Angiolipoma Larynx: A Case Report

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Abstract We report an extremely rare case of angiolipoma larynx Case report and a review of the world literature concerning angiolipoma are presented. A case of tumour of the larynx in a 72-year-old male who underwent excision by a lateral pharyngotomy approach. Histopathological diagnosis was angiolipoma. 19 cases of angiolipoma have been reported from head and neck region, none from the larynx. To our knowledge this is the first report in the world literature of angiolipoma larynx.

Keywords Angiolipoma · Lateral pharyngotomy · Larynx

Introduction

Angiolipoma is a histological variant of lipoma. It is a rare benign fatty tumour, composed of mature lipocytes and multiple areas containing angiomatous elements. It is quite rare in the cervico-facial region. In the English literature we found only 19 cases of angiolipoma described in the head and neck region, and none in the larynx. We report a case of angiolipoma of the larynx in a 72-year-old male who was treated at our institution. He underwent excision by a lateral pharyngotomy approach, and the histopathological diagnosis was angiolipoma.

Case Report

A 72-year old man was admitted to our hospital in March 2003 with complaints of increased salivation and a

sensation of something sticking in the throat. He had noticed a change in voice and had difficulty in breathing on turning to the left side in the supine position for 15 days. He had no difficulty in swallowing.

There was no history of fever, night sweats, and weight loss, loss of appetite or cervical swellings. He was a life long non-smoker. Co-morbidities included diabetes, essential hypertension and bronchial asthma.

Initial exam revealed a pinkish, smooth, submucosal mass arising from the left aryepiglottic fold, which partially obstructed the view to the laryngeal inlet. It was mobile on inspiration. The airway was borderline but adequate and the patient had no resting stridor. Within a week the lesion had grown substantially and the patient developed stridor at rest. Examination at this point showed complete obstruction of the laryngeal inlet by the mass. There was no cervical lymphadenopathy, hepatomegaly, splenomegaly or palpable subcutaneous nodules.

Contrast enhanced computed tomography of the neck showed a $2 \times 3 \times 3.5$ cm well circumscribed swelling in the supraglottic region. It was extending into the laryngeal vestibule and left piriform sinus (Fig. 1). The lesion was had density similar to fat. The radiological diagnosis was of a lipoma.

Magnetic Resonance Imaging confirmed a well-demarcated mass in the supraglottic region hyper intense on T1 and T2 weighted images (Fig. 2).

Surgery An elective tracheostomy was done and inhalation anesthesia given via the tracheostome. Direct laryngoscopy confirmed the indirect laryngoscopic findings of a large, well circumscribed smooth mass arising from the left aryepiglottic fold, obliterating the left piriform fossa, extending on the laryngeal inlet, obscuring the view of left vocal cord.

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Fig. 1 CECT neck axial view (contrast enhanced computed tomography)

Fig. 2 MRI neck coronal view

A left-sided lateral pharyngotomy approach was used. The tumor was a large, entirely submucosal mass with a broad base of attachment in the aryepiglottic fold extending to the piriform fossa, which was easily dissectible by blunt and sharp dissection. Redundant mucosa at the aryepiglottic fold was excised and pharynx was closed by standard fashion after inserting a nasogastric tube. Patient's postoperative stay was uneventful. He was decannulated after a week and fed orally after 2 weeks. The histopathological diagnosis was angiolipoma.

Over a 6-month follow up, the patient has shown no signs of recurrence.

Discussion

Angiolipomas are well-circumscribed, encapsulated tumors located in the subcutis [1]. It is a histological variant of a lipoma and is seen in 17% of lipomas. They are usually seen in the spine [2], gastrointestinal tract [3] and bones [4]. It is a rare entity in head and neck region. Alvi et al. [5] in 1998 in an extensive review identified 17 documented cases of head & neck angiolipoma in the English literature.

Multiple angiolipomas are more common than solitary lesions. More than 2/3rd angiolipomas are multiple [6]. Belcher et al. [7] reported a patient who developed 204 angiolipomas over a 15-year period. Single cases of angiolipoma in the maxillary sinus [8], parotid [9] and temporalis muscle [10] have been described in the literature. The treatment has been surgical excision. Our patient did not have any other similar lesions. There have been no reports of malignant change in cases of angiolipoma [1].

Microscopically [1] angiolipomas are composed of sheets of mature fat cells separated by branching network of small vessels. They have characteristic fibrin thrombi in the vascular channels, a feature distinguishing them from usual lipomas. Unlike ordinary lipomas that have karyotypic abnormalities, most karyotyped angiolipomas have been reported to have a normal karyotype [11, 12].

We present this case as the first reported case of laryngeal angiolipoma, unique for the short duration of history and rapid growth.

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