

SPINDLE CELL LIPOMA MASQUERADING AS MIXED PYOLARYNGOCELE : A RARE CASE REPORT

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ABSTRACT

Spindle Cell Lipoma (SCL) is an uncommon benign tumor of adipose tissue that is usually superficially located in the posterior neck, back and shoulder region. We report a rare case of SCL in a 39 years old male presenting as neck swelling with c/o stridor and dysphagia. The contrast enhanced computed tomographic scan of neck showed an external and internal part of the swelling traversing through the thyrohyoid membrane suggestive of Mixed Pyolaryngocele. The tumor was excised by a trans-cervical approach but the post operative histopathology was found to be spindle cell Lipoma. We report this case due to its atypical presentation and location.

Keywords: Lipoma, Spindle cell, Pyolaryngocele

INTRODUCTION

Spindle cell lipoma (SCL) is an uncommon variant of lipoma, characterized by mature adipocytes and small uniform spindle cells first described by Enzinger and Harvey in 1975.¹ The lesion usually presents in male patients between the age of 40 to 60, and is located in the subcutaneous layer of the posterior trunk, shoulder and posterior neck.¹⁻³ In rare cases SCL have been reported in tongue⁴, buccal mucosa⁵, lip and larynx. Wide local

excision is the treatment of choice.¹

We report a rare case of SCL of the lateral neck presenting with all features suggestive of a mixed pyolaryngocele

CASE REPORT

A 39 years old male presented to ENT OPD with complaints of swelling in left side of neck for last 6 months and difficulty in breathing and swallowing for last 15 days. He had undergone an emergency tracheostomy in another centre and was referred to us for further management.

On clinical examination the patient was found to have a 8 x 6cm soft to firm, non tender, non compressible swelling on the left side of the neck extending from left submandibular region to 3 cm above the left supraclavicular region. The fiberoptic examination of larynx showed a supraglottic mass obscuring the entire oropharynx with edema of the epiglottis and no visualisation of other laryngeal structures. (Fig 1)

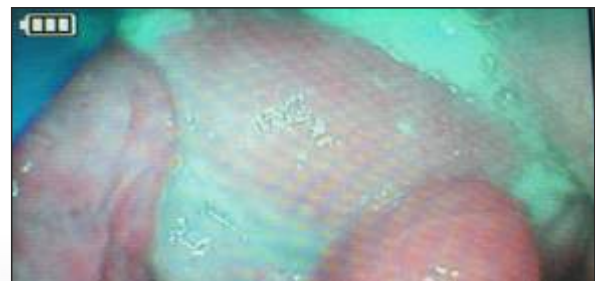


Figure 1: Fibreoptic laryngoscopy showing the internal component of the mass obscuring the entire oropharynx.

A CECT scan of neck was suggestive of a large well defined homogenous cystic lesion comprising of laryngeal and extralaryngeal component traversing through the thyrohyoid membrane suggestive of a mixed pyolaryngocele. (Fig 2)

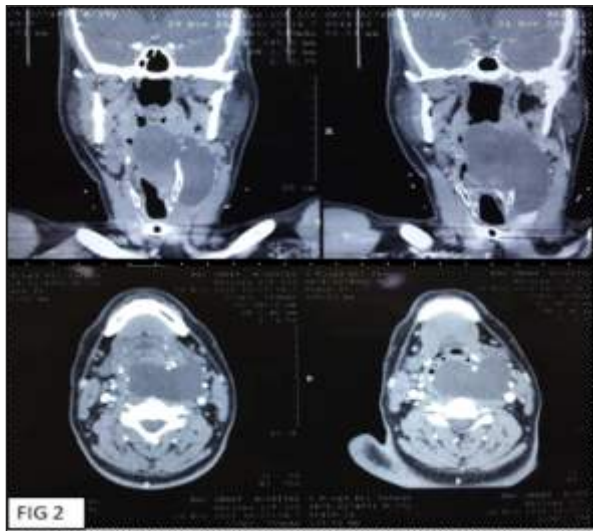


Figure 2: Coronal and axial cuts of CECT neck showing the external and internal component of the mass.

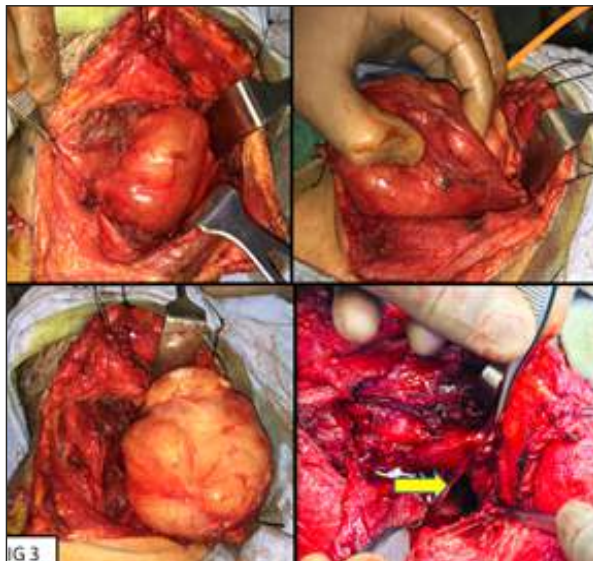


Figure 3: Surgical excision of the mass via Transcervical approach. Rent seen in the lateral pharyngeal wall. (Arrow)

The patient was taken up for excision of mass via transcervical approach. The external component of the mass was completely freed from all surrounding structures and narrowed to the entry into thyrohyoid membrane. With help of finger dissection the internal component was delivered into the neck creating a rent in the lateral pharyngeal wall. (Fig 3)



Figure 4: Mass removed in toto.

