

A RARE INSTANCE OF LINGUAL TONSILLAR HYPERTROPHY

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ABSTRACT

The lingual tonsils are often overlooked as a component of Waldeyer's ring. Therefore, normal oropharyngeal examination cannot reveal their presence. The airway becomes obstructed as these tonsils enlarge. Here is a 77y old female who is a K/C/O allergic rhinitis and congenital torticollis, presented with complaints of dysphagia, foreign body sensation in throat since 3 weeks and no relieving factors. Due to its rarity in this age group, lingual tonsil hypertrophy is often mistaken for malignancy. Surgical excision is recommended, if medical management was inconclusive.

Keywords: Tonsil, Torticollis, Airway, Obstruction, Hypertrophy

INTRODUCTION

The lingual tonsils are a part of Waldeyer's ring and are composed of unencapsulated lymphoid tissue (Caylakli *et al.*, 2004). They are located in the posterior part of the tongue, bounded by the epiglottis at the back, the circumvallate papillae in the front, and the tonsillar pillars on each side (Caylakli *et al.*, 2004). Some patients experience pathological enlargement, leading to the development of symptoms (Renkonen *et al.*, 2018). Symptoms of lingual tonsil hypertrophy include dysphagia, a globus sensation, and a blockage of the upper airway, which is a major contributor to snoring and OSA-hypopnea syndrome (Renkonen *et al.*, 2018). It is not frequently seen in ordinary medical examination, although it is more usually observed during the administration of general anaesthesia (Hope *et al.*, 2016).

CASE

A 77y old female, K/C/O allergic rhinitis and congenital torticollis presented with complaints of dysphagia since 3 weeks. She also complained of foreign body sensation in throat since 3 weeks with no relieving factors.

On examination, oral cavity and oropharynx was normal.

On VDL, a nodular growth of size 2*3 cm, noted at the base of tongue on the left side and extending upto the left valleculae. On palpation, firm in consistency.

Patient underwent CT Neck plain and contrast-It showed non enhancing iso-dense lesion in the base of tongue on left side- suggestive of lingual tonsil hypertrophy.

The patient underwent EXCISION BIOPSY under GA which was challenging due to torticollis, and the mass was sent for HPE.

HPE shows benign lymphoid tissue lined by stratified squamous epithelium containing numerous crypts which is consistent with Lingual tonsillar hypertrophy.

DISCUSSION

Lingual tonsillar hypertrophy is primarily prevalent among children, while in adults it typically manifests without any noticeable symptoms. Although they are normally symmetrically distributed on both sides of the glossoepiglottic fold, the lingual tonsils can also be unilateral (Ovassapian *et al.*, 2002). The exact pathophysiology of LTH remains uncertain; however, factors such as atopy, smoking, GERD and chronic

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lingual tonsil infection are believed to potentially contribute to its development (Yamakawa *et al.*, 2009). Compensatory enlargement following tonsillectomy and/or adenoidectomy, is the most frequent cause of lingual tonsillar hypertrophy (Hope *et al.*, 2016). Atopy is the cause for LTH in this patient.



Figure 1: Patient with congenital torticollis presented to ENT OPD.

