Case Report

Fibrolipoma of the Hypopharynx

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ABSTRACT

Introduction:
Hypopharyngeal lipomas are rare tumors of head and neck which present with vague symptoms like dysphagia, foreign body sensation in throat, feeling of something coming to the throat or mouth, choking sensations or with symptoms of obstructive sleep apnea. These tumors can cause upper airway obstruction and even asphyxial deaths presenting as medical emergency.

Case report:
We report one such case of a 38 year old female with hypopharyngeal lipoma who had presented to us with symptoms of dysphagia, choking episodes and foreign body sensation in throat.

Discussion:
Laryngoscopic examination in these cases is diagnostic to assess its size and site of attachment. Imaging studies like CT scan or MRI help in diagnosis.

Keywords:
Hypopharyngeal Neoplasms; Lipoma; Dysphagia; Airway Obstruction

Lipomas as such are very common benign tumors of the body but their location in the larynx and the hypopharynx is rare. They represent less than 0.6% of the benign tumors of the larynx and the hypopharynx.[1,2] Because of their relatively rare occurrence and vague symptoms that they cause, it can be confused with other pathologies. Large pharyngeal lipomas even present with respiratory distress due to upper airway obstruction. Here we present a case of such hypopharyngeal mass which had presented to us with symptoms of dysphagia, choking episodes and foreign body sensation in throat.

Case Report

A 38 year old lady, known hypertensive under treatment, non-smoker had presented to us with symptoms of dysphagia, choking episodes and foreign body sensation in throat since 1 month. Her routine head and neck examination was normal except for a mass coming to the mouth on coughing seen on mirror examination. The mass was smooth and floppy which was intermittently obstructing the laryngeal inlet. Its attachment was not seen clearly on indirect laryngoscopy. Videolaryngoscopy revealed a pedunculated mass seen attached to the right posterior pharyngeal wall hanging over the glottis and obstructing the airway intermittently. (Figs. 1 & 2) However, patient did not present with any acute obstructive symptoms like stridor.

Imaging studies with CT NECK revealed a well defined lobulated, fat attenuated lesion measuring 1.5x1.7x2.6 cm in the pharyngeal lumen, attached to the right posterolateral pharyngeal wall with no enhancement on contrast study. Prevertebral, paravertebral soft tissues and adjacent muscles appeared normal.

Patient was then planned for excision of the lesion under general anesthesia. Intubation in this patient was smooth with no difficulty in passing the endotracheal tube.

On examination, the mass was found attached by

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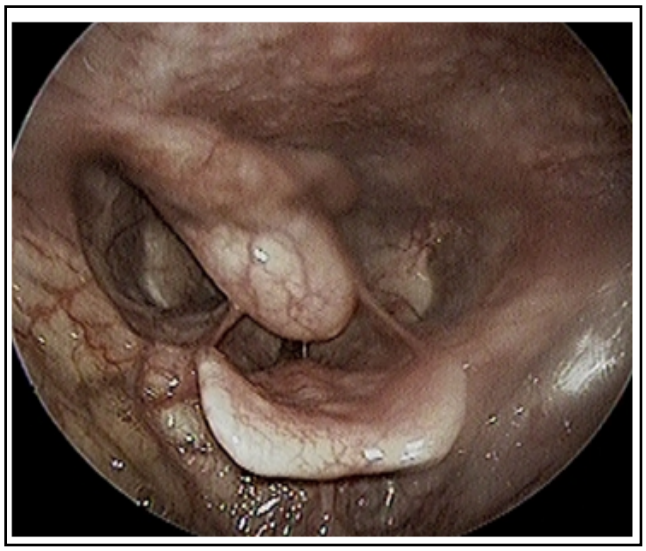

