

Pleomorphic adenoma presenting as a base of tongue mass

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Abstract

A rare case of pleomorphic adenoma of the base of the tongue with a relevant review of literature is reported.

Key words: Salivary gland neoplasms; Tongue

Introduction

Benign and malignant tumours of minor salivary glands are commonly seen in the palate, upper lip, gums, cheek, floor of the mouth, pharynx, larynx and trachea (Burbank *et al.*, 1959). The literature indicates an overall ratio of approximately 1:6 for the benign/malignant lingual salivary gland tumours (Main *et al.*, 1976; Clark and Yarrington, 1980; Everson and Cawson, 1985). The most common benign tumour in this region is a pleomorphic adenoma whereas adenoid cystic carcinoma is the most common malignant tumour reported, accounting for 46.3 per cent of cases (Chaudhary *et al.*, 1961; Pogrel, 1979). Only three cases of pleomorphic adenoma of the base of the tongue have been reported so far in the English literature (Goldblatt and Ellis, 1987).

Case report

A 50-year-old female presented to the ENT Outpatients department of Nehru Hospital of the Postgraduate Institute of Medical Education and Research, Chandigarh, with complaints of odynophagia, a feeling of a lump in the throat and exertional dyspnoea of six months duration. At a peripheral institution, an attempt had been made to

examine the larynx and take a biopsy under general anaesthetic but the endotracheal tube could not be negotiated because of a large mass at the base of the tongue and an emergency tracheostomy was done. After about one month the patient was referred to us for further management. Indirect laryngoscopy revealed a firm mucosa-covered mass at the base of the tongue measuring 2.5×1.75 cm. There was neither a history of bleeding nor could any visible pulsations be seen over the mass.

Computed tomography (CT) scan revealed a non-contrast enhancing mass of homogeneous density over the base of tongue (Figure 1). A biopsy was taken from the mass using the apnoeic technique with a punch forceps. The biopsy specimen was reported as 'pleomorphic adenoma' (Figures 2 and 3). Subsequently, excision of the mass was performed under general anaesthetic by a lateral pharyngotomy approach and the total mass was excised. The histopathological examination of the mass reconfirmed the diagnosis. The post-operative period was uneventful and the patient was successfully decannulated on the 10th post-operative day. The patient was regularly followed up for a period of 14 months without any evidence of recurrence.

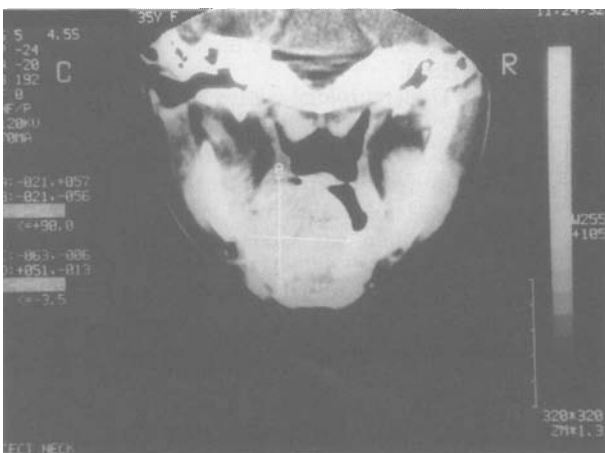


FIG. 1

Pre-operative CT scan showing a mass of homogeneous density at the base of the tongue.

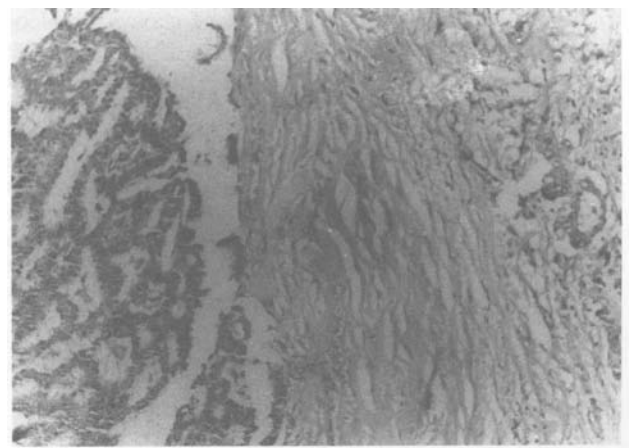


FIG. 2

Histology showing clusters of tumour separated by fibrous tissue and skeletal muscle (H & E; $\times 550$).

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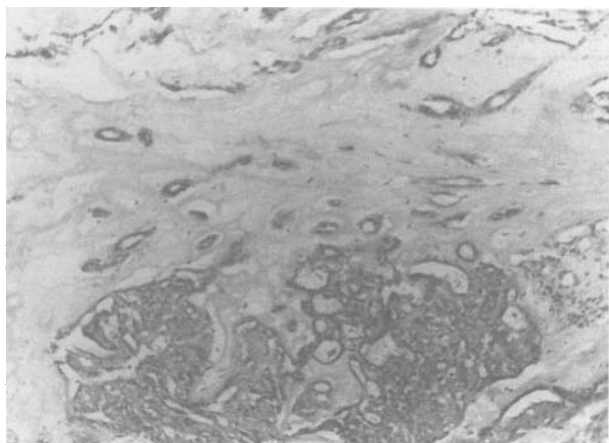


FIG. 3

Histology showing ductal differentiation and myoepithelial cells (H & E; \times 280).

Discussion

Pleomorphic adenoma of the base of the tongue is a very rare tumour. These tumours are benign having a multifaceted origin of epithelial and connective tissues. The cells of origin are the myoepithelial cells and intercalated duct cells. These tumours are most commonly found in the tail of the parotid gland, are slow-growing and thus some of the patients may seek treatment after several years. Most of the studies indicate that the malignant lesions of the minor salivary glands are more common (Bardwil *et al.*, 1966; Everson and Cawson, 1985) and the majority of the lesions affecting the base of tongue are also malignant (Geopfert *et al.*, 1976; Clark and Yarrington, 1980; Goldblatt and Ellis, 1987). Feinmesser *et al.* (1993) reported a case of monomorphic adenoma of the base of the tongue whereas Goldblatt and Ellis (1987) reported three cases of pleomorphic adenoma in addition to one each of monomorphic adenoma and papillary cystadenoma.

These tumours are usually seen in the middle-age group and the highest reported incidence is at 46 years of age (Main *et al.*, 1976). Our case also falls in the same age group. The diagnosis of these tumours is made on the basis of histopathological features. Incisional biopsy gives the pathologist a better chance of diagnosis than fine needle aspiration, without an increased morbidity.

Surgical excision is the treatment of choice for pleomorphic adenoma irrespective of the site of origin. Enucleation as a primary modality increases the chances of recurrence (Eneroth *et al.*, 1972). The tumour can be approached either by midline glossectomy or via a lateral pharyngotomy approach. A tracheostomy is advised if the

tumour is large or if chances of bleeding endangering respiration are anticipated. Recurrence is uncommon and may be attributed to partial excision or a multifocal origin of the tumour.

The above case thus illustrates that pleomorphic adenoma of the base of the tongue can be considered as a rare possibility in the differential diagnosis of lesions of the base of the tongue.

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