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CASE REPORT

EXTENSIVE NASOPALATINE PLEOMORPHIC ADENOMA:-A CASE REPORT

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ABSTRACT

Pleomorphic adenoma is a salivary gland tumors commonly originating from the parotid gland or the submandibular gland. It is uncommonly seen involving the minor salivary gland. Pleomorphic adenoma is a mixed benign tumor, which exhibits both epithelial and mesenchymal components. It is the most common neoplasm of the major and minor salivary glands. The parotid is common site but palate is most common site for minor salivary adenoma. The lesion occurs as a painless, slow-growing, dome-shaped mass with a smooth surface patient.

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INTRODUCTION

The pleomorphic adenoma is more common in female and occurs after 50 yrs of age. It is a benign neoplasm arising from the ductal epithelium of the major and minor salivary glands. Pleomorphic adenoma is the most common salivary gland neoplasm, which is a benign tumor and mucoepidermoid carcinoma is the most common malignant salivary gland tumor1. Pleomorphic adenoma comprises a mixture of ductal and myoepithelial cells with more cellular elements less of myxoid and chondroid components. Intraorally palate is the most common site followed by lips and buccal mucosa2-3. Extraorally, the parotid gland is the most common site followed by the submandibular gland. Pleomorphic adenoma is more commonly seen in females4. Intraorally these tumors are slow growing unilateral with palpable rubbery masses.. The tumors were classified as stroma-rich, cell-rich and classic (balanced amount of epithelial and stromal component6.The mesenchymal component was divided into myxoid, chondroid, hyaline, fatty and calcified tissue. The parenchymal component was analyzed according to presence of spindle, plasmacytoid, basaloid, squamous, cubic, mucous and oncocytic cells 7. The architectural pattern was divided in to ductal, solid and trabecular. There was no evidence of cellular atypia or necrosis in all cases 8-9.

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CASE REPORT

A 50 year-old female patient reported to the Gujarat Research and medical institute in department of Otorhinolaryngology and Head & Neck Surgery with a chief complaint of a painless swelling over the mid palatal region and both nasal blockage with discharge since 6 months. History revealed that the swelling was initially of a small size and had progressively increased to its present size. Which was also extended to both nostril more on left side . On Intra-oral examination revealed a single dome-shaped swelling on the mid palatal region measuring 20mm × 15mm [Figure 1]. The swelling was firm in consistency with a smooth surface and non-tender on palpation.On examination there is global mass in both nostril more on left side ,nasal endoscopic showing both nostril fill with globular submucosal mass [Figure 2]. On CT scan showed there is large nonenhancing ill defined soft tissue lesion measuring 42mmx28 mm at anterior nasal cavity causing widening of both nasal cavities with invading inferior nasal septum and hard palate ,with bony gap of 18x08 mm, the lesion is seen to protrude with the oral cavity via hard palate gap. The lesion shows multiple arc like calcification. The intraoral component of the lesion measure 20 x 13 mm [Figure 3]. Based on the history, clinical, and radiographic findings , a provisional diagnosis of a benign minor salivary gland neoplasm, with pleomorphic adenoma being the most likely, was made. A clinical differential diagnosis of neurofibroma, lipoma, and the palatal abscess was considered. Aspiration

biopsy of the lesion showed no fluid collection. Routine hematological investigations carried out were within normal limits. The lesion was treated with careful surgical excision, followed by reconstruction of palatal defect with fat and fascia lata. Histopathological examination showed a stratified squamous parakeratinized epithelium with an underlying connective tissue stroma. The overlying epithelium and tumor mass were separated by a pseudocapsule. The tumormass showed an epithelial and a mesenchymal component. Based on the histopathological findings, a final diagnosis of a pleomorphic adenoma was made. (Figure 4). The patient has been advised to regular follow-up for 1year.different morphological patterns and are delineated from the surrounding tissues by a fibrous capsule.

