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Case Report

Laryngeal Lipoma: A Rare Cause of Tracheostomy

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Abstract

Laryngeal lipoma is a rare cause of upper airway obstruction. Here we report a case of lipoma which is located at the three subsites of the larynx: supraglottis, glottis and subglottis, in a 58 years old woman who presented with dysphonia for 2 years which subsequently developed into laryngeal dyspnea requiring an emergency tracheotomy. Suspension microlaryngoscopy with submucosal removal of the tumor was performed. Histologically, the tumors composed of mature adipose tissue without any evidence of malignant cells. The patient was fully recovered and the tracheostomy closed a few days later.

Keywords: *Larynx; Lipoma; Dyspnea; Tracheostomy; Endoscopic Surgery*

Introduction

Lipomas are benign tumors that comprise 0.6% of all benign laryngeal tumors, mostly occurring in men during their 6th decade [1,2]. Most of patients develop airway obstruction due to progressive growth of this tumor [1- 3], sometimes patients maybe asymptomatic or have non-specific symptoms like dyspnea, paroxysmal coughing, sleep apnea/snoring and dysphagia [1-3].

Case Observation

A 58-year-old female patient, with no medical or surgical history, who presented isolated dysphonia that had been gradually worsening for two years. The patient was admitted to our department due to inspiratory dyspnea with stridor, supraclavicular retractions which led us to request an emergency CT scan (Figure 1 and 2). CT scan showed a low density mass encapsulated with a long axis of 30 mm, interesting the three glottic floors of the larynx and which bombs in the laryngeal lumen and stretches down to the trachea. There was no associated cervical lymphadenomegaly.

Figure 1: *Axial CT scan of the neck revealing a well-defined mass of a very low-density without enhancement, highly suggestive of lipoma (white arrow).*

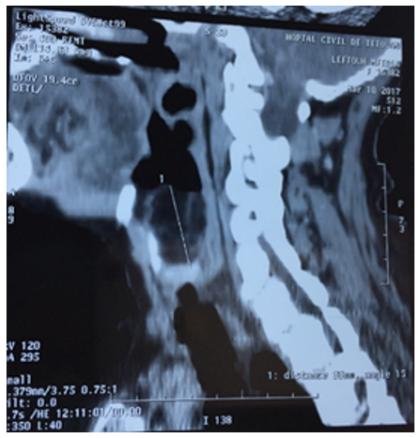

Figure 1: *Sagittal reconstruction of axial CT scan Showing a well-defined oval mass (white arrows) and regular margins, encapsulated, with lipomatous density, at level of hyoid bone.*

We performed an emergency tracheotomy then an examination by laryngeal nasofibroscopy which highlighted a submucosal process of the right ventricular fold with a fixity of the right arytenoid. This process overflowed on the glottal plane preventing its visualization.

Suspension microlaryngoscopy with submucosal removal of the tumor was performed. Using microscopic instruments, the tumor was dissected free from its capsule and removed. The tumor was measured as 3 × 2 × 2 cm. The overlying mucosa was left intact and the wound was closed with biological glue (Figure 3-5).

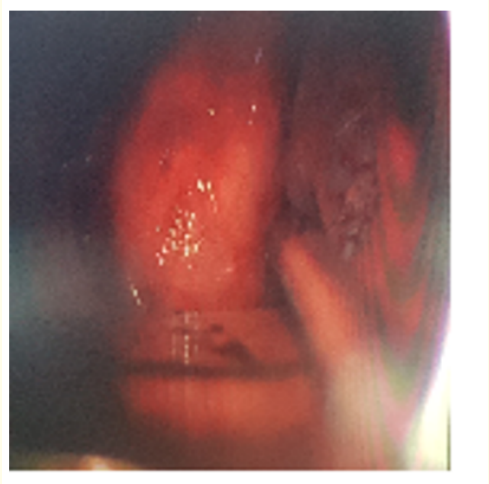

Figure 3: *Perioperative image of suspension microlaryngoscopy showing the laryngeal lipoma (white arrow).*

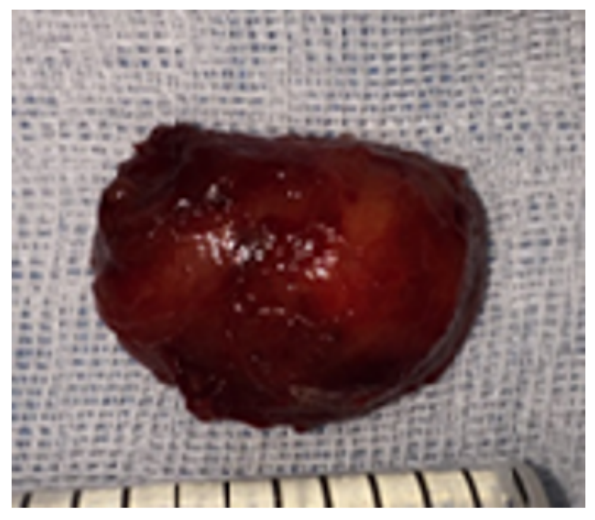

Figure 4: *Surgical specimen after excision.*

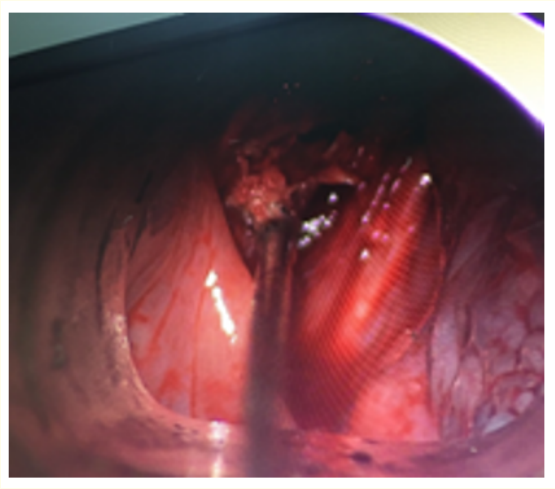

Figure 5: *Perioperative image after the lipoma's removal showing the wound closed with biological glue.*

The histopathological exam was compatible with lipoma without any evidence of malignant cell. The patient recovered uneventfully and the tracheostoma closed a few days later.

