Open Journal of
Clinical & Medical
Case Reports

Volume 8 (2022)
Issue 09

ISSN: 2379-1039

Large lipoma in the supraglottic larynx: A case report

Ilham Rkain; Elhassouni Adam*; Borki Rajae; Mimouni Hicham

***Corresponding Author: Elhassouni Adam**
ENT surgery department, University Hospital, Al Kortobi Hospital Tangier, Morocco.
Email: elhassouniadam@gmail.com

Abstract

Lipoma is a benign mesenchymal tumor that occurs relatively rarely in the upper aero-digestive tract, because this lesion grows slowly, it can cause a variety of symptoms because of the mass effect, which causes obstruction and compression of nearby tissues, we describe a case of 58-year-old man with a large lipoma in the supraglottic area removed through an endoscopic approach, the final pathologic diagnosis was lipoma, furthermore, it is important to remember that lipomas can reappear after long periods of time without treatment, thus long-term monitoring of these patients is required.

Keywords

Lipoma; Larynx; Supraglottic; Soft tissue; Endoscopic techniques.

Introduction

The lipoma is the most common neoplasm of mesenchymal origin, but only 13% occur in the head and neck region, with the majority occurring subcutaneously in the posterior neck, they can appear in the anterior neck, infratemporal fossa, and in or near the oral cavity, throat, larynx, and parotid gland on rare occasions [1].

Lipomas are benign mesenchymal tumors that make about 0.6% of all benign laryngeal tumors [2], they primarily affect males in their sixties.

These tumors are generally found in areas that contain a high proportion of subepithelial fat, such as the epiglottis and aryepiglottic folds [3]. Patients with laryngeal lipomas may be asymptomatic or have nonspecific symptoms such as dyspnea, paroxysmal coughing, sleep apnea/snoring, and dysphagia, making diagnosis difficult, Furthermore, due to the tumor's gradual growth patients may develop an airway obstruction, We herein present a case of a large lipoma arising from the supraglottic area, along with a review of the literature.

Case Report

A 58-year-old male with no notable pathological history, presented for three months a symptomatology such as difficulty swallowing and breathing associated with a chronic cough. He did not complain of odynophagia, reflex earache, or weight loss, the cervical palpation did not reveal any adenopathy.

Transnasal flexible endoscopy showed a large, round, smooth mass on the laryngeal side of the epiglottis in front of the area of the three folds. Approximately 75% to 80% of the supraglottic area was obstructed, the lesion was translucent in appearance and covered by normal non hemorrhagic mucosa, both vocal cords incompletely visible were mobile and symmetrical, the pyriform sinuses showed no abnormalities.

Radiological findings indicated a diagnosis of a large lipomatous mass arising from the supraglottic space. An injected cervical CT scan (Figure 1) revealed the presence of a supraglottic mass that could correspond to a laryngocele but whose density suggested a fatty tissue. With the patient under propofol-curare anesthesia, despite the 80% obstructed supraglottic area we were able to intube it, avoiding the tracheotomy, a suspension laryngoscopy was performed, and a large, smooth, yellowish mass presented itself. The tumor was covered with an intact mucosa and was attached by a sessile base to the laryngeal face of the epiglottis.

The neoplasm was grasped with a Lynch grasping forceps and pulled to one side. An incision was made with a scalpel through the mucosa which enveloped the base of the tumor, and the mucous membrane was reflected from the capsule of the mass. Scissors were employed to free the capsule of the tumor from its bed, and a surgical cutter was used to sever the sessile base. The surgical specimen (Figure 2) was oval and measured 40 x 35 mm (HxW) mm.

Microscopic section revealed the lipomatous structure (Figure 3) and the lesion was eventually identified as a supraglottic lipoma. After the operation, the patient made a full recovery, transnasal flexible endoscopy indicated no recurrence during the 3-month follow-up, and the subglottic airway remained unobstructed (Figure 4).

