Ulcerated Pleomorphic Adenoma of the Hard Palate: A Rare Case Report

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ABSTRACT

Pleomorphic adenoma of the hard palate usually presents as a painless, slow-growing swelling. Ulceration is an unusual presentation that may raise suspicion of malignancy.

A 30-year-old male presented with an ulcerated palatal mass. Histopathology confirmed pleomorphic adenoma. No recurrence was observed over four years.

Ulcerated pleomorphic adenoma can clinically mimic malignancy and should be considered in the differential diagnosis of palatal masses.

Keywords: Hard palate, Pleomorphic adenoma, Minor salivary gland

INTRODUCTION

Pleomorphic adenoma is the most common benign salivary gland tumour, accounting for approximately 70% of all salivary gland tumours. It arises from both major and minor salivary glands and predominantly affects the parotid gland. Among minor salivary gland tumours, the hard palate is the most common site, followed by the upper lip and buccal mucosa.[1-3]

Pleomorphic adenoma typically presents as a painless, slowly enlarging submucosal swelling with intact overlying mucosa. Ulceration is an unusual clinical presentation and may raise suspicion of malignancy, particularly in minor salivary gland tumours. This atypical appearance can pose a diagnostic challenge and may complicate clinical differentiation from malignant lesions. We report a case of pleomorphic adenoma of the hard palate presenting as an ulcerated mass in a young male patient, highlighting its unusual presentation and potential to mimic malignancy.

CASE REPORT

A 30-year-old male presented to the Department of Otolaryngology and Head and Neck Surgery at Gandaki Medical College, Pokhara, Nepal, with a six-month history of painless, gradually progressive swelling over the right posterior hard palate, adjacent to the upper molars. The swelling was associated with intermittent bleeding. There was no history of paraesthesia, xerostomia or dysphagia.

Head and neck examination revealed no facial asymmetry or cervical lymphadenopathy. Oral cavity examination demonstrated a solitary, ovoid swelling measuring 3.5 × 2.5 cm over the right posterolateral hard palate, extending from the canine region anteriorly to the upper second molar posteriorly. The overlying mucosa was ulcerated (Figure 1). On palpation, the mass was firm, non-tender and non-pulsatile, with ill-defined margins.



Figure 1. An ulcerated mass in the hard palate.

Routine blood investigations were within normal limits. Computed tomography revealed a well-circumscribed submucosal soft-tissue mass with pressure resorption of the underlying bone. Magnetic resonance imaging demonstrated an oval lesion that was isointense on T1-weighted images

and hyperintense on T2-weighted images (Figures 2).

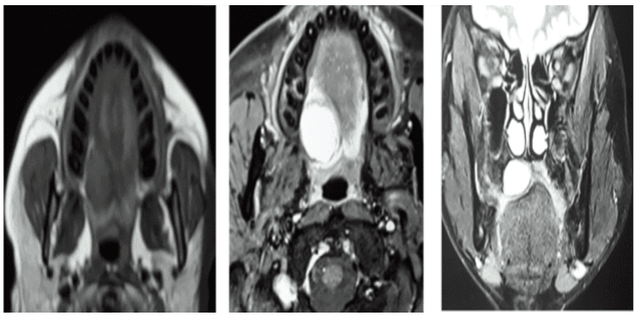


Figure 2. MRI-T1 weighted image showing isointense lesion in the right posterior part of hard palate and MRI T2-weighted axial and sagittal section showing hyperintense lesion in the right posterior part of hard palate suggestive of pleomorphic adenoma.

Wide local excision was performed under general anaesthesia. A curvilinear right paramedian incision was made, extending from approximately 5 mm superior to the canine region to the right maxillary second molar. The mucoperiosteal flap was elevated medially, and the mass was excised along with the underlying periosteum and a 5-mm margin of healthy surrounding tissue. Haemostasis was achieved using electrocautery, and the wound was closed with 3-0 Vicryl sutures. The postoperative period was uneventful.

Gross examination revealed a well-circumscribed, solitary, grey-white tumour (Figure 3). Histopathological examination demonstrated predominantly epithelial components with scanty stromal elements. The epithelial cells were arranged in closely packed ductal and myoepithelial structures, with some cystically dilated glands containing eosinophilic secretions. Chondromyxoid stroma was observed between the epithelial islands. There was no evidence of necrosis or cellular atypia (Figure 3). These findings confirmed the diagnosis of pleomorphic adenoma.

