

Transoral resection of a large parapharyngeal lipoma

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ABSTRACT:

Objective: Primary tumors of the parapharyngeal space are extremely rare. Lipomas are among the least common ones. Parapharyngeal lipomas typically present as a painless neck mass or parapharyngeal fullness and some may present with neurologic or vascular compromise. CT scan and MRI are necessary tools to investigate these masses. In this report we describe the use of transoral approach to achieve complete resection of a large parapharyngeal lipoma.

Observation: We report a case of a woman who had an excision of a large parapharyngeal lipoma by a transparotid approach eight years ago and who presented with a recurrence of the lipoma that we operated by a transoral approach.

Conclusion: Huge parapharyngeal lipomas are usually symptomatic and require surgical removal, transoral resection can be adequate and safe for treatment.

Key-words: Lipoma, parapharyngeal, transoral approach

INTRODUCTION:

Parapharyngeal space (PPS) tumors account for less than 1% of all head and neck tumors. Of this, lipomas are among the least common primary masses. In many patients, it can be an incidental finding in a physical examination [1]. Computed tomography (CT) with contrast and/or magnetic resonance imaging (MRI) is essential to characterize the lesion and can enhance diagnostic accuracy. Various approaches for surgical excision have been described in the literature, with the transcervical approach being the most common [2]. In this report we describe the use of transoral approach to achieve complete resection of a large parapharyngeal lipoma.

CASE REPORT:

A thirty-three year old woman who underwent eight years ago an excision of a left parapharyngeal lipoma by a transparotid approach in another hospital, was referred to our department for left parapharyngeal fullness. It was discovered incidentally. The patient was otherwise healthy, and denied throat or ear pain, dysphagia, odynophagia, neck masses or lesions. On physical examination, we have noted fullness over the left lateral wall of the oropharynx, displacing the tonsil medially. The neck examination was normal.

Indirect laryngoscopy showed the lesion reaching up to vallecula. The CT scan revealed a well-defined homogenous mass with low density and involving the left prestyloid, masticator spaces and reaching the deep lobe of parotid gland (Figure 1). The MRI showed a mass with high signal intensity on T1 and T2 weighted sequences with few thin septae within the lesion (figure 2).

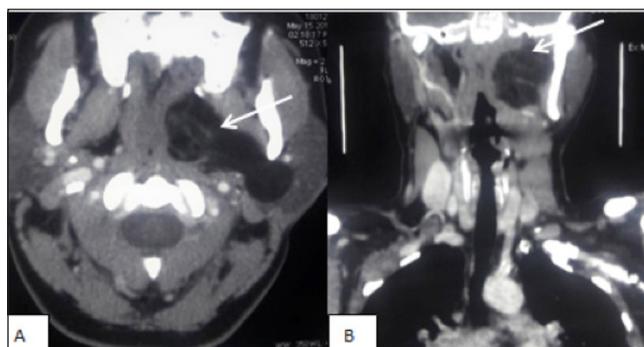


Figure 1: Cervical CT: A- Axial section, B- coronal section: showing a homogenous low-attenuation mass in the prestyloid space extending to the deep lobe of the parotid gland

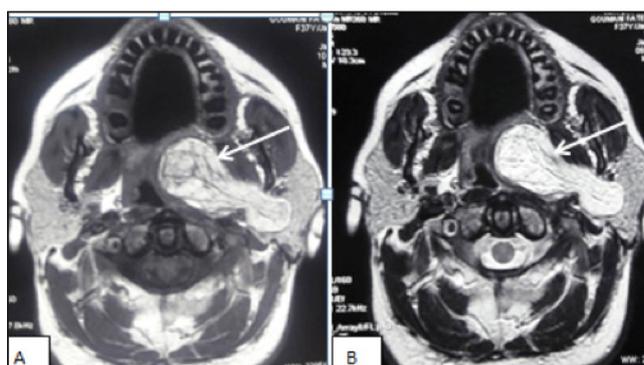


Figure 2: MRI of the neck axial view A: T1 weighted signal and B: T2 weighted sequences showing a mass with high signal intensity

The patient underwent transoral surgical excision. An incision was made over the tonsil anterior pillar. Once the mucosal flaps were elevated, the lipoma was seen bulging toward the oropharynx. As visualisation is poor,

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blunt finger dissection was performed judiciously, keeping in mind the close proximity of the carotid vessels. The lipoma was then freed from the surrounding tissues and removed through the patient's mouth. The tumor has 4 cm of diameter. Histopathological evaluation confirmed the diagnosis of parapharyngeal lipoma.

Post operatively, the patient was symptom free with a follow-up of six months.

DISCUSSION:

Parapharyngeal lipomas comprise a fraction of the 0.5% of head and neck masses that are attributable to parapharyngeal space lesions. Lipomas are slow-growing tumors that are usually not detectable until they reach a large size [3].

As lipomas can extend from the base of the skull to the superior mediastinum, the symptoms can vary depending on the affected part of the aerodigestive tract [4].

Initially asymptomatic, PPS lipomas produce a bulge in the lateral oropharyngeal wall resulting in medial prolapsed of the ipsilateral tonsil once they reach a size of 3 cm [5].

Other features include swelling below the mandible angle, dysphagia due to mass effect; respiratory distress and obstructive sleep apnea were described [2]. CT scan and MRI form the mainstay of diagnosis and evaluation for further surgical treatment. Lipomas appear as typically homogenous, non-enhancing low-density areas on CT scan. MRI scan with gadolinium injection is the imaging of choice due to its multiplanar capability and superior soft tissue delineation. A fat suppression T1 weighted sequence provides better contrast with the surrounding soft tissue [1].

Since fine needle aspiration cytology (FNAC) may not differentiate between a well differentiated liposarcoma and a lipoma, definite histology should be obtained via complete excision [6]. This is especially the case for large retropharyngeal lipomas, as liposarcomas typically originate from the deep soft tissue. As large retropharyngeal lipomas usually result in the compression of the aerodigestive tract, leading to prominent symptoms, surgical resection is the mainstay of treatment [7].

Therefore, authors suggest that surgical excision be performed on all young patients with retropharyngeal lipomas, even if they are asymptomatic [8].

A transcervical approach is usually employed for parapharyngeal lipomas. This approach gives wider access, especially to the lateral aspect of the parapharyngeal space, thus facilitating complete removal of the tumor.

Transparotid approach is used for prestyloid tumors especially arising from deep lobe of parotid and we report even transmandibular approaches for larger masses [9]. Transoral resection offers a direct approach to the tumor in oropharynx, the procedure is relatively easy and it has lower postoperative morbidity. Otherwise we have no control on neurovascular structures.

In some studies, it was shown that it is possible to remove completely a huge retropharyngeal lipoma with parapharyngeal extension via a transoral approach. It has less morbidity. This is possible because lipomas are usually well-encapsulated and distensible [10]. This was also confirmed in our case. Otherwise, for elderly patients with small lipoma or patients who are not fit for surgery, we can opt for observation.

CONCLUSION:

Parapharyngeal lipomas are among the most rare parapharyngeal space masses. Transoral excision is typically indicated for small parapharyngeal tumors. However we showed that this approach may be reliable for huge symptomatic parapharyngeal lipoma. Little is known about the natural history of these lesions, so considerable variability exists in its management. Further work is needed to characterize the long term behavior of these lesions.

Compliance with ethical standards

Conflict of interest: The authors stated that there is no conflict of interest.

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