



Case Report

Fine needle aspiration cytology diagnosed pleomorphic adenoma of soft palate- A rare case report

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ABSTRACT

Background: Pleomorphic adenoma (PA) is benign tumor of salivary gland. Pleomorphic adenoma contains both epithelial and myoepithelial elements and it arises from myoepithelial cells of salivary gland. The index study to describe rare case of pleomorphic adenoma of soft palate diagnosed by FNAC (fine needle aspiration cytology).

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1. Introduction

Pleomorphic adenoma (PA) is benign tumor of salivary gland. It is mostly arise from major and minor salivary gland, followed by lip and buccal mucosa.¹ Pleomorphic adenoma contains both epithelial and myoepithelial elements and it arises from myoepithelial cells of salivary gland.² Minor salivary gland tumors rare in comparison to major salivary gland, which comprising 15-20% salivary gland neoplasm.³ Aim of index study to describe rare case of pleomorphic adenoma of soft palate diagnosed by FNAC (fine needle aspiration cytology).

2. Case Report

A 46 years old female presented with history of difficulty in swallowing (progressive dysphagia) and voice change in OPD. The patient was referred to our FNAC clinic. Physical examination there was a mass on right side of soft palate measuring 2.5 x 2.0 cm extending inferior-laterally (Figure 1a). The overlying was mucosa normal. The CECT was suggested neurogenic tumor/schwannoma.

The FNAC was performed from the 23-gauge needle, a 10-cm³ syringe and pistol handle. The blood mixed particulate material was aspirated. Both airdried and alcohol-fixed smears were made for Giemsa and haematoxylin and eosin stains. The smears were cellular and showed dual cell population, mainly myoepithelial cells singly and small groups, plasmacytoid cells, spindle shaped cell and few tightly cohesive clusters of benign ductal cells seen in a background of abundant fibrillary chondroid myxoid ground substance (Figure 1b,c,d) and cytologically diagnosed pleomorphic adenoma (PA). The patient was underwent for surgery. Post-operative histological examination confirmed in a variety of architectural patterns of benign epithelial and myoepithelial neoplasm consist with pleomorphic adenoma (Figure 2a & b).

3. Discussion

FNAC is very simple and reliable diagnostic technique for diagnosis of both major and minor salivary gland tumor. In our case the PA arises at soft palate from minor salivary glands. The efficacy of FNAC for diagnosis of minor salivary glands shown by few studies.⁴ So,

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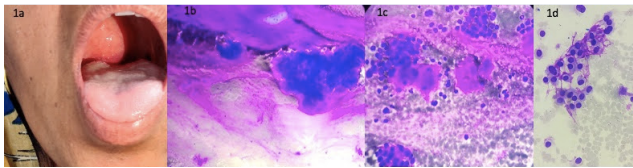


Fig. 1: a: Photograph showing soft palate mass; **b-d:** showing dual cell population, mainly myoepithelial cells singly & small groups, plasmacytoid cells, spindle shaped cell and few tightly cohesive clusters of benign ductal cells seen in a background of abundant fibrillary chondroid myxoid ground substance (Giemsa,400x).

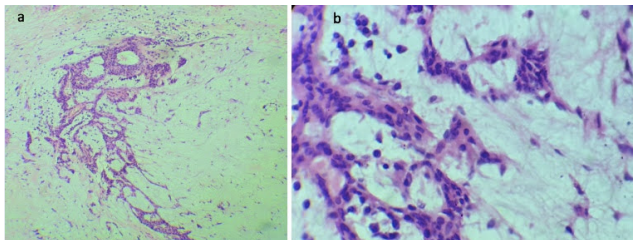


Fig. 2: Photomicrograph showing myoepithelial and epithelial components arranged variable pattern in chondroid myxoid stroma (**a:** H&E,40x; **b:** H&E 400x).

in our case we also presented efficacy and accuracy of FNAC in diagnosis of minor cellular glands. The PA more commonly occurs in male than female, with ratio 2:1. The reported case is female. The differential diagnosis are hematoma (bluish discoloration), mucocele, necrotizing sialo metaplasia, mucoepidermoid carcinoma, adenoid cystic carcinoma and polymorphous low grade adenocarcinoma.⁵

So, we concluded that FNAC very useful and accurate method for diagnosis of rare tumour of soft palate like

PA. FNAC also minimum invasive and rapid diagnostic procedure.

4. Acknowledgement

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5. Conflict of Interest

The authors declare that there is no conflict of interest.

6. Source of Funding

None.

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