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Case Report

Pleomorphic Adenoma-a Case Report

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Abstract

Among neoplasia of head and neck, Salivary gland tumours are rare and it comprises about less than 3%. Pleomorphic adenoma is the most common benign tumour of all salivary gland tumours, which is a so called mixed tumour due its wide cytomorphological and architectural diversity. In this case report we are presenting a case of pleomorphic adenoma of buccal mucosa in a 56-year-old male patient who reported to our department with complaint of painless swelling in the left side cheek region since two years.

Keywords: Neoplasia, Salivary gland tumour, Buccal mucosa, Pleomorphic adenoma

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INTRODUCTION

Salivary gland tumors represent about 3% of all neoplasms of the head and neck and are rare(1) Parotid gland tumours are more commom among salivary gland tumours about 70%,of them 85% are benign.Among benign tumours Pleomorphic adenoma constitute about 80%(2). As far as intra oral salivary gland are concerned, palate (42.63%) is a most commonly affected site followed by lip (10%), buccal mucosa (5.5%), retromolar area (0.7%) and lastly affecting the floor of the mouth.(3,4,5) These tumours are mostly uniformly characterized by a slow-growing, painless mass, usually varying from 2 to 6 cm in diameter.Mostly originating in the superficial lobe but, more rarely, these tumours may involve the deep lobe of the parotid gland(6). It is generally considered to be a benign tumour, even if this lesion presents several histological features due to the different compounds with a myxoid or condroid matrix. Right side involvement is more common than left side and female to male ratio is 2:1. Its occurrence is rare in children and young adults and is found more commonly between fourth to sixth decades of life .The main characteristics are the high recurrence rate and not infrequent malignant conversion. Symptoms are usually rare or not significant; in fact, in most cases, the only sign is asymptomatic swelling, that slowly grows in the parotid region without involving the facial nerve, the function of which remains unchanged. It most commonly presents in the middle age and is most common in women.(7) A rare complication is the malignant conversion followed by distant metastasis.(8).Herewith, a case of pleomorphic adenoma is presented.

A male patient aged 46 years complained of unilateral slow growing non tender swelling on the left buccal region. The swelling was asymptomatic facial asymmetry was seen. The past medical and past dental history was noncontributory. On careful clinical examination, a solitary oval well defined swelling measuring 4 x 5 cm in size was seen on the left side of the face, laterally about 2cm from tragus of the left ear to angle of the mandible, medially 1cm from angle of lip, superiorly about 2cm from lower canthus of eye, and inferiorly involving mandible (Fig 1&2.). No sinus or discharge of pus or bleeding w as seen. Swelling was well circumscribed, superficial, firm in consistency, mobile and was not attached to the skin. Overlying skin was normal in colour and texture.

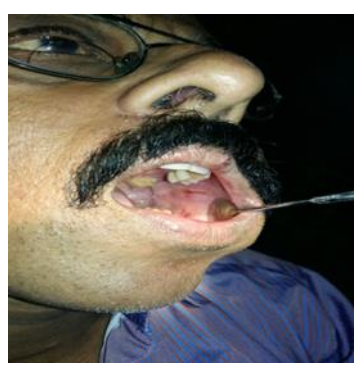

Figure 1: **Clinical picture of the lesion showing** unilateral
Slow growing non-tender swelling on the left buccal mucosal region.

A provisional diagnosis of tuberculous node, Lipoma, Rhabdomyoma, Sebaceous cyst was considered. On gross examination, Multiple bits of tissue received in formalin measuring A1-0.3 x 0.2 cm,A2-0.3 x 0.2 cm A3-0.2 x 0.2 cm,0.1 x 0.1 cm A4- 0.2 x 0.1 cm,0.2 x 0.2 cm,A5-0.3 x 0.3cm,0.3 x0.2 cm,0.1 x0.1 cm greyish white in colour and firm in consistency. The entire bit of tissue is kept for processing.