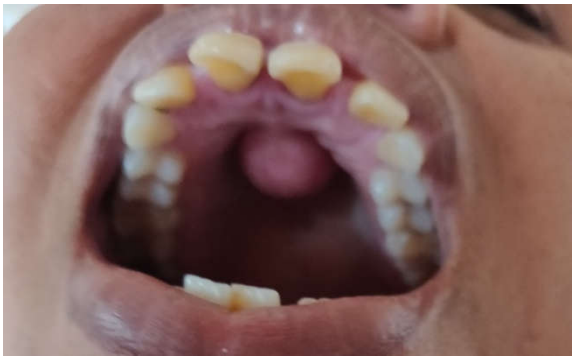


Figure 1. Showing palatal lesion

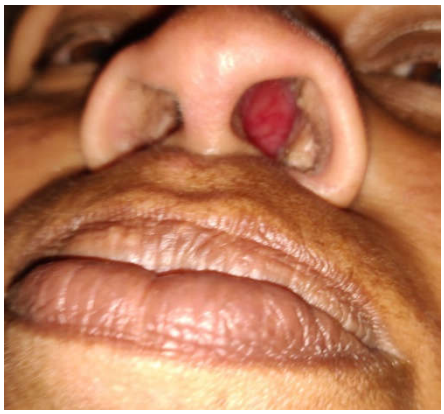


Figure 2. Globular mass in nostril

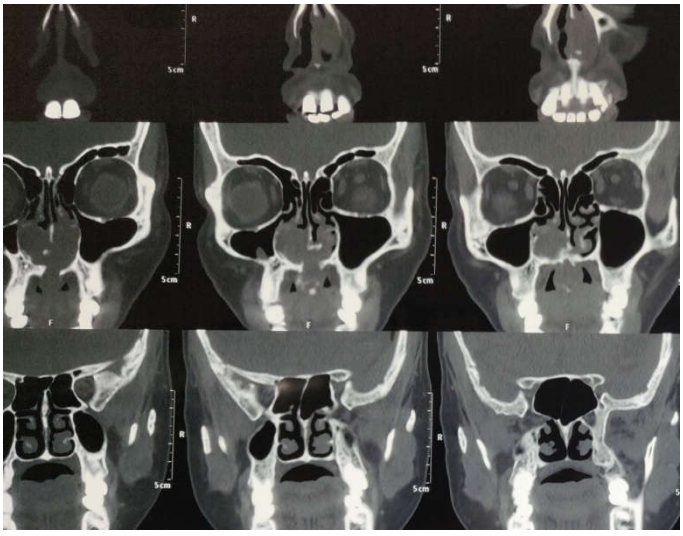
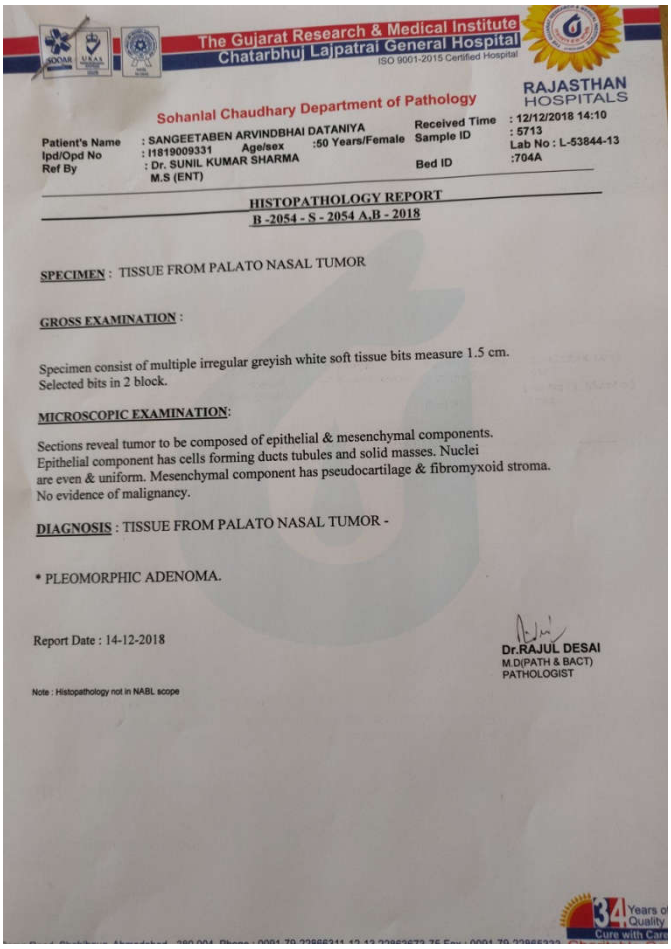


