



Large pleomorphic adenoma of palate-A case report and review of literature

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ABSTRACT

Majority of tumours occurring in minor salivary gland are malignant. Pleomorphic adenoma is a benign tumour rare in minor salivary gland of palate. We report a rare case of a minor salivary gland pleomorphic adenoma of the palate in 60 year old female patient who presented with painless slow progressive swelling of palate over the last 7 years. The mass was extending to nasopharynx and oropharynx causing mechanical obstruction of airway and dysphagia. CT scan depicted soft tissue density mass lesion measuring 5×4.5 cm in the left half of soft palate. Fine needle aspiration cytology was suggestive of pleomorphic adenoma. Complete surgical excision of mass was done. Histopathological examination confirmed diagnosis of pleomorphic adenoma of minor salivary gland. Pleomorphic adenoma must be considered in the differential diagnosis of palatal mass. Timely intervention of pleomorphic adenoma prevents malignant changes. Complete surgical excision is the treatment of choice. Recurrence is rare after complete surgical excision with wide margin. Prognosis is excellent after complete surgical excision.

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Introduction

Salivary gland tumours accounts for the 3% of all head and neck tumours¹. Pleomorphic adenoma constitutes approximately 90% of all benign salivary gland neoplasms². Pleomorphic adenoma accounts for the 60% of all salivary gland neoplasms³. The majority of minor salivary gland tumours are malignant. Among benign tumours of the minor salivary glands pleomorphic adenoma is the commonest. Palate is the most common site of minor salivary gland pleomorphic adenoma. Other common sites are lip and buccal mucosa.⁴ Pleomorphic adenoma rarely causes destruction and bone erosion. Pleomorphic adenoma is a slowly growing tumour that's why patients seek late medical advice. Careful evaluation of patient required in preoperative period. Careful history, physical examination, fine needle aspiration cytology and imaging required in preoperative period for making provisional diagnosis. Complete surgical excision is required for treatment and definite diagnosis of this rare tumour. Here, we report a case of large pleomorphic adenoma arising from the soft palate.

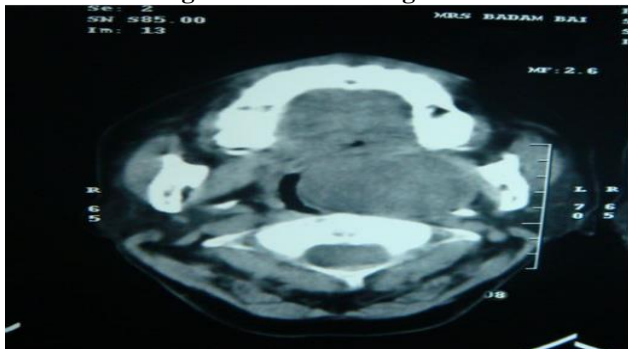
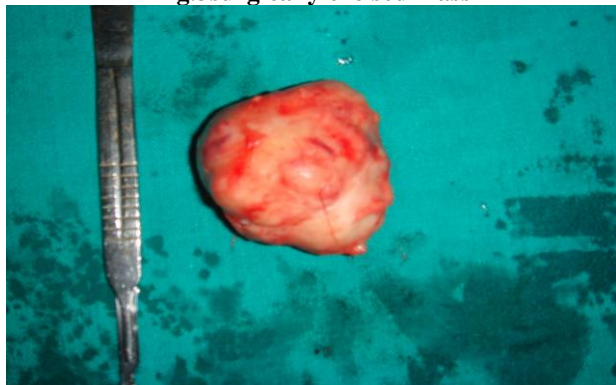
Case Report

A 60-year-old woman presented with a gradually progressive painless swelling in palate of 6 years duration and change in quality of speech of three-year duration. Patient is known case of hypertension on prescription since 10 year. The general health of the patient was preserved. On examination there was a $5\text{cm} \times 4\text{cm}$ well demarcated swelling of the left half of soft palate and left lateral pharyngeal wall present. Mass extends up to nasopharynx, superiorly and left lateral pharyngeal wall almost touching posterior pharyngeal wall on left side (Fig.1) Tonsil and uvula is pushed medially, overlying mucosa was intact and pinkish in colour. On palpation the swelling was nontender, smooth and firm. Postnasal examination and indirect laryngoscopy was not possible. There was no lymph node enlargement in the neck. With the clinical diagnosis of soft palatal tumour a CT scan of the head and neck was taken which showed a well marginated homogeneously enhancing soft tissue density mass lesion measuring 5×4.5 cm in the left half of soft palate, extending superior into nasopharynx involving its left