Fig. 1. Pedunculated hypopharyngeal mass

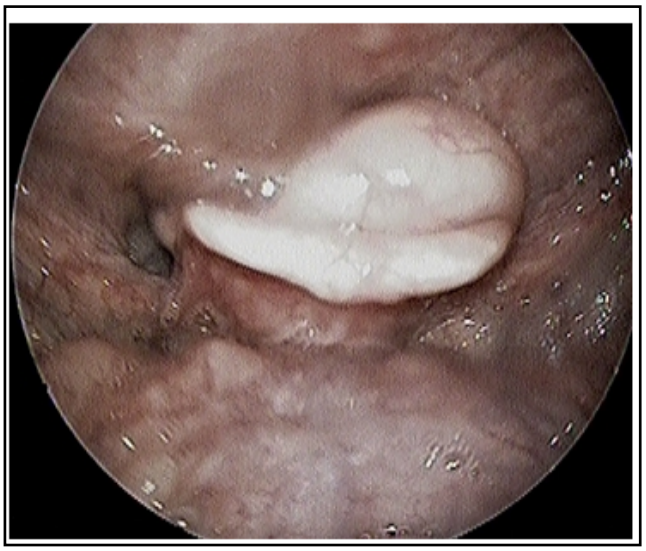

Fig. 2. Mass obstructing the laryngeal inlet

a pedicle to the right posterior pharyngeal wall with easy accessibility transorally.

A Boyle Davis gag was applied and the mass with its attachment was visualized with the help of microscope and removed with scissors and diathermy. (Fig. 3) The pharyngeal excision site was left unsutured and specimen sent for histopathological examination. After surgery, patient had immediate relief in her symptoms and discharged the next day. Endoscopic examination after 1 week revealed a healthy scarred stump at the site of excision. Patient was followed for a period of 2 months with no recurrence and is still on follow-up.

Histologically, the tumor was reported to be a 2.8x 2.5x1.5 cm sized bilobed pedunculated fibrolipoma displaying large islands of adipose tissue, punctuated by bands of fibrocollagenous tissue. The tumor was lined externally by pharyngeal squamous epithelium with no evidence of malignancy. (Fig. 4)

Discussion

Lipomas are mesenchymal tumors derived from mature adipocytes and characterized by their slow rate of growth.[3] Although common in the soft tissues of neck, they are rarely seen in the upper aerodigestive tracts. They may be single or multiple, sessile or pedunculated, and well encapsulated with smooth fleshy consistency.[3] They are reported to occur more often in the elderly.[4]

The etiology of lipomas is unknown; however some authors have suggested that they derive from lipoblasts or by a metaplasia of muscle cells, while others have suggested a possible etiopathological role of familial and endocrine factors or conditions such as trauma, infection, or chronic diseases.[5]