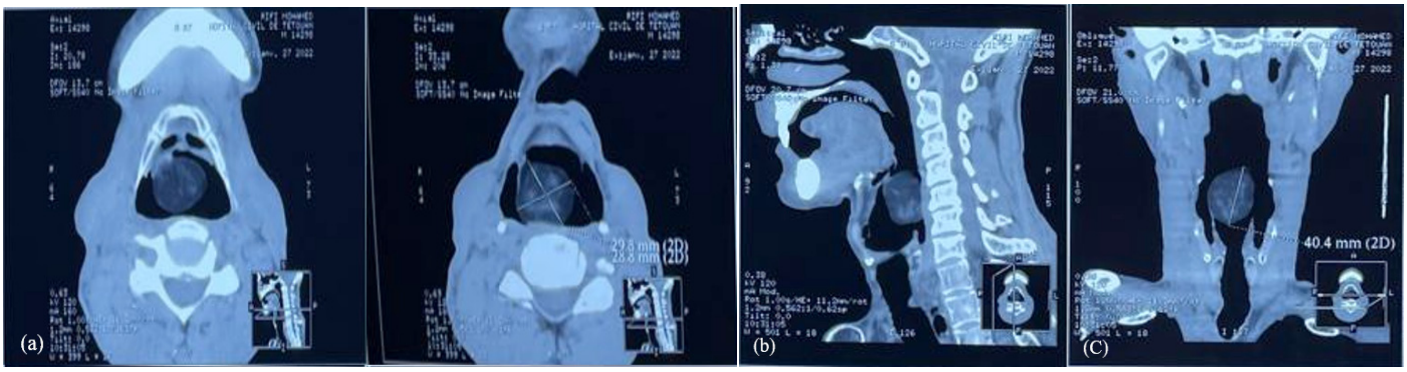

Figure 1: **(a)**: Axial CT of the neck shows the mass in area of the right epiglottis and backward the right glosso-epiglottic ligament, **(b)**: In the sagittal plane, the mass is seen at the level of C5 attached to the laryngeal surface of the epiglottis, **(c)**: coronal CT shows a mass in the supraglottic space just above the right arytnoid.

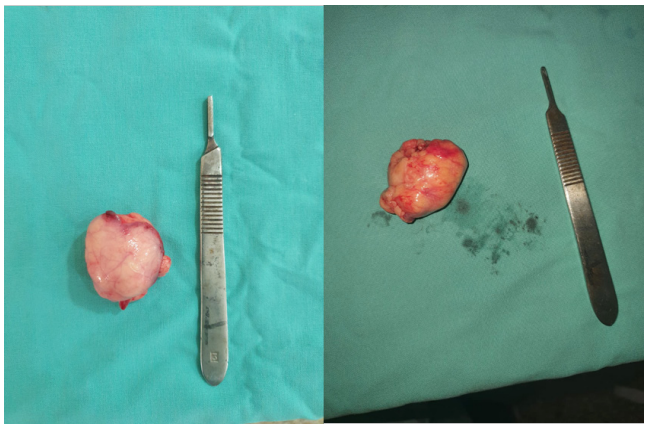

Figure 2: Removed mass

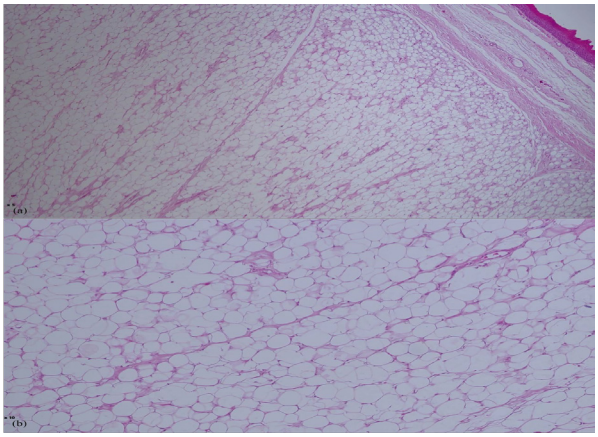

Figure 3: Microscopic examination showed vacuolar lipoma cells a, ×5; b, ×10.

