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Obstructive Lipoma of the Oropharynx: A Case Report

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Abstract Case Report

Lipoma is a benign mesenchymal tumor that develops from adipose tissue. Its location in the oropharynx is rare, accounting for only 1 to 4% of all benign tumors in this region and the oral cavity[1]. These tumors typically progress slowly, but their size and location may cause obstruction of the aerodigestive tract. Treatment is based on surgical excision. Recurrence may indicate incomplete resection or transformation into a liposarcoma. We report here the case of a 66-year-old patient presenting with a polypoid mass located on the posterior wall of the oropharynx. Surgical excision was performed, and histopathological examination confirmed the diagnosis of lipoma. We describe the clinical features, diagnostic work-up, and therapeutic management of this rare case.

Keywords: Lipoma, Oropharynx, Surgery.

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INTRODUCTION

Lipoma is a benign tumor that develops from adipose cells. It is a ubiquitous pathology representing 5% of benign tumors. Its occurrence in the oropharynx is unusual and represents only 1 to 4% of benign tumors in this region and the oral cavity.

This work aims to highlight this rare entity due to its location and to discuss its clinical, radiological, and therapeutic aspects.

CASE REPORT

Patient Presentation:

 A 66-year-old patient, with no prior medical history, complained of dysphagia associated with a progressive foreign body sensation in the oropharynx for over a year.

Clinical Findings:

Clinical examination revealed a red, pale, painless, polypoid submucosal mass, measuring approximately 2 cm, soft in consistency, mobile, rounded, well-defined, and pedunculated, implanted on the posterior wall of the oropharynx, obstructing 50% of the oropharyngeal lumen.

 Lymph node areas were free, and the rest of the ENT examination was unremarkable.



Figure 1: Intraoral view showing a mass on the posterior wall of the oropharynx

Diagnostic Approach:

- **CT scan of the oropharynx** revealed a well-defined, homogeneous fatty lesion, 23 mm in its longest axis, non-enhancing with contrast, located on the posterior wall of the oropharynx.



Figure 2: CT scan of the oropharynx in coronal, axial, and sagittal sections showing the lipoma of the posterior wall of the oropharynx.

a- Coronal view. b- Axial view. c- Sagittal view.

Therapeutic Intervention:

- The patient **underwent complete excision** of the mass via an intraoral approach using bipolar forceps.



Figure 3: Excised lipoma specimen.



Figure 4: Post-operative intraoral view after complete excision of the oropharyngeal lipoma.

Histopathological Analysis

- Showed a benign adipocytic proliferation with vacuolated cytoplasm and peripheral nuclei, consistent with a submucosal lipoma.

Follow Up and Outcomes:

- The postoperative outcome was favorable with no signs of recurrence.

DISCUSSION

Lipoma is a benign mesenchymal tumor composed of mature adipose cells. It typically develops in subcutaneous tissue, the retroperitoneum, and the omentum, where adipose tissue is abundant [2]. Approximately 13% of lipomas occur in the head and neck region, mainly within subcutaneous tissue [3]. Several locations have been described in the upper aerodigestive tract, including the pharynx, larynx, oral cavity, and retropharyngeal space [4].

The etiology of oropharyngeal lipomas remains uncertain. Several contributing factors have been proposed, such as trauma, hereditary fatty degeneration, infection, infarction, or chronic irritation [5].

These tumors may occur at any age, though they are more frequently observed after the age of 30. Congenital cases have also been reported [1]. Their clinical presentation varies depending on location. Some lipomas may have life-threatening implications, leading to dyspnea or sleep apnea. Other symptoms may include a sensation of a foreign body, a painful or painless mass, dysphagia, dysphonia, or cough [5, 6].

Imaging plays a key role in the diagnostic process. On computed tomography (CT), lipomas appear as well-circumscribed, homogeneous, hypodense masses [3]. On magnetic resonance imaging (MRI), they present a high signal intensity on both T1- and T2-weighted images, with signal suppression on fat-saturated sequences—features that are characteristic of lipomas [7]. No enhancement is seen after contrast administration, and the lesion is usually surrounded by a hypointense or hypodense fibrous capsule.

Definitive diagnosis is based on histological examination. Lipomas may be classified according to the presence of other mesenchymal components within the tumor. Reported variants include fibrolipoma, myxoid lipoma, angiolipoma, angiomyolipoma, spindle cell lipoma, chondroid lipoma, chondrolipoma, myolipoma and osteolipoma [6].

The standard treatment is complete surgical excision [8]. An intraoral approach is generally preferred, although the choice of surgical technique depends on the size and location of the tumor. Endoscopic resection is typically recommended, although an external approach may be considered for large masses [1]. The transoral route is often favored, as lipomas are well-encapsulated, facilitating complete removal. Several transoral resection techniques exist,

including cold dissection, monopolar resection, mechanical stapling, and laser excision [10].

Postoperative outcomes are usually favorable, however, long-term follow-up is necessary due to the risk of recurrence [10].

CONCLUSION

Oropharyngeal lipoma is a rare benign tumor whose clinical significance lies in its potential to obstruct the upper aerodigestive tract and, albeit rarely, undergo malignant transformation. Treatment is based on complete surgical excision to prevent recurrence.

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