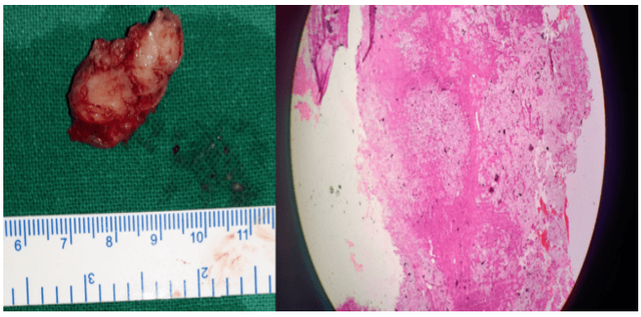


Figure 3. Gross appearance and microscopic appearance of pleomorphic adenoma

The patient was followed up regularly, with no evidence of recurrence over a four-year follow-up period.

DISCUSSION

Pleomorphic adenoma, also known as a benign mixed tumour, is composed of epithelial and myoepithelial elements arranged in variable morphological patterns. It accounts for approximately 70% of all salivary gland tumours, with a proportion arising from the minor salivary glands.[2,3] The hard palate is the most common intraoral site, followed by the upper lip.[4] It predominantly affects females and is commonly encountered during the fourth to sixth decades of life.[2] However, our patient presented at a younger age.

Clinically, pleomorphic adenoma of the hard palate typically presents as a painless, slowly progressive, well-defined swelling over the posterolateral aspect of the palate, with a smooth, dome-shaped surface.[5] Owing to the tightly adherent nature of the palatal mucosa, the lesion may appear fixed to the underlying tissues. Although these tumours are generally slow-growing and seldom exceed 1–2 cm in diameter, progressive enlargement may cause difficulty in mastication, speech and swallowing.[6] Ulceration of the overlying mucosa is unusual and should raise suspicion of malignancy.[5]

The most noteworthy feature of our case was the presence of mucosal ulceration overlying a relatively large palatal mass. Unlike the usual presentation of pleomorphic adenoma with intact mucosa, ulceration and intermittent bleeding may clinically suggest a malignant minor salivary gland tumour. This atypical presentation highlights the importance of considering benign salivary gland neoplasms in the differential diagnosis of ulcerated palatal masses. Although clinical and radiological findings can guide the diagnostic evaluation, histopathological examination remains essential for establishing the definitive diagnosis.

Histopathologically, pleomorphic adenoma consists of epithelial, myoepithelial and mesenchymal components arranged in variable patterns. The epithelial component forms sheets, nests and ductal structures, sometimes containing eosinophilic secretions. Myoepithelial cells are a characteristic component and may exhibit plasmacytoid, spindle, clear or oxyphilic morphology. The stromal component may demonstrate myxoid, chondroid or osseous differentiation. The surrounding pseudocapsule results from compression and fibrosis of adjacent salivary gland tissue.[7]

The differential diagnosis of an ulcerated palatal mass includes haemangioma, haematoma, mucoepidermoid carcinoma, adenoid cystic carcinoma and polymorphous adenocarcinoma.[7] Magnetic resonance imaging may provide useful diagnostic information. Pleomorphic adenoma typically demonstrates high signal intensity on T2-weighted and short-inversion-time inversion recovery images, with gradual enhancement on dynamic magnetic resonance imaging.[8] However, imaging findings alone cannot reliably exclude malignancy.

The treatment of pleomorphic adenoma is complete surgical

excision with adequate margins of surrounding healthy tissue. Simple enucleation is associated with an increased risk of recurrence, which may occur even several decades after initial treatment.[9] Recurrence has been attributed to pseudopod-like extensions, capsular defects, tumour spillage during surgery, incomplete excision and multicentric origin.[10,11] Radiotherapy may be considered in selected patients with recurrent or high-risk disease, although its role in the management of pleomorphic adenoma remains limited.[12]

CONCLUSION

Pleomorphic adenoma of the hard palate may present at a younger age and, rarely, with overlying mucosal ulceration and intermittent bleeding. Such an atypical presentation may clinically mimic malignancy. Therefore, pleomorphic adenoma should be considered in the differential diagnosis of ulcerated palatal masses, and histopathological examination is essential for definitive diagnosis. Complete surgical excision with adequate margins and long-term follow-up are important to minimise and detect recurrence.

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