Figure 3. CT scan lesion is extensive with Nasopalatine mass


The Gujarat Research & Medical Institute
Chatarbhuj Lajpatral General Hospital
ISO 9001-2015 Certified Hospital
RAJASTHAN HOSPITALS
Sohanlal Chaudhary Department of Pathology

Patient's Name : SANGEETABEN ARVINDBHAI DATANIYA
Ipd/Opd No : I1819009331 Age/sex :50 Years/Female
Ref By : Dr. SUNIL KUMAR SHARMA M.S (ENT)
Received Time : 12/12/2018 14:10
Sample ID : 5713
Lab No : L-53844-13
Bed ID :704A

HISTOPATHOLOGY REPORT
B -2054 - S - 2054 A,B - 2018

SPECIMEN : TISSUE FROM PALATO NASAL TUMOR

GROSS EXAMINATION :

Specimen consist of multiple irregular greyish white soft tissue bits measure 1.5 cm.
Selected bits in 2 block.

MICROSCOPIC EXAMINATION:

Sections reveal tumor to be composed of epithelial & mesenchymal components.
Epithelial component has cells forming ducts tubules and solid masses. Nuclei
are even & uniform. Mesenchymal component has pseudocartilage & fibromyxoid stroma.
No evidence of malignancy.

DIAGNOSIS : TISSUE FROM PALATO NASAL TUMOR -

* PLEOMORPHIC ADENOMA.

Report Date : 14-12-2018

Dr.RAJUL DESAI
M.D(PATH & BACT)
PATHOLOGIST

Note : Histopathology not in NABL scope

34 Years of Quality Cure with Care

Figure 4. Biopsy reveal epithelial and mesenchymal component

DISCUSSION

The treatment protocol for such cases is mostly surgical excision of tumour wherein they are excised up to periosteum of bone with a cuff of normal surrounding tissue. Excision of bone is included rarely required as it serves as an anatomical barrier. The palate is the most commonly affected minor salivary gland site (due to the large number of minor salivary glands in this region) 10-11. This neoplasm is commonly seen in the fourth to sixth decades of life, but can occur at any age, and a slight female predilection is noted. It is also the most commonly occurring neoplasm of the salivary glands in children and represents 66-90% of all salivary gland tumors, that rarely ulcerates the overlying skin or mucosa. The vast majority of these tumors are between 2 cm and 6 cm in size. Intra-orally, the lesion usually present as a painless, smooth surfaced, dome-shaped mass on the posterior palate. It appears to be fixed since the mucosa of the hard palate is tightly bound. However, lesions of the lips and buccal mucosa are freely movable12. The present case was diagnosed in a 50 years old female patient and involved thepalate. Histologically, pleomorphic adenoma shows a mixture of epithelial, and myoepithelial elements, within a background stroma that may be mucoid, myxoid, chondroid or fibroid. The epithelial elements consist of polygonal, and spindle or stellate-shaped cells, which may be grouped in duct-like structures, or as sheets or interlacing strands. A characteristic of this lesion is the presence of microscopic tumor projections on the outside of the capsule; failure to remove these projections along with the tumor results in recurrence of the

lesion. The differential diagnosis for intraoral lesions includes palatal abscess, soft-tissue tumors such as fi broma, neurofibroma or lipoma, cysts (odontogenic and nonodontogenic), The treatment of choice for pleomorphic adenoma is surgical excision. Hard palate tumors are usually treated by excision down to the underlying periosteum, which includes removal of the overlying mucosa. Malignant transformation, although rare, has been reported in around 5%cases.Suspicion regarding malignant transformation may result from a sudden change in growth and local signs of malignancy including pain, spontaneous bleeding from the region, ulceration, and tissue invasion. Our case was treated by surgical excision and no recurrence has been noted till date13-14.

Conclusion

Even though pleomorphic adenoma of the minor salivary glands is a benign, slow-growing and painless neoplasm, diagnosis and treatment at an early stage can prevent further complications like difficulty in mastication and speech. Careful surgical removal is necessary to avoid recurrence (due to multifocal seeding of the primary tumor bed) and malignant transformation. Pleomorphic adenoma though being a common entity has to be dealt with utmost care when it is originating from minor salivary glands. One should be aware of the chances of recurrence and malignant potential of the tumour.

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Conflict of interest

The authors express no conflict of interest.

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