid tissue is approximately 1 per 100,000 to 300,000 persons and is reported to occur in 1 in 4,000 to 8,000 patients with thyroid disease.

In 70% of cases of ectopic thyroid, the normal thyroid gland is absent. It is extremely rare to have dual ectopic thyroid with a normally located thyroid gland

**2. CASE DISCUSSION**

Our case is an 8 year old boy came with complaints of swelling midline of neck since 5 years duration. No history of pain and loss of weight or appetite or history of evening rise of temperature. No history of chronic cough. Patient was clinically euthyroid with normal growth and development. Swelling of size 3.0 x 1.5 cm front side of neck with smooth surface and well defined margins located between hyoid bone and thyroid cartilage. It was freely mobile in the horizontal plane but restricted in vertical plane, soft in consistency and moves with deglutition. No regional lymphadenitis. No tonsillar enlargement. No hepatosplenomegaly.



**INVESTIGATIONS**

	Res ult	Reference value	Units
Free T3	3.87	2.3 – 4.2	pg/ml
Free T4	.874	0.8 – 2.5	ng/ml
TSH	5.65	1.0 – 9.1	mIU/ml

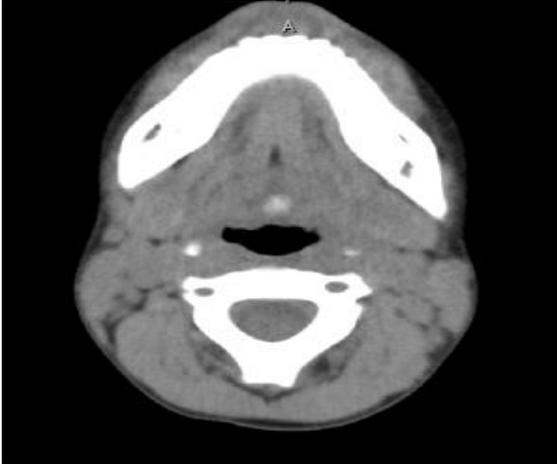
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**USG report :**

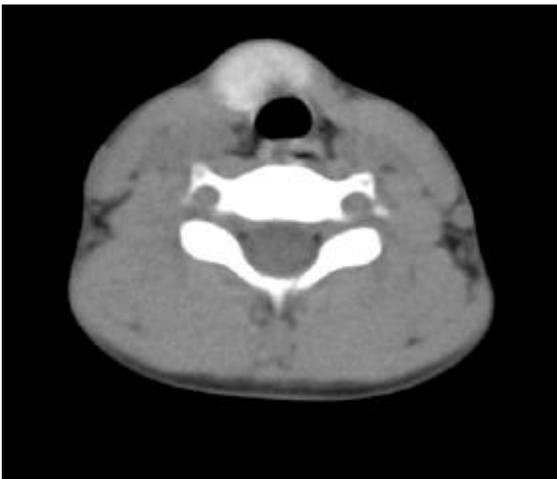
An hyperechoic mass of size 29 x 10mm just above isthmus with well defined margins (? Delphian node)

**NECT Neck**

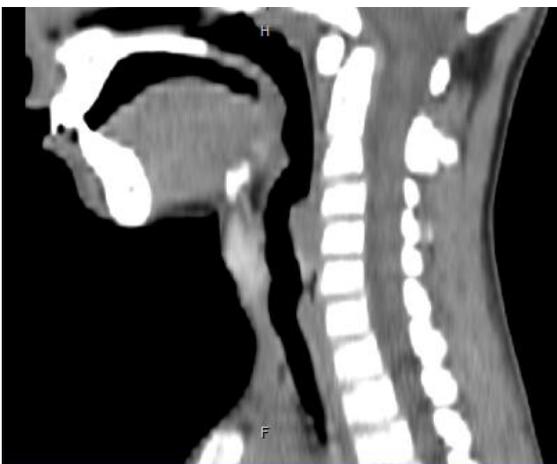
1.A small well defined hyperdense foci measuring 7 X 6.4 X 6mm in size seen in posterior third of the tongue with the density same as that of orthotopic thyroid gland.