Endoscopic control was conducted tree weeks later with evidence of healthy scared tissue.

Discussion

Lipomas are benign mesenchymal tumors derived from mature adipocytes, characterized by their slow growth. They are common in other parts of the body, its location on the larynx is very rare, accounting only for 0.6% of cases [4]. They involve above all, the supraglottic larynx and arise from fat tissue of the laryngeal vestibule, aryepiglottic fold and epiglottis [5]. The etiology of lipoma is unknown. Many studies showed that lipomas are the result of growing embryogenetic lipoblast cells or metaplastic muscle cells, while others suggested a possible involvement of trauma, endocrine factors, infections, obesity or chronic irritating conditions [6]. They are more frequent between the 4th and 5th decade of life [7]. Symptoms linked to lipomas of the upper aerodigestive tracts may take months or even years to appear. It depends on the location, the size and compression of the surrounding anatomical structures. Symptoms can range from hoarseness, dysphonia to laryngeal dyspnea requiring emergency tracheostomy [8]. Contrasted neck CT scan and Magnetic resonance imaging (MRI) can correctly diagnose the lipoma before surgery. CT scan allows a good estimation of the size as well as the extent of the lipoma which has the appearance of a homogeneous process non enhanced after contrast injection [9], however the MRI allows a better examination of the soft tissues and higher definition of the location and the extent of the lipoma [10,11].

The treatment consists in the complete excision of the lesion. Surgical resection by cervicotomy would be indicated in cases of extrinsic vascular compression and upper aerodigestive tract compression with visceral infiltration otherwise it could be removed by endoscopic surgery [12]. Because of the risk of recurrence, long-term follow-up of these patients is mandatory [12,13]. The event of one or more recurrences after surgical excision may be indicative of low grade sarcoma and should be subjected to further investigations [14].

Conclusion

Lipoma is a benign tumor, but its laryngeal location is a real danger given the risk of respiratory distress that can compromise the patient's life. Early diagnosis and immediate management which usually consists of an endoscopic surgical excision or open surgery provides to the patient an uneventful recovery.

Bibliography

1. Khorsandi Ashtiani MT., *et al*. "Large lipoma of the larynx: a case report". *Acta Medica Iranica* 48.5 (2010): 353-356.

2. Jungehulsing M., *et al*. "Rare benign tumors: laryngeal and hypopharyngeal lipomata". *Annals of Otology, Rhinology, and Laryngology* 109.3 (2000): 301-305.

3. Joyson K., *et al*. "Lipoma and liposarcoma of the larynx: case reports and literature review". *American Journal of Otolaryngology-Head and Neck Medicine and Surgery* 36.4 (2014): 611-615.

4. Parmar SC and Blackburn C. "Madelung's disease: an uncommon disorder of unknown aetiology?" *British Journal of Oral and Maxillofacial Surgery* 34.5 (1996): 467-470.

5. Zbaren P., *et al*. "Rare benign neoplasms of the larynx: Rhabdomyoma and lipoma". *ORL: Journal for Oto-Rhino-Laryngology and its Related Specialties* 57.6 (1995): 351-355.

6. Singhal SK., *et al*. "Myxolipoma of the epiglottis in an adult: a case report". *Ear, Nose and Throat Journal* 84.11 (2005): 728, 730, 734.

7. Barnes L and Ferlito A. Soft tissue. Neoplasms". In: Ferlito A, editor. "Neoplasms of the larynx". First edition. London: Churchill-Livingstone (1993): 265-304.

8. Barry B., *et al*. "Retro-pharyngeal and pharyngeal-laryngeal lipomas". *Annales d'Oto-Laryngologie et de Chirurgie Cervico-Faciale* 117.5 (2000): 322-326.

9. El-Monem MH., *et al*. "Lipomas of the head and neck: presentation variability and diagnostic work-up". *Journal of Laryngology and Otology* 120.1 (2006): 47-55.

10. Cappabianca S., *et al*. "Lipomatous lesions of the head and neck region: imaging findings in comparison with histological type". *La Radiologia Medica* 113.5 (2008): 758-770.

11. Rana K., *et al*. "Lipoma in unusual head and neck region: case series of 4 patients". *International Journal of Pediatric Otorhinolaryngology Extra* 8.3 (2013): 75-78.

12. Guillermo Arturo LC., *et al*. "Laryngeal Lipoma Associated with Madelung's Disease: A Case Report". *Acta Otorrinolaringologica Española* 63.4 (2012): 311-313.

13. Nuno Ribeiro Costa., *et al*. "Lipoma of the pre-epiglottic space: A common pathology in an uncommon place". *Acta Otorrinolaringologica* 69.3 (2017): 181-182.

14. Esclamado RM., *et al*. "Laryngeal liposarcoma". *Archives of Otolaryngology - Head and Neck Surgery* 120 (1994): 422-426.

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