



AMELOBLASTOMA OF THE MAXILLA: A Case Report

RELEVANT HISTORY: 37 year old female patient reported with complaint of a painless swelling on left half of palate which gradually increased over a period of 5 months. There was no rhinorrhea, nasal obstruction, or other antranasal or ophthalmic abnormality. No H/O trauma to the site.

On examination a solitary expansile well defined swelling was noted involving left hard palate. There was no evidence of any extraoral swelling.

Cone Beam CT (CBCT) OBSERVATIONS

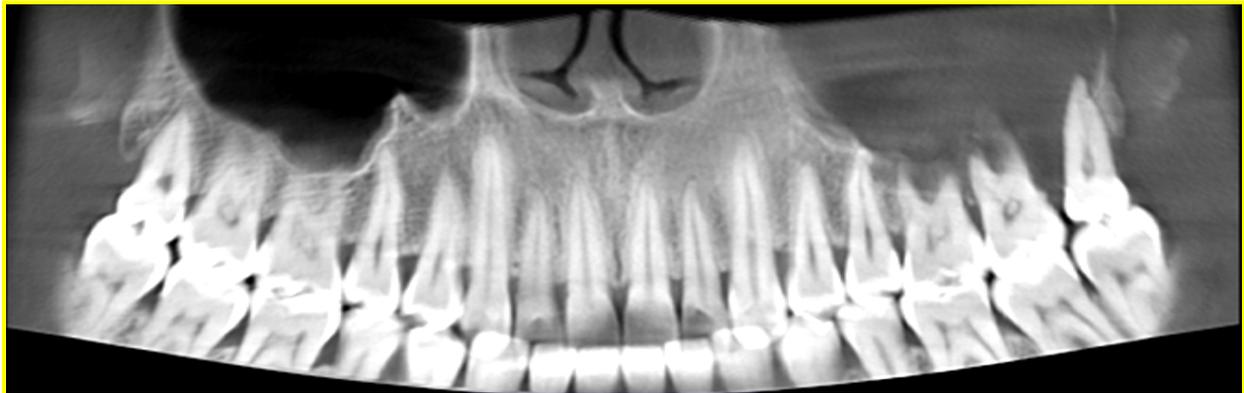


Figure #1.1: Panoramic view showing unilocular radiolucent lesion involving the upper left alveolar process and extending into tuberosity and sinus.

Evidence of complete opacification of left maxillary sinus with a massive well defined lesion invading the alveolar bone between # 25 26 27 28 and the entire left maxillary sinus. The lesion measures supero-inferiorly 34.85 mms, antero-posteriorly 31.9 mms and bucco-palatally 19.6 mms. Evidence of expansion and perforation of the palatal cortex of alveolar bone with mild expansion and thinning of the buccal cortical plate. Resorption of the apical end of the roots of # 26 27 and displacement of the roots of #27 and 28 with thinning and expansion of sinus walls and perforation of the floor of sinus suggesting a lytic nature. Internal structure is uniformly homogenous and more radio-opaque (of soft tissue density) compared to the right sinus air cavity with no

internal septae. No evidence of impacted or missing tooth. The right maxillary sinus is clear. The lower left concha of the nose was not penetrated in any position.