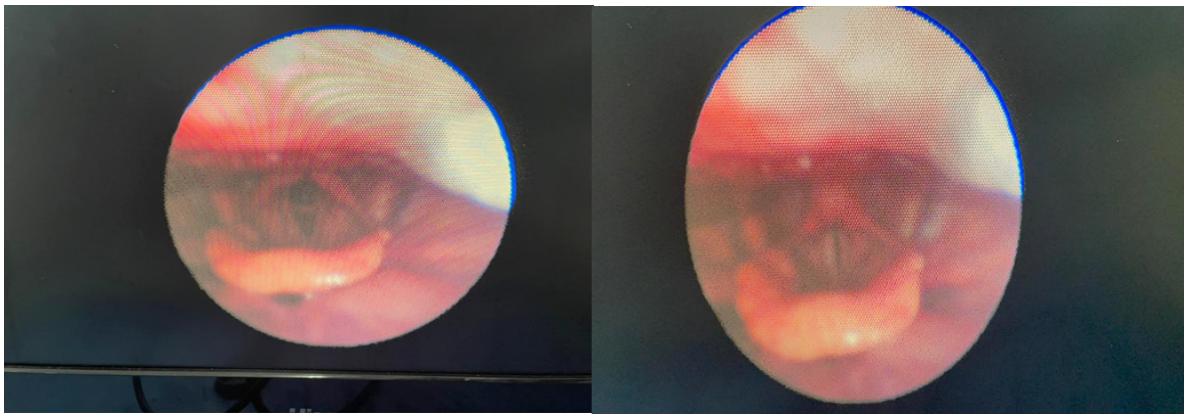

Figure 4: Transnasal flexible endoscopy at the 3-mounth follow-up visit showed no reccurence and an unobstructed subglottic airway.

Discussion

Lipomas are slow-growing benign tumors generated from mesenchymal cells, unless they intrude on or compress nearby structures, they are normally asymptomatic.

Lipomas commonly occur on the trunk and limbs because these are areas that have high subcutaneous fat content, and they account for 4% to 5% of all benign tumors of the human body [4].

In the larynx, lipomas are generally located in the supraglottic area, but they are sometimes (rarely) found in the subglottic area [5], There are four main differential diagnoses when evaluating fatty lesions of the larynx: Lipoma, liposarcoma, lipoblastoma, and hibernoma, differentiating liposarcomas and lipomas on imaging can be challenging due to subtle findings that may favor a liposarcoma [6]. Hemorrhage and necrosis are suggestive of liposarcoma, while complete fat suppression, lack of septations, and no enhancement favor the diagnosis of lipoma [7]. Angiography might aid in differentiation due to hypervascularity in liposarcomas.

Lipoma and liposarcoma are treated in the same way surgically, if the tumor is a liposarcoma, it should be usual procedure to remove it completely, both lipoma and liposarcoma are treated with surgery first, in terms of the extent to which the tumor was excised, surgical excision method plays a big effect

in liposarcoma prognosis [8]. The treatment of laryngeal lipomas is controversial, endoscopic excision of the lesion has been recommended in several studies [9]. Yanagisawa and Hausfeld narrowed the scope of endoscopy's application to pedunculated tumors, while submucosal tumors should be removed using an external approach [10].

For optimal exposure, large non pedunculated tumors require an external approach employing thyrotomy, transhyoid, or lateral pharyngotomy, at the same time emphasizing complete resection to eliminate any possible recurrence, identification of the superior and recurrent laryngeal nerves is mandatory to avoid compromising laryngeal function.

Given that the tumor was pedunculated and well limited, and its lower pole were accessible in the supraglottic space, that's why an endoscopic excision was tempted and it has succeeded.

