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Pleomorphic Adenoma of Palate-Management by Complete Excision

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Pleomorphic adenoma **(PA) is the most common benign mixed salivary gland neoplasm that accounts for 60% of all benign salivary gland tumors. It has diverse histological presentation and occurs in both major and minor salivary glands. PA of minor salivary gland in the palate is a common entity. We report the case of a 50-year-old female who presented with a painless slow growing swelling of palate over the last 20 years. Computed tomography data depicted an oval-shaped mass occupying oropharynx. Fine needle aspiration cytology (FNAC) was suggestive of PA. The entire tumor mass was excised along with overlying mucosa conservatively. Histopathological examination confirmed diagnosis of PA of minor salivary gland. There has been no recurrence of the lession since 1 year.**

Key words: Pleomorphic adenoma, Salivary glands,surgical management.

Pleomorphic adenoma (PA) can be defined as a benign mixed tumor composed of epithelial and myoepithelial cells arranged with various morphological patterns, demarcated from surrounding tissues by fibrous capsule. It is one of the salivary gland tumors affecting both major and minor salivary glands. Pleomorphic adenoma, also known as benign mixed tumour, is the most common salivary gland neoplasm and accounts for 60% of all benign salivary gland tumours[1]. It most commonly presents in middle age and is most common in women[2,3]. Although it occurs most commonly in the major salivary glands, it may also occur in the minor salivary glands and extra-salivary tissue. The importance of lesions lies in the fact that they are more likely to be malignant when associated with minor salivary glands (50%)[4,5]. Histologically it is characterised by the presence of both epithelial and mesenchymal elements. A wide spectrum of histological findings exists because of the expression of varying proportions of epithelial and mesenchymal features, hence the term "pleomorphic",but despite this, diagnosis from an excision biopsy specimen is relatively easy as pathologists are familiar with its manifestations[6]. Basal cell adenoma is considered a subtype of pleomorphic adenoma and includes a neoplasm that was previously labelled as monomorphic adenoma[7]. Histologically it is made up of uniform basaloid epithelial cells with membranous and non-membranous subtypes. The aim of this case report is to present histopathologically diagnosed[8]. PA of palate in a 40-year-old female, to emphasize its peculiar nature of growing slowly for over 20 years to a size of 4 × 4 cm, and yet asymptomatic[9,10]. The diagnosis of salivary gland tumors utilizes both

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tissue sampling and radiographic studies. Tissue sampling procedures include fine needle aspiration (FNA). Imaging with ultrasound, magnetic resonance (MRI), or computed tomography (CT) may be used depending on the site and size of the tumour[11].

Case report

A 50-year-old female presented with a slow growing swelling, of approximately 20 years duration involving her hard and soft palate junction on the left side, which was peanut sized when she first observed. The lesion was asymptomatic with no associated pain or paresthesia. Patient had no medical history. She had no known allergies and had not undergone any surgeries of head and neck. She had no complaints of pharyngeal or airway obstruction. General physical examination of the patient revealed a well oriented and moderately built individual with no signs of any systemic illness. The patient presented a typical 'hot potato in mouth' speech. The clinical examination revealed non-ulcerated, dome-shaped, palatal swelling on her hard and soft palate junction, crossing the midline. (Figure 1). The lesion was

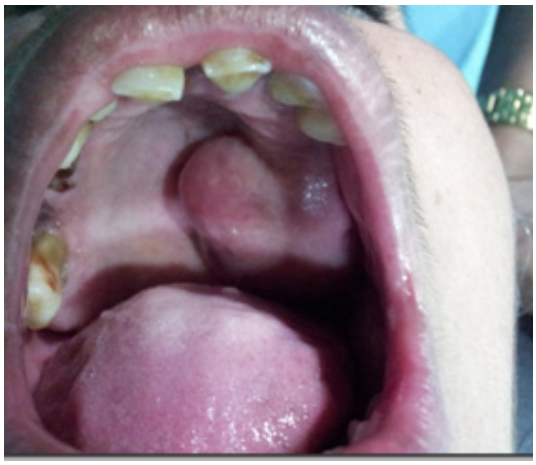
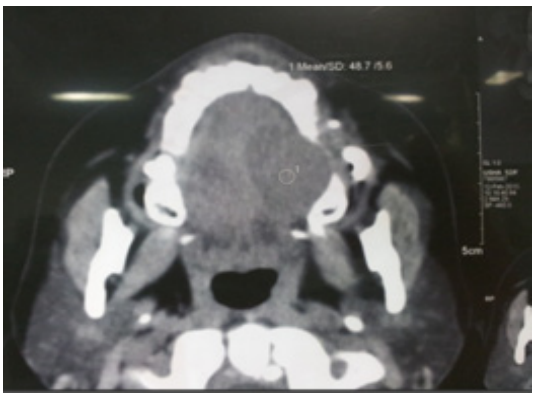