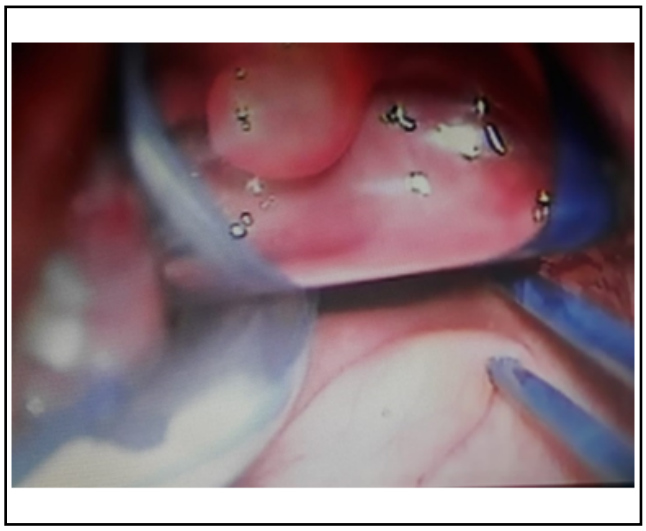

Fig. 3. Intraoperative view of the mass with its attachment

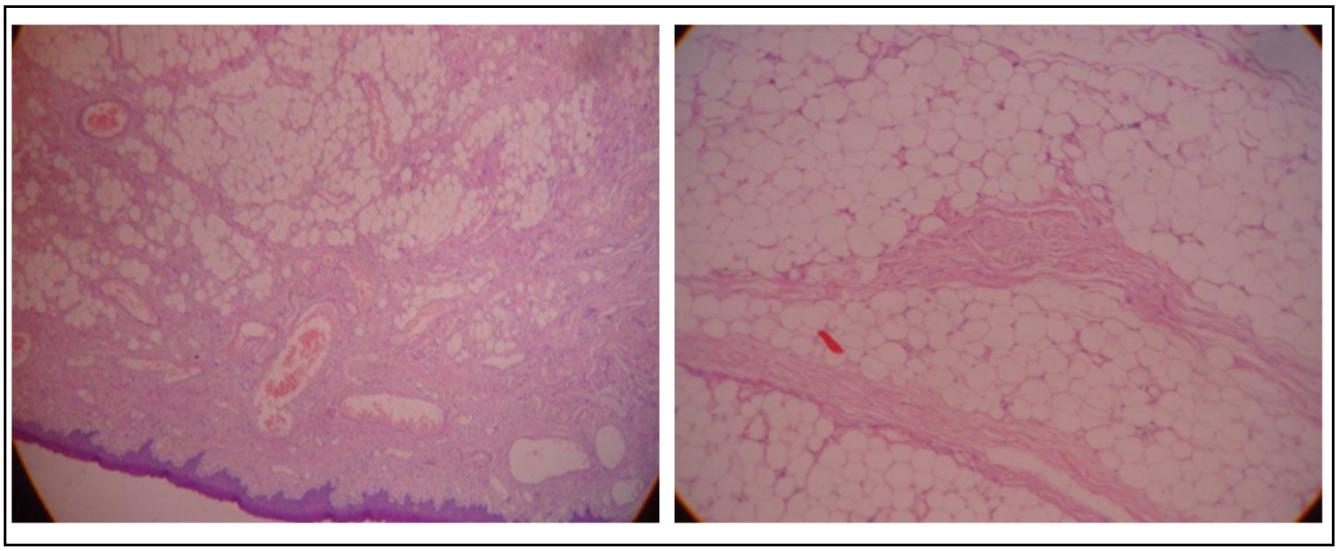

Fig. 4. Microphotograph of the mass (H&E, x10)

Those arising in the hypopharynx can have their attachment to the posterior pharyngeal wall, post cricoid area or the pyriform sinus.

Lipomas are slow growing with patients usually presenting during later stages. They present with symptoms occurring over a course of few months to years which include foreign body sensation in throat or feeling of something coming to the throat or mouth, dysphagia, dyspnea, obstructive sleep apnoea or even asphyxia, depending upon the size and location of the tumor.[5,6] These are generally pedunculated 6 and the tumor may protrude through the mouth on valsalva maneuver or on coughing.[3,5,7]

Literature even reports large lipomas causing asphyxial deaths.[4,8] One of first such case was reported by Penfold in 1952 where a lipoma attached to posterior cricoid area caused asphyxial death in a healthy middle aged women.[4]

Laryngoscopic examination in these patients are diagnostic to assess the size and site of its pedicle attachment. Any obstructive or compressive effects on the laryngeal vestibule and esophagus can also be assessed.

Imaging studies like CT scan or MRI help to know the extent and vascularity of the tumor. On CT scans, lipomas appear as areas of low attenuation (typically approximately -65 to -120 HU) with minimal internal soft tissue component. Areas of calcification may be seen, though are more commonly associated with well differentiated liposarcomas. However, MRI is the modality of choice for imaging lipomas which allows better assessment of atypical features and surrounding anatomy. Lipomas follow subcutaneous fat signals with high signal intensity on T1 and T2 weighted images with no or minimal enhancement on T1 sequences.[9]

Treatment of such lesions include complete excision with histological evaluation and long term follow-up. This is true as long term behavior of these lipomas is still uncertain.[3]

Approach for excision depends upon the location of the tumor and its accessibility. It can be approached via transcervical, peroral or endoscopic technique. Besides diathermy, ablators like harmonic scalpel or coblation can be used in the excision of such lesions.

For huge hypopharyngeal tumors, transoral robotic surgeries can also be considered which provides a 3- dimensional visualization of the resection margin and the dissection plane.[10]

Among the histological variants of lipomas, there are angiolipomas, angiomyolipomas, pleomorphic, benign lipoblastoma, fibrolipoma, chondrolipoma, and spindle cell lipomas based on their stroma.[3]

A qualifying prefix of "fibro" is used for lipomas possessing an unusually prominent connective tissue component.[6]

Histopathological examination of these tumors is necessary to rule out dangerous variants like liposarcomas which bears a resemblance to fat cells. They are differentiated from liposarcomas by the cellular uniformity and lack of lipoblasts and cellular pleomorphism.[3] Immunohistochemistry can be considered for specific diagnosis of the tumor.

Conclusion

Although lipomas of the upper aerodigestive tracts are rare, they must be considered as one of the differential diagnosis of hypopharyngeal masses causing dysphagia. Also large lipomas in this region can be potentially fatal because of the risk of upper airway obstruction. These need to be surgically excised to rule out dangerous variants like liposarcoma, which is a histopathological diagnosis.

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