An unusual case of lingual tonsillar hypertrophy
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Key Clinical Message
Lingual tonsillar hypertrophy is an unusual presentation of voice change. If managed incorrectly this group of patients has the potential to deteriorate significantly causing airway obstruction and potentially death.

Keywords
Airway, emergency, ENT, otoloaryngology, tonsils.

We present a 68-year-old female referred to the ENT outpatient department with a several year history of altered speech that was deteriorating. On direct questioning it became apparent that she was suffering from “hot-potato” speech. She did not complain of any throat pain, dysphagia, weight loss, or breathing difficulties. Her past medical history was unremarkable except for rheumatoid arthritis that had been under control with long-term methotrexate. A thorough ENT examination was performed. Significant lingual tonsillar hypertrophy was revealed as pictured (Figure 1). This was so extensive it obscured visualization of the larynx on flexible nasolaryngoscopy. To allow a formal diagnosis and because of significant airway concerns, the patient underwent surgical excision of her lingual tonsils (Figure 2). Histopathology of the lesion was benign with features in keeping with lymphoid hyperplasia.

Questions
What are the lingual tonsils?
Where are the lingual tonsils found?

Lingual tonsils consist of lymphoid tissue
They are found at the base of the tongue with the base of the epiglottis lying posteriorly and the circumvallate papillae anteriorly.

Answers

Figure 1. Examination of the oropharynx at operation revealing significant lingual tonsillar hypertrophy.
Discussion and Outcome

Lingual tonsillar hypertrophy in adults is often asymptomatic. It can, however, present with vague symptoms including throat pain, dysphagia, voice changes, foreign body sensation, coughing and choking, and obstructive sleep apnea [1]. It is of clinical significance due to the potential for anesthetic difficulty, particularly as it is not always detectable on routine oropharyngeal examination [1]. Furthermore, it has the potential to cause fatal airway obstruction.

The most common cause of lingual tonsillar enlargement is compensatory enlargement following tonsillectomy. Other potential causes include lymphoma, chronic infection and HIV. Irritation such as from smoking and gastro-oesophageal reflux disease (GORD) can also cause lingual tonsil hypertrophy. Immunosuppressant drugs, as was the case in this patient, are also known to cause enlarged lingual tonsils [2].

Management should be guided by the cause, with cessation of triggering agents if possible, for example, smoking, or medical management of pre-existing conditions, such as, commencement of a proton pump inhibitor in GORD.

Surgical excision is only recommended if medical management has failed and the patient remains symptomatic. The procedure is often difficult due to difficult access, poor visualization and difficult haemostasis. There is also risk of airway edema and patients complain of excessive postoperative pain [3]. Improved exposure can be obtained by using suspension laryngoscopy or transoral endoscopy [4]. In our case, excision was undertaken using bipolar scissors. Other surgical techniques have been described in the literature including the use of CO2 laser and suction debrider [1] though bleeding is still an issue. Coblation, though still controversial as a method for palatine tonsillectomy, appears to be a reasonable option with improved intraoperative haemostasis and therefore visualization [3]. The most recent technique is transoral robotic surgery [5] – while minimally invasive, both the high cost of the procedure and availability of equipment limits this option in many centers.

Take Home Message

Given the paucity of literature and lack of awareness regarding lingual tonsillar hypertrophy, we feel this case highlights the clinical importance of a careful clinical history and examination. If managed incorrectly this rare group of patients has the potential to deteriorate leading to airway obstruction.

Conflict of Interest

None declared.

References

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