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Pleomorphic adenoma: A case report

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Abstract

Pleomorphic adenoma a common entity to find in literature but difficult to diagnosis clinically in early stage. Capsulated excision in early stage rarely reduces the chance of re-occurrence and malignant transformation.

Keywords: Pleomorphic adenoma, salivary gland tumor

Introduction

The term pleomorphic adenoma was suggested by Willis^[1]. It was referred by different names like mixed tumor, enclavoma, branchioma, endothelioma, enchondroma, etc. in earlier years^[2]. Pleomorphic adenoma (PA), also known as benign mixed tumor, is the most common salivary tumor, constituting up to two-thirds of all salivary gland neoplasms^[3]. Mostly, PA is located in the parotid glands (85%), minor salivary glands (10%), and the submandibular glands (5%)^[4]. In the majority of cases, tumors originate in the superficial lobe. However, occasional cases may involve the deep lobe of the parotid gland and the parapharyngeal space^[5]. Minor salivary gland tumors are frequently encountered on the palate, followed by the lip, cheek, tongue and floor of the mouth^[6]. PA usually manifest as a slow progressing asymptomatic, parotid gland swelling without facial nerve involvement^[7]. They are best treated by a wide local excision with good safety margins and follow-up for at least 3-4 years^[8].

Case report

A 26 year old male reported to the Department of Oral & Maxillofacial Surgery with the complaint of soft small swelling on left side of face. On history, according to patient the swelling was first noticed 3 months back which initially just like a nodule. He tried to get removed through hair dresser while having a shave but he couldn't. Then subsequently swelling start increase in size. On examination non tender 1 x 1 cm swelling on left mandibular ramal region which is non adherent, mobile with negative FNAC. Considering provisional diagnosis as sebaceous cyst enucleation was planned under local anesthesia. Using circumferential elliptical widen incision, enucleation was done. Encapsulated mass was removed in total and was sent for pathological examination. Closure was done in two layers using 3-0 vicryl and 3-0 mersilk. Cap Amoxicillin 500mg tds and Tab Dolomol tds was prescribed for 3 days. Patient follow up was done within 2 days interna and suture removal was done after 7 days post-operatively. Post-operative no sign of facial nerve paraesthesia and fistula was seen, wound healed uneventfully. Histo-pathological examination reveals, it have inflamed connective tissue showing abundant amount of chronic inflammatory cell infiltrate along with areas of haemorrhage. Focal areas showed inflammatory infiltrate. At the periphery organized collagenous fiber bundles was seen along with scant bacterial colonies and reactive bone was appreciated towards the periphery with final suggestive diagnosis as Pleomorphic adenoma.



Discussion

Pleomorphic adenoma is the most common salivary gland tumor. The main site of occurrence is the parotid gland, affecting patients of any age, more frequently between the fifth and sixth decades of life [9].

It accounts for 53-77% of parotid tumors, 44-68% of submandibular tumors and 33-43% of minor salivary gland tumors [1]. It is a benign tumor consisting of cells capable of differentiating to epithelial (ductal and nonductal) cells and mesenchymal (chondroid, myxoid and osseous) cells [10]. Its morphologic complexity results from the ability of tumor cells to differentiate into fibrous, hyalinized, myxoid, chondroid and osseous areas, as a result of metaplasia or actual products of tumor cells per se [1, 11, 12].

Pleomorphic adenoma has a tendency for local recurrence & some cases undergo malignant transformation. Treatment of choice for pleomorphic adenoma in minor salivary glands is wide local excision with removal of periosteum or bone if involved. Simple enucleation is believed to lead to a high local recurrence rate & should be avoided [13].

The incidence of malignant transformation in PAs ranges from 1.9% to 23.3 % [14]. The risk increases in tumors with long time of evolution, recurrences, advanced age of the patient and location in a major salivary gland [15]. Some authors postulated that the risk of malignant transformation increases from 1.6% in tumor with less than 5 years of evolution, to 9.5% for those presenting for more than 15 years [16].

The classic clinical history of carcinoma ex-pleomorphic adenoma is of a slow-growing mass for many years, with a recent fast growth [17].

Conclusion

Pleomorphic adenoma, though a benign tumor of salivary gland, should be diagnosed at an early stage and complete local surgical excision with negative microscopic margins is recommended. When involving parotid gland, precaution should be taken to preserve facial nerve, whenever possible. Care must be taken to remove the lesion entirely to avoid recurrence and malignant transformation.

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