



**ORIGINAL RESEARCH PAPER**

**Oncology**

**PLEOMORPHIC ADENOMA OF THE CHEEK: A CASE REPORT**

**KEY WORDS:**

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**ABSTRACT**

**Introduction:** Pleomorphic adenoma of minor salivary glands accounts for 5-10% of the cases, rarely occur in the cheek. **Case report:** We report a rare case of a minor salivary gland pleomorphic adenoma of the cheek. **Discussion:** Pleomorphic adenoma of the cheek minor salivary gland is of rare occurrence. Complete surgical excision is the treatment of choice.

**INTRODUCTION**

Pleomorphic adenoma is the most common benign salivary gland neoplasm. The tumour has mixed histology consisting of an epithelial, a myoepithelial and a stromal component.<sup>1</sup> These neoplasms occur most commonly between the third to sixth decades of life; the mean age at presentation is between 43-46 years and is found more commonly in females than in males.<sup>2</sup> They can arise from both major and minor salivary glands. The parotid is the most common site of involvement, accounting for 70-80% of the cases. Other common sites are the submandibular gland and sublingual gland, which accounts for 10% and 1% of cases. Minor salivary glands accounts for 5-10% of the cases and the most common areas of involvement are palate (42.8-68.8%), followed by upper lip (10.1%) and cheek (5.5%). The other rare sites include the nasal cavity, pharynx, larynx and trachea.<sup>3</sup> The aetiology of pleomorphic adenoma is still unknown. A few studies implicate the role of radiation exposure and the Simian virus (SV40). Wide local excision with adequate margins is the treatment of choice.<sup>4</sup>

**Case Report**

A 47-year-old female presented to Head and Neck OPD, Kidwai Institute of Oncology, Bangalore with a slow-growing painless swelling in the right cheek of 3 years duration. On clinical examination, the mass was around 3 x 3 cm, firm, mobile, smooth, non-tender with focal involvement of the skin (Fig.1). Sensory and motor nerve functions were intact. Contrast-enhanced computed tomography noted a well-defined homogeneously enhancing lesion in the subcutaneous plane of the right cheek measuring approximately 3.1 x 3 x 3 cm. Posteriorly the lesion was abutting the right masseter muscle with a well-maintained fat plane. Bilateral sub-centimetric cervical lymph nodes were noted, largest in level Ib measuring 0.7 cm. Trucut biopsy taken from the lesion showed features of pleomorphic adenoma.

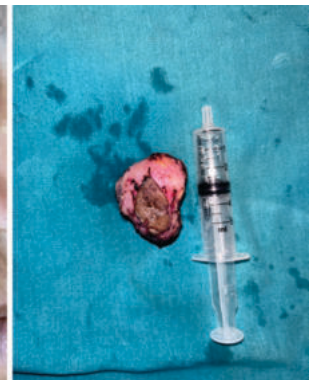
Under general anaesthesia, an elliptical incision was made over the swelling including the involved skin. The flap was raised in the subcutaneous plane, the tumour was found lying just beneath the skin surface. While resecting the tumour from the surrounding tissue, the lower buccal branch of the facial nerve was transected. The resultant defect was closed with vicryl 3-0 and skin with subcuticular 4-0 monocryl sutures.

On gross examination, a 3 x 3 x 2.5 cm firm and the globular tumour was seen just below the skin covered with a thin capsule (Fig.2). Histopathology showed epithelial and myoepithelial cells arranged in a ductular pattern, sheets and chords with adipocyte metaplasia. All the features were

consistent with pleomorphic adenoma. The postoperative period was uneventful.



**Fig. 1**



**Fig. 2**

**DISCUSSION**

Salivary gland neoplasms accounts for 3-5% of all the head and neck tumours. Minor salivary gland accounts for 22% of all salivary gland neoplasms. Most of these tumours are malignant with 18% being benign. Pleomorphic adenoma is the most common benign tumour.<sup>4</sup>

Majority of the benign salivary gland tumours presents as a painless swelling, however, tumours arising from the cheek may enlarge and involve the peripheral branches of facial nerve leading to paralysis. As seen with our case, the lower buccal branch of the facial nerve was wrapped around the tumour and had to be sacrificed. Postoperatively, the motor function of the remaining peripheral branches was intact.

Diagnosis requires a complete history, physical examination, imaging and cytological examination.<sup>5</sup> Computed Tomography and Magnetic Resonance Imaging can help determine the size, location, extension and involvement of surrounding structures.<sup>6</sup> The treatment of choice is surgical resection with negative margins. Although pleomorphic adenomas are well-encapsulated tumours, resection with adequate margins is necessary to prevent local recurrence as these neoplasms have microscopic pseudopod-like extension into the surrounding parenchyma.<sup>7</sup> A study conducted by Spiro et al. reported a recurrence in 7% of 1342 patients with benign parotid neoplasms and 6% in benign minor salivary gland tumours.<sup>4</sup> Due to the malignant potential of these minor salivary gland tumours, regular follow-up is required as it is associated with an increased risk of local recurrences.<sup>8</sup>

**Ethics Declarations:**

1. COMPLIANCE WITH ETHICAL STANDARDS – The study is compliant with the ethical standards
2. FUNDING – No funding was provided by any source for this study
3. CONFLICT OF INTEREST - There has been no conflict of interest
4. ETHICAL APPROVAL – Our institute ethics committee has confirmed that no ethical approval is required
5. INFORMED CONSENT – A written informed consent was taken from the patient to be a part of the study

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