A recurrence of lipoma is rare and may be due to one of two reasons; the lesion is a well-differentiated liposarcoma and not a classic lipoma or due to incomplete resection of the lesion [11]. And because lipomas can recur even after several years, long-term monitoring is required.

Conclusion

Lipomas are benign mesenchymal tumors that occur in the upper aerodigestive tract on a rare occasion. These tumors may go unnoticed in the clinic for years because to their sluggish growth; if large enough, they can cause compression of the surrounding cervical structures and, in some cases, life-threatening symptoms (dyspnea, asphyxia). Imaging techniques (CT scan, MRI) are beneficial for a more accurate diagnosis and in establishing the optimal therapy strategy for the specific patient. The treatment of choice is surgery, which can be performed endoscopically or externally. The selection of these surgical techniques is based on several lipoma characteristics (site, size, peduncle, submucosal growth).

It is critical to completely remove these lesions to avoid recurrences, which have been reported in the literature.

The likelihood of recurrence after long free intervals should be considered; consequently, a long-term follow-up time is required.

Acknowledgments: The author would like to acknowledge Open Journal of Clinical and Medical Case Reports for critical review of the manuscript

References

1. Som PM, Scherl MP, Rao VM, Biller HF. Rare Presentations of Ordinary Lipomas of the Head and Neck: A Review. 1986; 8.

2. Cukić O, Nikolić S, Jovanović M. Large lipoma of the larynx and its removal using a laryngofissure approach: Case report », Mater. Medica. 2017; 33: 1499-1502, 2017.

3. Durr ML, Agrawal N, Saunders JR, Ha PK. Laryngeal Lipoma Associated with Diffuse Lipomatosis: Case Report and Literature Review. Ear. Nose. Throat J. 2010; 89: 34-37.

4. Ma Y, Zhou B, Wang S. Large lipoma in the subglottic larynx: a case report. J. Int. Med. Res. 2020; 48: 030006052092878.

5. Wenig BM. Lipomas of the larynx and hypopharynx: A review of the literature with the addition of three new cases. J. Laryngol. Otol. 1995; 109: 353-357.

6. Okromelidze L, Middlebrooks EH, Bhatt AA. Lipoma of the Larynx and Other Differential Diagnoses. J. Clin. Imaging Sci. 2019; 9: 2019.

7. Vincentiis MD. Lipoma of the larynx: A case report Lipoma della laringe: Un caso clinico. 6.

8. Gagari E, Kabani S, Gallagher GT. Intraoral liposarcoma: Case report and review of the literature. Oral Surg. Oral Med. Oral Pathol. Oral Radiol. Endodontology. 2000; 89: 66-72.

9. Azimivaghar J, Javadirad E, Montazer S. Laryngeal Lipoma: A Clinicopathologic Case Report », Indian J. Otolaryngol. Head Neck Surg. 2019; 71: 876-878.

10. Yoskovitch A, Cambronero E, Said S, Whiteman M, Goodwin WJ. Giant Lipoma of the Larynx: A Case Report and Literature Review. Ear. Nose. Throat J. 1999; 78: 122-125.

11. Nader S, Nikakhlagh S, Rahim F, Fatehizade P. Endolaryngeal Lipoma: Case Report and Literature Review. Ear. Nose. Throat J. 2012; 91: E18-E21.

Manuscript Information: Received: June 13, 2022; Accepted: July 04, 2022; Published: July 15, 2022

Authors Information: Rkain Ilham[1,2]; Elhassouni Adam[1]*; Borki Rajae[3]; Mimouni Hicham[1]

[1]ENT surgery department, University Hospital, Al Kortobi Hospital Tangier, Morocco.

[2]Abdelmalek Saadi University, Faculty of Medicine and Pharmacy, Tangier, Morocco.

[3]ENT Unit, Provincial Hospital, Tetouan, Morocco.

Citation: Rkain I, Adam E, Rajae B, Hicham M. Large lipoma in the supraglottic larynx: A case report. Open J Clin Med Case Rep. 2022; 1871.