Fig. 1. Clinical presentation of the tumor



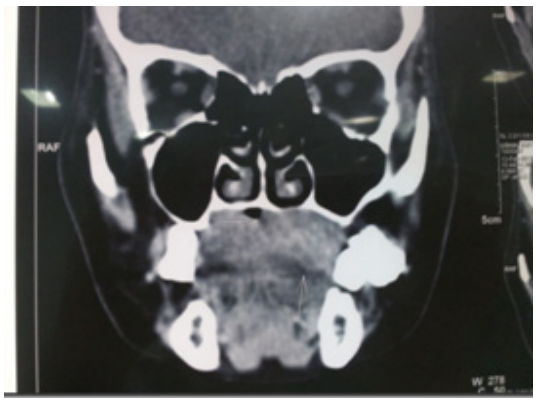


Fig. 2-3. Computed Tomographic Image of the tumor

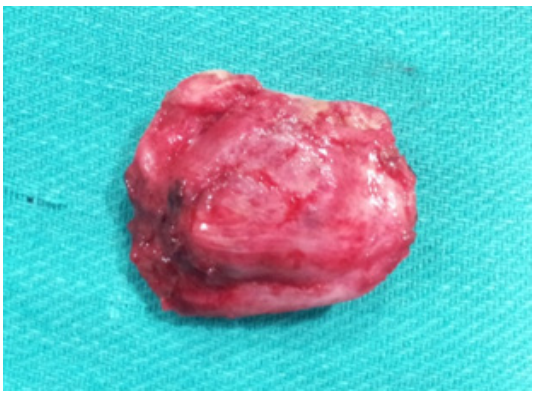


Fig. 4. Excised tumor

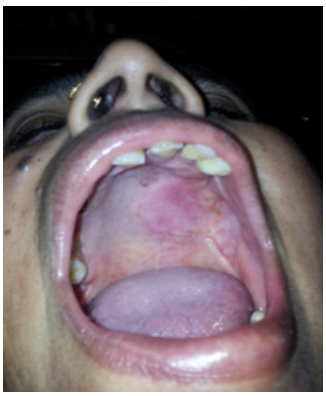


Fig. 5. Healing after 6 months

multinodular, fi rm, and nontender on palpation. Computed Tomographic data revealed a well-defined, multilobulated mass measuring 5.3 × 5.1 cm. (Figure 2 & 3). The mass had well-enhanced soft tissue density without any invasion to adjacent tissues.

FNA biopsy was performed, which was suggestive of PA. All preoperative blood and urine investigations were done, which were within normal limits. Endotracheal intubation was done with fi ber-optic guidance and was operated for wide local excision of the mass and primary closure of adjacent mucosa. The excised mass was 6 × 6 cm (Figure 4). Following excision of tumor, surgical wound was closed in layers in a tension-free water tight fashion. The excised mass was sent for histopathological examination, which revealed stratified squamous epithelium covering connective tissue and underlying connective tissue showed the cells arranged in sheets and duct-like pattern with a mucoid background.

This was confirmatory of PA. The patient's postoperative course was uneventful. The healing after 2 weeks was satisfactory. No recurrence was observed after a follow-up period of 1 month, 6 months (Figure 5) and 1 year.

DISCUSSION

PA of minor salivary gland is most common in palate (10%), followed by lip (4%). The unusual sites are sinuses, larynx epiglottis, and trachea. PAs have also been reported in tongue, soft palate, uvula, and even external auditory canal. Though the case we presented is not a rare one, these kinds of tumor are most often malignant and are often misdiagnosed. Clinically the patient presented a solitary, painless, slow growing, well-circumscribed palatal lump which is typical presentation of such tumor. The mechanical symptoms most commonly manifested by tumors of this location are dyspnea, dysphagia, acute airway obstruction, and obstructive sleep apnea. In our case the presenting complaints were dysphagia and diffi culty in speech. Surprisingly a tumor of 5.3 × 5.1 cm in size did not produce any respiratory distress. The main diagnostic modalities are FNA biopsy and imaging.

Cytological fi nding in PA are typically of mixed epithelial cells and mesenchymal elements. These features were clearly illustrated in our case. The histopathological confi rmation is mandatory in operating these tumors. However, differentiation from adenoid cystic carcinoma and polymorphous low grade adenocarcinoma may be diffi cult with FNA alone. Imaging with ultrasound, MRI, or computed tomography (CT) may be used depending on the site and size of tumor. In our case,CT was primarily used to determine size and more importantly infi ltration of lesion into the surrounding tissue. We found the lesion to be a 5.3 × 5.1 cm soft tissue dense mass, not involving adjacent tissues, and not displacing the tongue.

Surgical excision is the treatment of choice. Longevity and recurrence are risk factors for malignant transformation. The primary goal of excision should be complete removal of mass without risking recurrence. We performed complete excision of tumor with overlying mucosa and surgical wound was closed with advancement of adjacent mucosa. This produced an excellent result. The excised region can be left to heal by secondary intention also.

CONCLUSION

PA, though a common entity, is still a challenging tumor. Longevity and recurrence are risk factors for malignant transformation, which occurs in 3–4% if not excised. Pleomorphic adenoma generally does not recur after adequate surgical excision. Ultimately, complete surgical excision will provide the definitive diagnosis and treatment for this noteworthy salivary gland neoplasm.

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