**TRANSVERSE VIEW (lingual thyroid)**



**TRANSVERSE VIEW (lingual thyroid)**



**SAGITTAL VIEW**



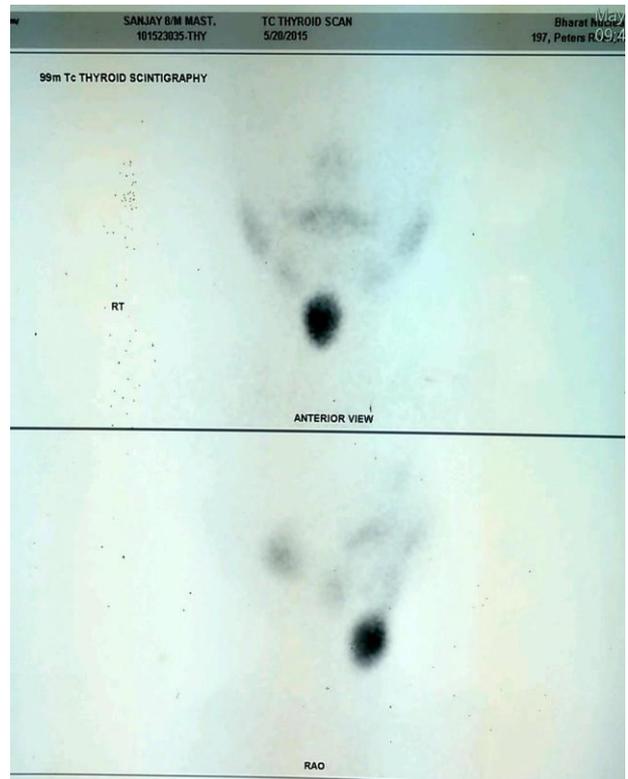
**CORONAL VIEW**

Orthotopic thyroid showing the hypoplastic left lobe

**FNAC (both normal and orthotopic thyroid)**

Normal thyroid cytology (no evidence of malignancy)

**RADIO ISOTOPE SCAN (99mTc)**



Ectopically located activity in the midline of neck is the only functioning thyroid tissue (distribution of tracer is uniform). No tracer is seen to localize in thyroid bed region (normal anatomical location of thyroid)

**3.DISCUSSION**

ETT is the presence of thyroid tissue in a site rather than the normal anatomical location of the gland.

Ectopic thyroid was first described by Hickman in 1869 in a newborn who was suffocated 16 hours after birth because of a lingual thyroid causing upper airway obstruction.

It is very rare to have two ectopic foci of thyroid tissue, and only a very few cases of dual ectopia have been reported in the world literature.

In 70% of cases of ectopic thyroid, the normal thyroid gland is absent. It is extremely rare to have dual ectopic thyroid with a normally located thyroid gland

Other sites of ectopic thyroid are suprahyoid and infrahyoid, lateral aberrant thyroid, substernal goiters, struma ovarii, and strumacordis. Ectopic thyroid has also been found in larynx, trachea, oesophagus, pericardium, diaphragm, and branchial cysts.

Rare cases of ectopic thyroid are described in parathyroid, cervical lymph nodes, submandibular gland, duodenal mesentery, adrenals, and carotid bifurcation. Ectopic thyroid occurs more commonly in females and are usually seen during adolescence and pregnancy when the demand for thyroid hormone increases .

Upto 70% of patients with lingual thyroid have hypothyroidism, and 10% suffer from cretinism.

Presence of two ectopic foci of thyroid tissue simultaneously is rare, and very few such cases of dual thyroid ectopia have been reported in the world literature. In an extensive review of the literature, Sood et al. found that the mean age of these patients was 15 years, more common in females with an F:M ratio of 1.25:1 .

The symptoms varied from asymptomatic to anterior neck swelling with or without altered thyroid status. In almost all of these patients, one site of ectopy was at lingual or sublingual region. The second ectopic focus was at subhyoid or suprahyoid level in most cases

Ectopic thyroid may be asymptomatic or produce symptoms due to its location. All diseases capable of affecting the normal thyroid can affect the ectopic thyroid like adenoma, hyperplasia, inflammation, and malignancy. The rate of malignant transformation in ectopic thyroid is no greater than in normally placed thyroid. Carcinoma of the lingual thyroid is a rare clinical entity with an estimated incidence of 1% . Follicular carcinoma is the commonest histopathological subtype .

But at other sites papillary carcinoma is more commonly seen. Therefore, for exact pathological diagnosis a biopsy should always be taken. In our case no evidence of malignancy was found on FNAC. Ectopic thyroid can coexist simultaneously with papillary thyroid carcinoma of normal thyroid. Lingual thyroid usually has a poorly defined capsule that leads to intermingling of glandular tissue with muscle elements raising the suspicion of malignancy.

#### 4.CONCLUSION

A subhyoid median ectopic thyroid gland is a rare anomaly which must be distinguished from a thyroglossal duct cyst prior to or at the time of operation in order to avoid excision with subsequent myxedema.

If a midline subhyoid mass is suspected of containing a solid component or if a normally placed thyroid cannot be palpated, a radioactive iodine scintigram should be done to assess the functional status of ectopic

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