

LINGUAL THYROID RESEMBLES TONSILLITIS

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A female baby aged about seven years came to an ENT specialist with difficulty in swallowing, pain in throat and fever following trauma by a fish-bone in the back of tongue.

Her temperature was 101°F pulse-84/min, there was reddish swelling at the back of the tongue, including the tonsillar fossa. She was treated by the specialist conservatively elsewhere and inflammatory symptoms were relieved. Then decision was taken for adenotonsillectomy. Before operative treatment she went to another ENT specialist for a second opinion. After keenly examined, a small rounded, reddish swelling was detected at the back of the tongue and clinically diagnosed as ectopic thyroid (Lingual) by the second specialist. The patient was referred to the Center For Nuclear Medicine and Ultrasound, Rangpur for radioisotope scanning. The diagnosis was confirmed by radioisotope scanning.

Injecting I/V 1mCi Tc^{99m}, no radiotracer were visualized in the neck region but increased concentration of tracer at the base of the tongue which later was confirmed by lateral view and the case was finally diagnosed as lingual thyroid. (Fig.1)

Thyroid hormones were estimated and found to be euthyroid. Values were T₃ = 2.43 nmol/L, T₄ = 112 nmol/L, TSH = 2.73 nmol/L.

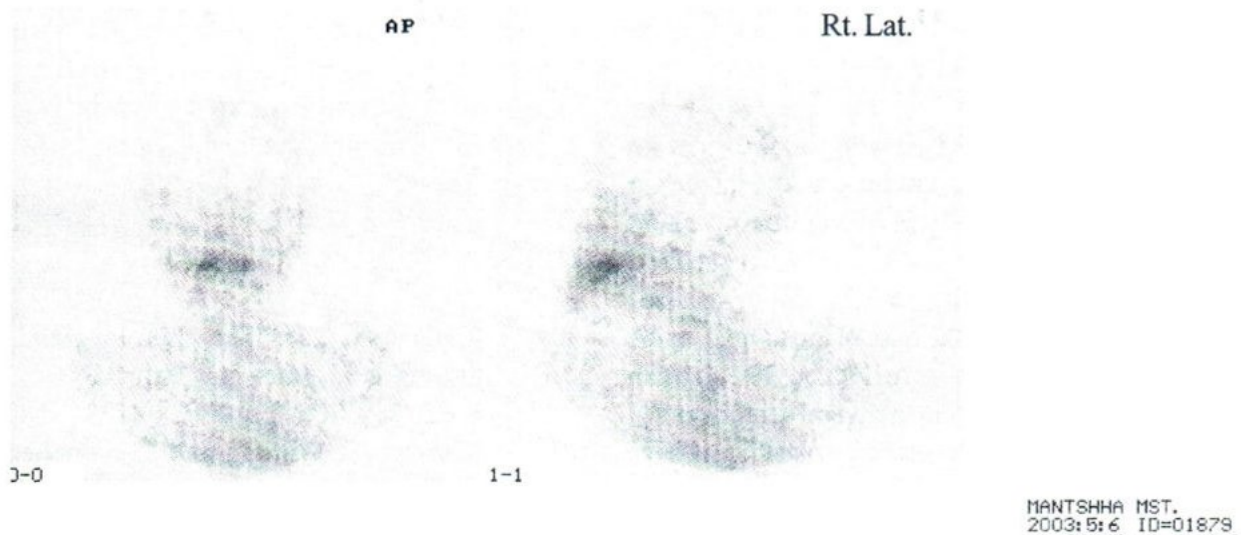


Fig. 1 Lingual thyroid.

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INTRODUCTION

The thyroid glands develops from the median bud of the pharynx which passed from the foramen caecum at the base of the tongue to the isthmus of the thyroid. Some residual thyroid tissue along the course of the thyroglossal tract is not uncommon and may be lingual, cervical, or intra-thoracic. Very rarely the whole gland is ectopic.¹

Lingual thyroid is a rounded swelling at the back of tongue at the foramen caecum, and it may represent the only thyroid tissue presented. When thyroid tissue occurs other than at the normal anatomical position, it may constitute a diagnostic or therapeutic problem. Most common ectopic form is the lingual thyroid, resulting from failure or incomplete descent of thyroid gland from its original embryological mid-line position at the back of the tongue.

DISCUSSION

The correct management of thyroid diseases depends on accurate diagnosis, appropriate management and careful monitoring. Radionuclide scan have always played a leading part in all aspects of the management of thyroid diseases and radionuclide scanning has long been the main method of investigating the thyroid in vivo.²

Lingual thyroid is an abnormal formation appearing as the result of a deficient descent during embryological development of the thyroid gland through the thyroglossal duct to its normal pretracheal location. The lesion consists of a tumor mass of thyroid tissue located at the base of the tongue, in the region of the foramen caecum linguae. The size can vary from a few millimeters to several centimeters in diameter. More than 400 cases of lingual thyroid have been documented in the literature to date.³

The ectopic thyroid (Lingual) usually present as a mid-line swelling at the back of the tongue or

upper neck or as a nodular goiter⁷ or as congenital hypothyroidism. Failure to recognize and diagnose a lingual thyroid swelling may lead to inadvertent excision and permanent hypothyroidism requiring life-long thyroid replacement.

The case presented with symptoms resembling tonsillitis i.e. painful dysphagia, fever and congestion of whole pharynx and after antibiotic treatment only the swelling at the base of the tongue persisted which was finally diagnosed as lingual thyroid by radioisotope scanning.

It was reported that, occasionally lingual thyroid resembling the neoplasm of the base of tongue.⁴

Rarely hyperthyroidism and malignancies were reported in lingual thyroid.^{5,6}

So it may be concluded that, any mid-line swelling at the back of the tongue should therefore always be investigated for the possibility of an ectopic thyroid before biopsy or excision as they may resemble tonsillitis, neoplasm of back of the tongue or cyst and presence or absence of a normally situated thyroid gland should also be confirmed by radioisotope scanning to avoid iatrogenic hypothyroidism and make the patient life long thyroxin dependent.

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