On histopathological examination, the salivary tissue showed predominantly myxoid areas and spindle cell areas arranged in the form of fascicles. Few nests and islands of epithelial cells with duct like areas containing eosinophilic material were evident within the myxoid and spindle cell components. Areas containing the spindle cells infiltrating into the large areas of surrounding adipose tissue were also evident. With all these histological findings, the differential diagnoses are spindle cell lesion, benign lipoma, pleomorphic adenoma.

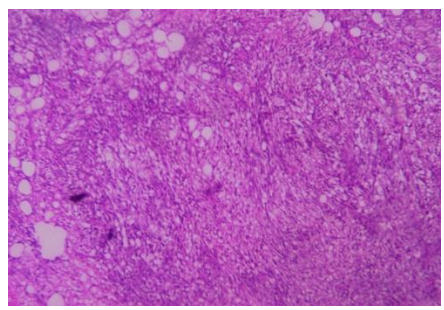

Fig 2. Histopathological picture demonstrating the predominantly myxoid areas and spindle cell areas arranged in the form of fascicles

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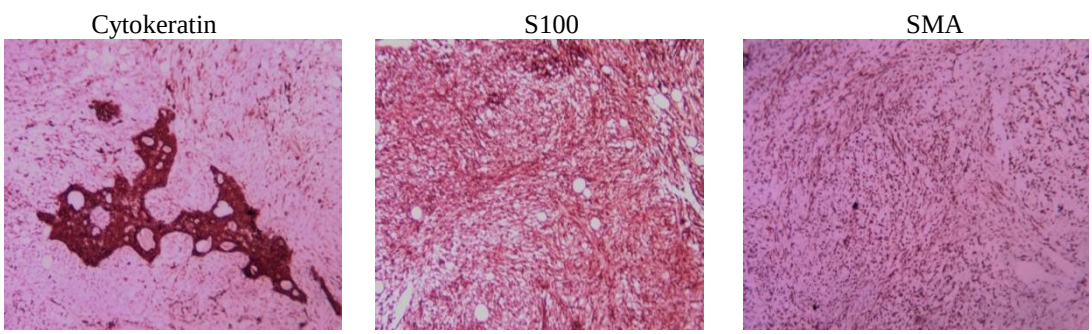

Fig 3. Immunohistochemical analysis for cytokeratin, S100 and SMA demonstrated the positivity of cytokeratin by the epithelioid cells.

These histopathological, Immunohistochemical findings along with location of the lesion, confirmed the diagnosis of pleomorphic adenoma of the parotid gland.

DISCUSSION:

Pleomorphic adenoma is the most common salivary gland tumour. The parotid gland is most frequently affected . Most frequently between the fourth and sixth decades of life. It is mostly located at the superficial lobe of the parotid gland. Malignant transformation in adenomas ranges from 1.9% to 23.3%. The risk increases in tumours with long-standing evolution, recurrence, advanced age of the patient and location in a major salivary gland.(9) Pleomorphic adenoma is usually seen clinically as slow growing ,painless,solitary and well circumscribed swelling in the preauricular region. Size may vary based on duration of lesion.It is usually encapsulated when it arises in the major salivary glands, but not in the minor salivary glands. PA composes intermingling of ductal structures of epithelial origin and mesenchymal elements that may give rise to myxoid, hyaline, cartilaginous, and osseous change (10). Diagnostic imaging, such as Computed Tomography (CT) or Magnetic Resonance Imaging(MRI) , are mandatory, on account of its better definition of soft tissue, and provides precise information concerning tumour margins as well as the relationship with the surrounding structures. The most widely used surgical procedure for the excision of a superficial lobe benign parotid tumour is nowadays represented by superficial parotidectomy which is referred to as the most widely used technique by the International Literature. Other inappropriate surgical treatments, such as enucleation, are strongly associated with higher tumour recurrence rat.

Conclusion

Pleomorphic adenoma, a benign tumor of salivary gland, still should be diagnosed at an early stage and surgically excised. When involving parotid gland, precaution should be taken to preserve facial nerve, if possible. Care must be taken to remove the lesion entirely to avoid recurrence and malignant transformation

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Conflicts of interest :

There are no conflicts of interest

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