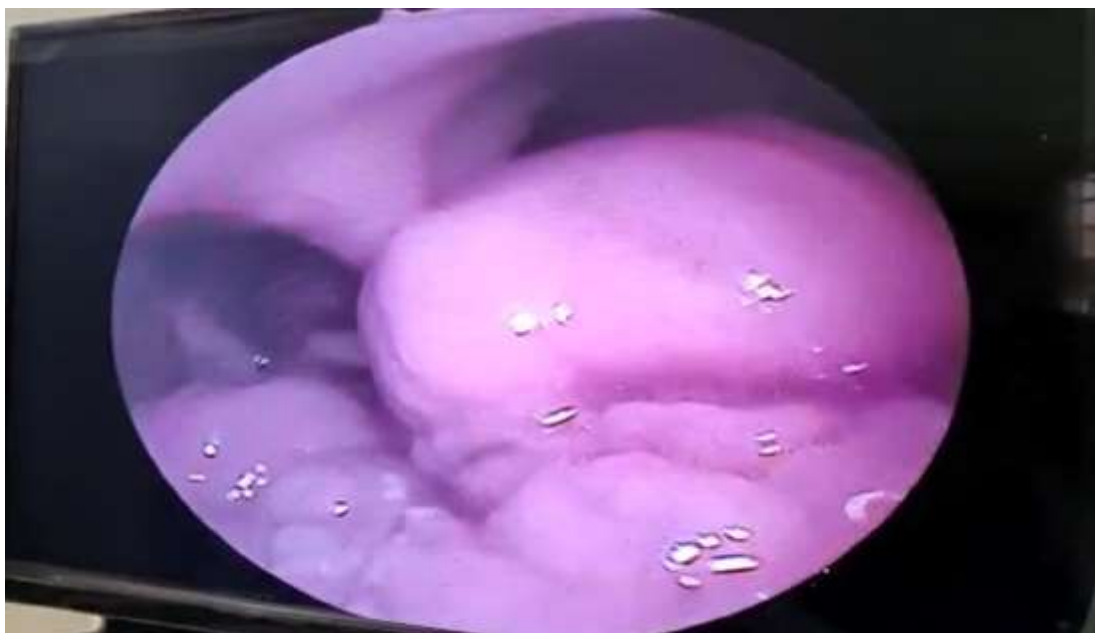


Figure 2: On VDL, nodular growth of size 2*3 cm, noted at the base of tongue on the left side and extending upto the left valleculae



Figure 3: Patient under GA and in position, Lingual tonsil can be visualised under direct vision



Figure 4: On Axial cuts in CT neck contrast study, Lingual tonsil hypertrophy visualised mainly on left side.

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To diagnose LTH, a thorough evaluation of the tongue base and hypopharynx is necessary using either indirect laryngoscopy or a fibre optic laryngoscope (Yamakawa *et al.*, 2009). If there is suspicion of a base of tongue mass, additional radiographic investigations, such as magnetic resonance imaging or computed tomography, can be conducted (Caylakli *et al.*, 2004). Here, in this patient, the lingual tonsils were found to be enlarged during VDL and this was later verified by CT neck.

Ectopic thyroid, thyroglossal duct cysts, dermoid cysts, angiomas, lymphangiomas, adenomas, fibromas, papillomas, squamous cell carcinomas, minor salivary gland tumors of the base of the tongue, lymphomas, and papillomas are all potential differential diagnoses for LTH (Yamakawa *et al.*, 2009).

Treatment should be based on the underlying cause, with smoking cessation or cessation of precipitating agents whenever possible and medical management of pre-existing conditions, such as the initiation of a proton pump inhibitor in GERD, analgesics and antibiotics in acute inflammation.

Surgical intervention is uncommon and is typically reserved for patients who present with symptoms of airway obstruction, tonsillar abscess, or recurrent infection that does not respond to antibiotic therapy (Caylakli *et al.*, 2004). Many methods are available, including dissection, electrocautery, cryotherapy, coblation and robotic surgery. Since it achieves haemostasis instantly and lessens the likelihood of postoperative haemorrhage, a common consequence of other new instruments, the carbon dioxide laser has quickly become a preferred tool (Caylakli *et al.*, 2004).

CONCLUSION

Lingual tonsil is commonly seen in young age group but in this case it is seen in the old age female, which is a rare presentation. It could have been misdiagnosed as malignancy because of the age group. Therefore, thorough history taking and clinical examination is important to identify the abnormalities associated with lingual tonsils.

Abbreviations: VDL: Video Directed Laryngoscope, CT: Computed Tomography, HPE: Histopathology, LTH: Lingual Tonsillar Hypertrophy, GERD: Gastroesophageal Reflux Disease

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REFERENCES

ÇAYLAKLI, AKKUZU, AVCI (2004). Lingual tonsillar hypertrophy: a case report. *Kulak Burun Bogaz Ihtis Derg*, **13**(1-2) 28-30.

Hope, Smith, Moran, Primrose (2016). An unusual case of lingual tonsillar hypertrophy. *Clinical Case Reports*, **4**(5) 526–527.

ovassapian, Glassenberg, Randel I, Klock, Mesnick S, Klawfta M (2002). The Unexpected Difficult Airway and Lingual Tonsil Hyperplasia. *Anesthesiology*, **97** 124–32.

Renkonen, Mäkitie A, Bäck (2018). Targeted Treatment with Radio Frequency Ablation for Lingual Tonsil. *Clinical Medicine Insights: Ear, Nose and Throat*, **11** 1–4.

Yamakawa, Andrade, Watanabe S, Santos N (2009). Lingual tonsil pseudolymphoma and obstructive sleep apnea. *Brazilian Journal of Otorhinolaryngology*, **75**(3) 469.