lateral wall and inferiorly involvement of left lateral oropharyngeal wall and tonsillar fossa. (Fig.2) FNAC suggestive of moderately cellular smear showing two type of population spindle cells within tissue fragment, epithelial cell having round to ovoid nuclei. Cells are arranged in loose clusters and sheets against chondromyxoid background. Picture was suggestive of pleomorphic adenoma. Excision of mass with safe margin was done to avoid recurrence. The patient was operated under general anesthesia, through nasal intubation and throat pack inserted. An elliptical incision was given in the paramedian position all over the lesion extending to hard palate. A delicate proper dissection was done to separate the palatal mucosa. The tumor was excised in one piece. The underlying bone inspected properly for any erosion. It was completely intact. Primary repair was done intraorally with 3-0 vicryl. Antibiotics were given for 1 week. Dexamethasone was given to avoid soft palate and throat edema. On theseventh post-operative day the sutures were removed. Wound healed very well within one month. There has been no recurrence in two year follow up. On gross examination the lesion was grayish white globular piece of soft tissue mass (Fig.3). Cut surface showed grayish whitish solid with glistening white and yellowish area. Histopathological examination showed a neoplasm having an admixture of epithelial and stromal components. Ducts lined by inner epithelial and outer myoepithelial cells were seen surrounded by a chondromyxoid stroma consistent with pleomorphic adenoma.

Fig.1 A diffuse swelling over left side of palate



Fig.2 CT scan showing mass**Fig.3 surgically excised mass**

Discussion

Pleomorphic adenoma, also known as benign mixed tumour is the most common tumour of salivary glands. 84% of the pleomorphic adenoma occurs in the parotid, 8% in the submandibular, 4%-6% in the minor salivary gland⁵. Tumours arising in the minor salivary gland accounts for 22% of all salivary gland neoplasms. Majority of them are malignant with only 18% being benign⁶. Of the benign tumours pleomorphic adenoma is the commonest. Pleomorphic adenoma is more often seen in woman^{7,8}. The most common site of a pleomorphic adenoma of the minor salivary gland is the palate followed by lip, buccal mucosa and floor of mouth, tongue, tonsil, pharynx, retro molar area and nasal cavity⁹. Intraoral pleomorphic adenoma appears as slowly growing, painless mass, usually in the fourth or fifth decade⁹. Pain, tenderness and ulceration are unusual. Although it is a benign tumor, it has a high recurrence rate and in small number of cases, a benign pleomorphic adenoma may degenerate into a malignant tumor. Pleomorphic adenomas of the oral cavity lack a well-defined fibrous capsule, a feature associated with a high recurrence rate⁹. These tumors are also able to invade and erode adjacent bone; causing radiolucent mottling on the x-ray of the maxilla. The diagnosis of pleomorphic adenoma is established on the basis of history, physical examination, cytology and histopathology. CT scan and MRI can provide information of the location, size and extension of tumor to surrounding superficial and deep structures. CT scan is an important diagnostic tool in tumours of palate because it helps in determining the extent of disease, local spread and also helps to some extent in determining the type of tumour. Contrast enhancement is seen in vascular and neurogenic tumours. Presence of intact fat plane helps in distinguishing benign tumours from malignant⁶. Histopathologically, pleomorphic adenoma is an epithelial tumour of complex morphology, possessing epithelial and myoepithelial elements arranged in a variety of patterns and embedded in a mucopolysaccharide

stroma. Formation of the capsule is a result of fibrosis of surrounding salivary parenchyma, which is compressed by the tumour and is referred to as false capsule¹⁰. The treatment of pleomorphic adenoma, is essentially surgical. Though these benign tumours are apparently well encapsulated, resection of the tumour with an adequate margin of grossly normal surrounding tissue is necessary to prevent local recurrence as these tumours are known to have microscopic pseudopod like extension into the surrounding tissue due to dehiscence in the false capsule.

Conclusion

Pleomorphic adenoma of palate is usually seen in adult population. Salivary tumours of palate presents as a painless progressive swelling with majority of these being malignant. Pleomorphic adenoma of palate is of rare occurrence. Pleomorphic adenoma must be considered in the differential diagnosis of palatal mass. Definite diagnosis depends on histopathological examination. CT scan is necessary to rule out bony erosion. Timely and adequate treatment of pleomorphic adenoma prevents malignant changes and recurrence. Complete surgical excision is the treatment of choice. Prognosis is excellent after complete surgical excision.

Conflict Of Interest

None

Source Of Support

Nil

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