An unusual presentation of globus

Introduction

Globus pharyngeus is the term for the sensation of a lump or discomfort in the throat without true dysphagia. Symptoms are reduced by eating but are more pronounced between meals and during a dry swallow.

Lipomas of the head and neck grow insidiously and represent 13% of all lipomas. They are most commonly found in the posterior neck (Wenig, 1995), but have been reported in the oral cavity, tonsillar area, parapharyngeal space, infratemporal fossa, hypopharynx, larynx and nasopharynx (Yoskovitch et al, 1999). They consist of encapsulated adipose tissue cells separated by fibrous trabeculae. They are well-circumscribed solitary tumours with a male preponderance. Although benign, they have relatively rare potential for malignant change. Computed tomography (CT) or magnetic resonance imaging (MRI) are the investigation of choice for definitive preoperative diagnosis, but final histological confirmation is essential. Treatment of laryngeal lipoma varies from conservative endoscopic removal to external surgical approaches.

This article reports a rare laryngeal lipoma involving the left arytenoid and aryepiglottic fold excised endoscopically with complete amelioration of symptoms.

Discussion

Globus pharyngeus is common, accounting for up to 5% of referrals to ear, nose and throat departments with a female preponderance. The exact cause of globus pharyngeus is unknown but it has been associated with gastro-oesophageal reflux disease, cervical spondylosis associated with increased neck muscle tension and anxiety disorders. Malignant tumours of the head and neck including post-cricoid web laryngeal tumours should be considered in the differential diagnosis.

About 120 cases of laryngeal lipomas have been reported in the literature. They predominantly affect men during the sixth decade of life. Although they are solitary and occur sporadically, they have been associated with disorders including Madelung's disease (benign symmetric lipomatosis associated with excessive alcohol consumption), Dercum's disease (painful lipomas), familial multiple lipomatosis (autosomal dominant inheritance) and Gardner's syndrome which is a variant of familial adenomatous polyposis (El-Monem et al, 2006).

The aetiology of laryngeal lipomas remains unclear. It has been suggested that they affect the false cords and aryepiglottic fold because these subepithelial structures have lipid as a major constituent. Multipotential fibroblasts may also differentiate into fat cells and form a lipoma (Yoskovitch, 1999).

Smaller laryngeal lipomas may remain asymptomatic, but larger ones commonly cause globus pharyngeus sensation, dysphonia and respiratory distress. Grossly they appear as a yellow, smooth, well-demarcated mass. Microscopically they are composed of adipocytes and are well vascularized (Eckel and Jungehulsing, 1994).

Endoscopically they may appear as a submucosal mass or pedunculated intraluminal projection and may be confused with a laryngocoele, chondroma, mucous retention cyst or a papilloma.

Both CT and MRI scans have been used in the diagnosis of laryngeal lipomas. Unfortunately in this case radiological imaging of the patient's laryngeal lipoma was not possible because of her extreme claustrophobia despite sedation. The characteristic appearance on CT is that of a low attenuated homogeneous mass ranging between 60 and 120 Houndsfield units. On MRI scans, fat has high intensity on T1-weighted images compared to

Case Report

A previously fit 49-year-old school teacher presented to the ear, nose and throat department with a 6-week history of globus pharyngeus symptoms – a clicking sensation in her throat associated with some odynophagia and dysphonia. There was no absolute dysphagia but she described a feeling of a lump of phlegm stuck in her throat which was she was unable to clear and which kept her awake at night. She had recently started taking proton pump inhibitors to treat possible reflux oesophagitis and was a lifetime non-smoker.

Fibreoptic laryngoscopy revealed a single large smooth-surfaced polypoidal swelling lateral to the left arytenoid and occluding the ipsilateral piriform fossa, but not obstructing the laryngeal inlet. There was no restriction in movement of her vocal cords. Her ear, nose and throat examination was otherwise unremarkable. Owing to her profound claustrophobia and phobia of intravenous injections, she refused a computed tomography scan and magnetic resonance imaging scan with sedation but consented to a microlaryngoscopy with a view to excising the whole lesion for histological analysis.

Subsequently, microlaryngoscopy revealed a large yellow lesion covered by normal mucosa lateral to the left aryepiglottic fold which was occupying but not extending beyond the left piriform fossa (Figure 1). The lesion was fully excised (Figure 2) and sent for histology, which confirmed the diagnosis of lipoma. She made an uneventful recovery with no signs of recurrence after 12 months during surveillance in the outpatient clinic with full restoration of the quality of her voice and swallowing.

Figure 1. Endoscopic laryngeal photograph of lipoma.

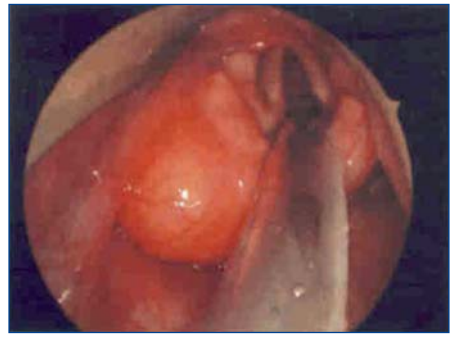
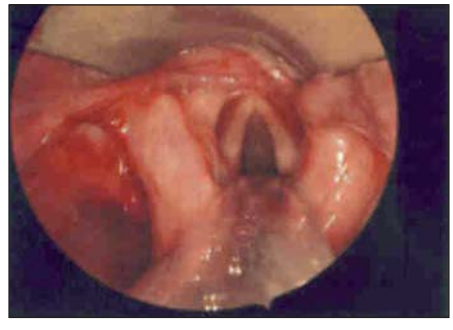


Figure 2. Endoscopic laryngeal photograph post-excision of lipoma.



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T2 weighting. However, MRI scans offer enhanced soft tissue delineation and visualization of laryngeal musculature because of their superior soft tissue contrast resolution. This further aids the radiological differentiation of laryngeal lipomas from other benign lesions.

Laryngeal lipomas may increase in size and cause airway obstruction (Aland, 1996). They should be included in the differential diagnosis of both benign and malignant laryngeal masses and complete surgical excision remains the treatment of choice for laryngeal lipomas to determine histological diagnosis. Smaller tumours can be removed endoscopically. An external approach using a lateral pharyngotomy is advocated for larger tumours (Trizna et al, 1991).

Conclusions

Although laryngeal lipomas are rare, they may present with symptoms resembling globus pharyngeus. Their diagnosis is important as they can cause fatal airway obstruction by protruding into the larynx. Surgical excision for histological analysis is necessary to exclude a malignant cause. CT and MRI scans are useful preoperative diagnostic modalities for laryngeal lipomas. The size and location of the laryngeal lipoma must be considered before planning excision, and surgery must be function sparing. **BJHM**

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