The mass was delivered in toto. (Fig 4) The rent was closed with continuous extramucosal interlocking sutures using 3-0 Vicryl.

On histopathological examination there was abundant myxoid stroma, admixed with mature adipocytes and spindle cells. There were no infiltrations or cellular pleomorphism. A diagnosis of Spindle cell lipoma was made. (Fig 5)

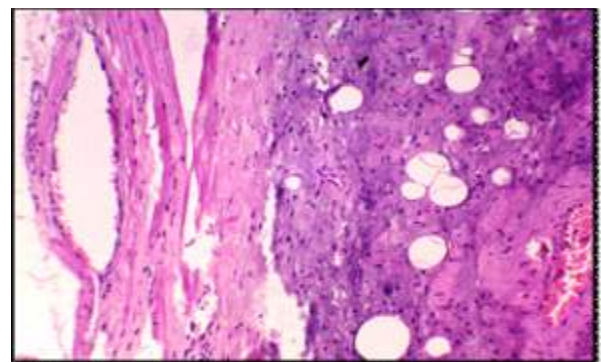


Figure 5: Histopathology showing mature adipocytes with spindle cells.

Post operatively the patient was kept on Ryle's tube feeding for 10 days. Fibreoptic evaluation was done which showed a normal mobile true vocal cords and healed pharyngeal repair. Ryle's tube was removed after a successful oral

challenge. Tracheostomy tube was decanulated and wound was successfully closed.

DISCUSSION

Lipomatous tumors are a common group of mesenchymal lesions, the most common of which is a lipoma.⁶ SCL is a rare variant of lipoma accounting for only 1.5% of all reported lipomatous tumors³. Most common site of SCL is posterior neck, back and posterior trunk. . It has also been rarely reported in tongue, oral cavity, larynx and breast⁴⁻⁸.

Agoff et al., have reported a case in the oral cavity⁵, while Lau et al reported a case in tongue⁴. Dominaski et al., have described the clinical, radiological, cytological and cytogenetic features of SCL in a series of 12 cases, 10 located in the neck and one each on the tongue and cheek³. SCL of larynx is extremely rare. To the best of our knowledge only 5 cases have been reported in literature.⁸ D'Antonio et al described one case of larynx in a 65 years old male who presented with a 1-year history of hoarseness, choking spells, stridor, and dyspnea. Examination revealed the presence of a large polyp on the left true vocal fold which on removal was found to be SCL.

However this is the first case of SCL which presented as lateral cervical mass having an internal laryngeal component leading to stridor and dysphagia and clinically and radiologically suggestive of a pyolaryngocele.

Grossly the lesions are tan to yellowish white in colour. Histology is characterised by presence of spindle cells mixed with mature adipocytes with

myxoid stroma and collagen bundles. The spindle cells express CD34 & BCL2 on immunohistochemistry as demonstrated in our case.

The histopathologic differential diagnosis includes simple lipoma, liposarcoma and tumors of nerve tissue origin. SCLs can be differentiated from Simple lipoma as the latter lesions do not exhibit extensive collagen bundles with spindle cells and mast cells. SCLs must be differentiated from nerve tumors infiltrating the surrounding adipose tissue. Nerve tumors express S100 and are negative for CD34 on IHC.

The most important differential diagnosis is well-differentiated liposarcoma. Histology reveal infiltrative features, cellular pleomorphism and rich vascularization. No such features were described in our case. Frequent recurrence of an excised lipoma may also indicate liposarcoma. Unlike spindle cell lipoma, for which local excision is sufficient, liposarcoma requires extensive wide excision.

SCL is a well known entity among pathologists and dermatologists, but it is a relatively unfamiliar tumor to most surgeons, who rely on patient history, physical examinations, and radiological imaging for diagnosis. However, radiological information maybe confounding as in our case in which it was suggestive to be a pyolaryngocele. SCL can be a diagnostic challenge to radiologist given its frequent presentation as a lesion containing little or no macroscopic or microscopic fat.⁹ In our case on retrospective discussion and reviewing of CT scan films

radiologist were of the opinion that the fat content in the tumor would have been very less and since the mass was showing an external and internal component therefore they suggested it as mixed pyolaryngocele.

As ENT surgeon a neck mass presenting in such a manner is not rare and management remains mainly surgical excision but the case described in this article is unique in two ways: first being it to be the first case of SCL of the neck extending into the oropharynx and larynx and second being it clinically presenting as a mixed type of pyolaryngocele causing difficulty in breathing and swallowing. To the best of our knowledge no such case is reported in the literature.

CONCLUSION

This case report highlights the atypical clinical presentation of Spindle cell lipoma and to create awareness among surgeons for appropriate management of such patients.

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