



PLEOMORPHIC ADENOMA OF MINOR SALIVARY GLAND: CASE REPORT AND REVIEW OF LITERATURE

Medical Education

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KEYWORDS

INTRODUCTION

Pleomorphic adenoma, the most common salivary gland tumor, is also known as benign mixed tumors (BMT's), because of its dual origin from epithelial and myoepithelial elements. It is the commonest of all salivary gland tumors constituting up to two-thirds of all salivary gland tumors.

the annual incidence is approximately two to three and a half cases per 100,000 population. Pleomorphic adenoma occurs in individuals of all ages; however, it is most common in the third to sixth decades. Pleomorphic adenoma incidence is slightly more in females than in males (2:1 ratio). Pleomorphic adenomas account for 70-80% of benign salivary gland tumors and are especially common in the parotid gland. [5]Pleomorphic adenoma predominantly affects superficial lobe of the parotid gland. Distribution among the various salivary glands is as follows:

- **Parotid Gland:** 84%
- **Submandibular Gland:** 8%
- **Minor Salivary Glands:** 6.5

Microscopically pleomorphic adenoma has a highly variable appearance, hence the name pleomorphic. It is characterized by mixed proliferation of polygonal epithelial and spindle-shaped myoepithelial cells in a variable stroma matrix of mucoid, myxoid, cartilaginous or hyaline origin. Epithelial elements are usually of polygonal, spindle or stellate-shaped cells which may be arranged to form duct-like structures, sheets, clumps, or interlacing strands. The ducts and tubules are seen usually exhibiting an outer lining in addition to an inner cuboidal epithelial cell layer. This is outer myoepithelial cell layer (or layers) which merges into the surrounding stroma which also contains dispersed or clumped myoepithelial element cells. Areas of squamous metaplasia and epithelial pearls can be found. The tumor lacks the true capsule and is surrounded by a fibrous pseudo capsule of variable thickness. The tumor extends through normal glandular parenchyma in the form of finger-like pseudopodia. These microscopic extensions account for the high risk of recurrence in cases treated with simple enucleation or surgical resections performed with inadequate surgical margins.

Case Report

28 year old male patient came to out patient department with history of swelling over posterior part of palat region since 1 month, not associated with pain, increasing in size gradually

Not bleed on touch.

Patient is not having tobacco addiction and no other significant addiction history.

No any other evidence of other swellings, No associated co morbidities
On Examination patient vitally stable

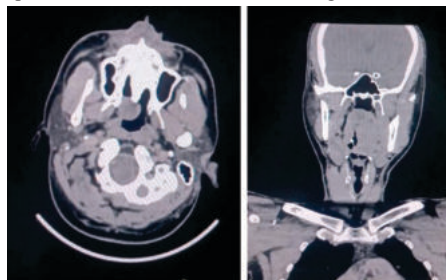
Local examination, mouth opening adequate with normal oral cavity structures, swelling over palatal region involving posterior one third part slightly toward right side measuring approximately 2×1.5 cm with regular margins, mucosa over the swelling maintained present

On palpation not indurated, not bleeding on touch, uvula free from the swelling

On posterior rhinoscopy no evidence of any swelling posterior nasopharynx normal, Ear nose throat examination normal Computed tomography scan of oral cavity advised suggestive of 2.1×1.6×1.6 cm sized relatively well defined minimally enhancing hypodense lesion is seen in submucosal plane of right posterior third of hard palate extending to soft palate, crossing midline, fat planes with adjacent structures maintained suggestive of benign etiology.



Patient is planned for oral mass Excision under genral anaesthesia.



Submucosal resection of palatal swelling under general anaesthesia, Linear incision over most prominent part of the swelling, dissection done in submucosal plane

Swelling present between mucosal and muscle layer, meticulous dissection done all around and swelling removed in toto, Mucosal layer sutured

Specimen sent for histopathological Report.

Histopathological report suggestive of benign mixed tumour of minor salivary glands with central ischemic changes. There is predominance of epithelial element, forming tubular gland, sheet and strands which exhibit regular ovoid nuclei. stroma showing focal myxoid change and increased vascularity



DISCUSSION

Pleomorphic adenoma is a benign mixed tumor, which is composed of myoepithelial and epithelial cells. A fibrous capsule separates these cells from the surrounding tissues. Pleomorphic adenoma is the most common salivary gland tumour accounting for 40-70% of all major and minor salivary gland tumours. It is also the commonest minor salivary gland benign tumours accounting for 70% of all tumours. Hard palate is the commonest site followed by upper lip, buccal mucosa, tongue, floor of mouth, retromolar trigone. This case report discusses a case of pleomorphic adenoma of hard palate in an old man after complete excision of the tumour, which was confirmed by a biopsy specimen.

Tumors arising from the minor salivary glands are uncommon clinical entities, accounting for 10-25% of all salivary glands' tumors. The palate is the most common site amongst the minor salivary glands for pleomorphic adenoma to occur, but they can also occur in the upper lip, cheek, floor of mouth, larynx and trachea [2]. The aim of this paper is to describe a case of pleomorphic adenoma of minor salivary gland in the palate of an old man patient who was treated with surgical excision of tumour showing no evidence of recurrence one-year post-operative follow-up.

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