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Pleomorphic Adenoma of Soft Palate

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ABSTRACT

Pleomorphic adenoma (PA) is the most common benign mixed salivary gland neoplasm that accounts for 60% of all benign salivary gland tumors. Pleomorphic adenomas are benign tumors of the salivary glands and are usually seen in major salivary glands, whereas are rare in minor salivary glands. Here We report the case of a 36-year-old female who presented with a painless slow growing swelling of palate over the last 2 years. The entire mass was excised along with overlying mucosa. Histopathological examination confirmed diagnosis of PA of minor salivary gland.

Keywords: *Pleomorphic Adenoma, Soft Palate, Salivary Gland.*

INTRODUCTION

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. Pleomorphic adenoma (PA) is the most common tumor (60%) of major and minor salivary glands, nearly 70% of the tumors of minor salivary glands are PAs, and the most common intraoral site is the palate, followed by upper lip and buccal mucosa.[1] It is stated that the smaller the gland, the greater the likelihood of malignancy for a salivary gland tumor.[2]. The aim of this case report is to present histopathologically diagnosed PA of palate in a 36-year-old female, to emphasize its peculiar nature of growing slowly for over 2 years to a size of 4 × 3 cm, and yet asymptomatic. It can be misdiagnosed as malignant tumor on blind clinical diagnosis, and hence this presentation also emphasizes on the need for awareness of its diverse presentation by

the examining clinician that could infl uence the outcome greatly and for histopathological diagnosis of such growth before any definative treatment.

CASE REPORT

A 36-year-old female visited the Department of surgery and presented with a slow growing swelling, of approximately 2 years duration involving her soft palate on the right side, which was peanut sized when she first observed. The lesion always had been asymptomatic, with no associated pain or paresthesia. She had no complaints of pharyngeal or airway obstruction. General physical examination revealed a well oriented and moderately built individual with no signs of any systemic illness. After routine preoperative investigations, the case was planned for surgical excision. Under local anesthesia, excision of the mass was done and sent for histopathological examination. Histological examination of the mass revealed a highly cellular encapsulated tumor with mixture of mesenchymal and epithelial elements.[Figure 1]. Cells were arranged in islands and sheets separated by a myxoid matrix. Ductal, glandular and tubular structures were noted on the sections. Histopathologically it was diagnosed as pleomorphic adenoma.

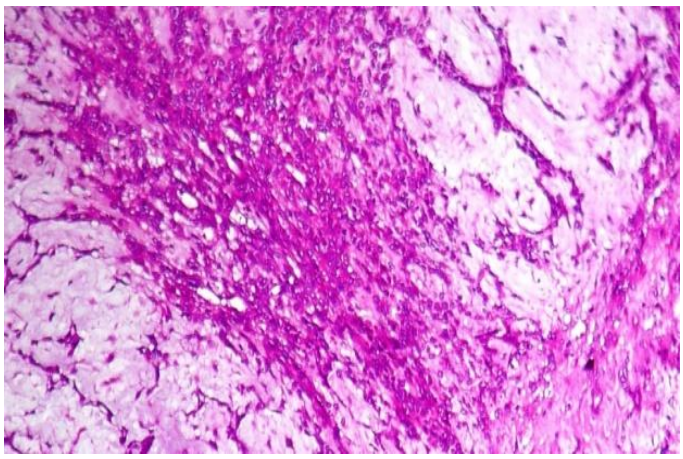

Figure 1: mixture of mesenchymal elements composed of pseudocartilage and epithelial elements.

DISCUSSION

PAs are derived from a mixture of ductal and myoepithelial elements.[3] It is the commonest benign salivary gland tumor; 84% of the PAs occur in the parotid, 8% in the submandibular, and 4–6% in the minor salivary glands. PAs have also been reported in tongue,[4] soft palate,[5] uvula,[6] and even external auditory canal.[7]

The differential diagnoses for this case include palatal abscess, odontogenic and non-odontogenic cysts, and other soft tissue tumors. Abscess can be ruled out because of loss of signs and symptoms of inflammation, whereas cysts are not firm in consistency. FNA biopsy should be performed as an adjunct to diagnosis prior to definitive surgical treatment. Computed tomography or magnetic resonance imaging should be considered when assessing for presence of bony erosion or soft tissue and nerve involvement. (8) In this present case unfortunately FNAC was not done and the mass was excised and sent for histopathological examination.

The histological pictures of pleomorphic adenomas vary. Pleomorphic adenomas of the extramajor salivary glands are similar to those in the major salivary glands and are composed of a mixture of epithelial and stromal elements. Three main histologic subgroups have been identified: myxoid (80% stroma), cellular (myoepithelial predominant), and mixed (classic) type. (9) article 4In our case microsections studied showed cells were arranged in islands and sheets separated by a myxoid matrix.

Metastasizing pleomorphic adenoma are known to occur after surgical excision or local recurrence. The most frequent site of a metastasizing pleomorphic adenoma is the parotid gland, where complete excision is difficult due to the critical anatomical problems such as the presence of the facial nerve, followed by the presence of the submandibular gland and the minor salivary glands. The most common site of a metastasizing pleomorphic adenoma in the minor salivary glands is the palate (10). The time interval between the diagnosis of a primary pleomorphic adenoma and metastasis has ranged from three to 22 years (11). In this present case, we had excised the mass completely with margins of normal surrounding tissues.

The treatment of pleomorphic adenoma is essentially surgical. Since these tumors are radioresistant, the radiation therapy is contraindicated.[12] Though these benign tumors are apparently well encapsulated, resection of the tumor with an adequate margin of grossly normal surrounding tissue is necessary to prevent local recurrence as these tumors are known to have microscopic pseudopod like extension into the surrounding tissue due to “dehiscence” in the capsule.[13] The recurrence of pleomorphic adenoma is attributed to the implantation recurrence due to rupturing of the capsule, Islands of tumor tissue left behind as a behind as a result of surgery, and to mulitcentricity of pleomorphic adenoma.[14]Hence, a follow up of 10-20 years is considered appropriate.[15]

To conclude PA, though a common entity, is still a challenging tumor for pathologist, radiologist, and the surgeon. Its diverse histological and topographical property makes the tumor special. The examining clinician and treating surgeon must be aware of its recurrence, longevity, and malignant potential if incorrectly diagnosed or treated.

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