A case of retropharyngeal Lipoma

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Abstract Lipomas are one of the most common benign mesenchymal tumors in the body. Usually asymptomatic, they rarely warrant treatment unless they attain enormous size causing cosmetic deformity or pressure effects. Head and neck region is an uncommon site, retropharyngeal space being one of the rarest. Lipomas in this region can produce pressure symptoms demanding surgical excision.

This is a case report of retropharyngeal lipoma, extending from skull base to the clavicle. Though tumor was present for 20 yrs it exhibited rapid growth over a period of 2–3 yrs causing respiratory obstruction, dysphagia & dysphonia. Clinically the entire laryngopharynx, trachea and carotid sheath were pushed anteriorly. On imaging, it showed classical features of a lipomatous mass. Patient underwent complete excision which presented a surgical challenge to surgeon and the anaesthetist from intubation to extubation.

Keywords Lipoma · Retropharyngeal

Patients and methods

A 65-yr-old male presented to Manipal Hospital Bangalore with a left sided neck mass since 20 yrs, exhibiting rapid progression for past 2–3 yrs. Progressive dysphagia, dysphonia and respiratory obstruction were presenting features. Clinical examination revealed a large soft fluctuant swelling occupying the entire left lateral neck, grossly shifting the laryngopharynx and the trachea to the opposite side. The medial border of the swelling was merging behind the larynx (Fig. 1). There was a smooth bulge in the post.pharyngeal and left lateral pharyngeal wall intraorally. Left vocal cord was immobile. Routine biochemical and hematological examinations were normal. The differential diagnosis considered in this case was lymphangioma. CT scan of the neck revealed a well encapsulated low density

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Fig. 1 Mass merging behind the larynx pushing the carotid sheath anteriorly

retropharyngeal mass with multiple septations consistent with a fatty tumor, pushing the carotid sheath anteriorly (Fig. 2). As anticipated because of the distorted anatomy, intubation was difficult and could be managed with the help of fiber optic bronchoscope.

Surgical access was a challenge. The neck was entered from right as the anatomy was better preserved on this side. The sternocleidomastoid muscle and carotid sheath were mobilized laterally to visualize the tumor in the prevertebral plane. The entire mass could be separated from the overlying right carotid sheath with careful dissections as it was not infiltrating the adjacent structures. Mobilisation was continued from right side across the midline. The left side of the neck was then opened. A systematic exploration of the neck was required to mobilize the mass without injuring the left phrenic nerve and brachial plexus. Medially left recurrent laryngeal nerve was identified low and superior laryngeal nerve high in the neck. Finally the mass was dissected free from prevertebral muscles and was removed in totality, with preservation of laryngopharyngeal complex, carotid sheath and important nerves.

The final histopathology was consistent with lipoma. Post operatively patient had aspiration while swallowing liquids and was managed on nasogastric feeds for 2 weeks.

Fig. 2 CT scan of neck showing lipomatous density mass and carotid sheath pushed anteriorly.

Discussion

Approximately 13% of lipomas occur in Head & neck region, most of them being in subcutaneous plane on the nape of the neck. Deep situated lipomas in this region are rare, though the literature shows stray reports of oral cavity, pharynx, nasopharynx and parapharyngeal space lipomas [1].

Most lipomas grow insidiously and are asymptomatic, however some attain huge dimensions causing pressure effects and cosmetic deformity. Complete surgical removal is the treatment [2]. They are known to recur in 5% of cases. A review of English literature revealed 18 case reports of retropharyngeal lipomas. When located in this region these tumors can present variety of upper aerodigestive tract symptoms. The diagnosis is mainly clinical supplemented with imaging.

A typical CT scan will show low attenuation Hounsfield values of -50 to -150 typical of fatty tissue. Nodularity or streaks within the mass indicates possibility of a liposarcoma [3]. CT has 75 to 90% accuracy in diagnosing lipoma and it delineates the exact extent [4]. Establishment of diagnosis is through histopathology. The retropharyngeal space needs to be approached from the neck. These lesions do not invade anatomical structures and their preservation is always possible. Their anatomical location often poses technical challenge to the surgical team.

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