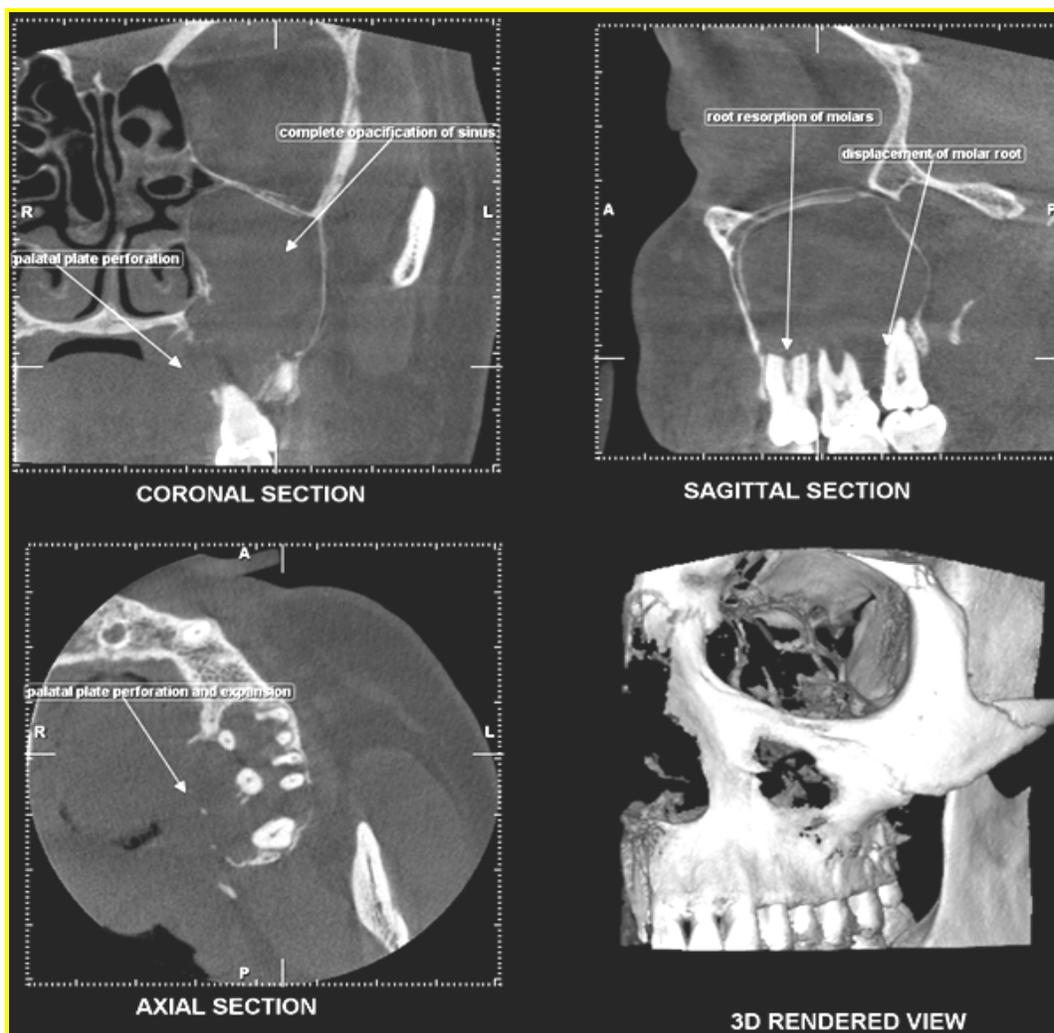


Figure #1.2: MPR images showing left maxillary sinus opacification, left palatal plate perforation and left molar root resorption.



RADIOGRAPHIC IMPRESSION:

- Benign neoplasm of maxilla involving the sinus s/o Ameloblastoma
- Malignant neoplasm of maxillary sinus

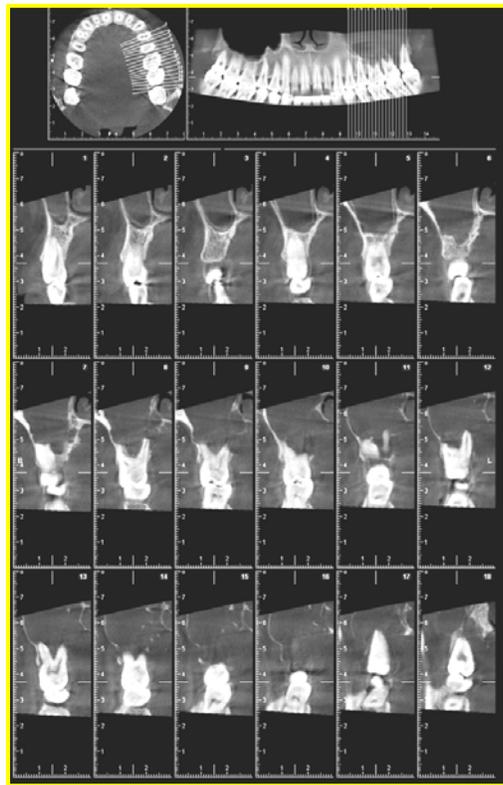
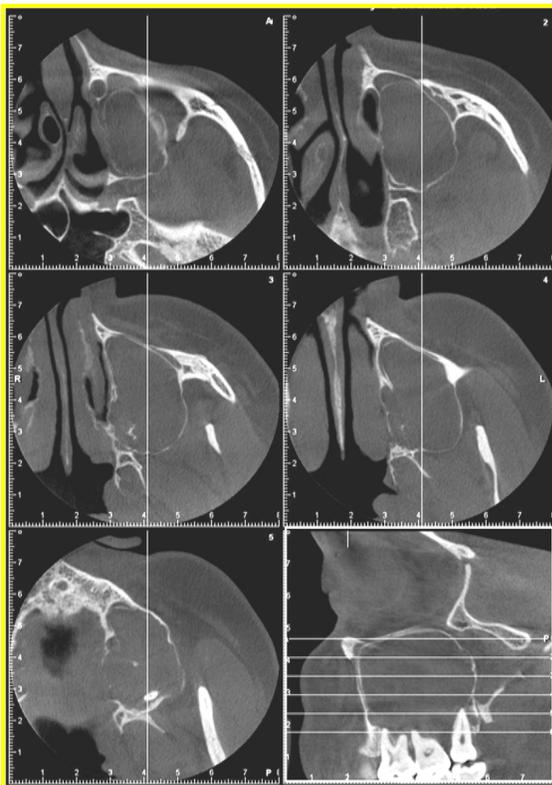
RECOMMENDATIONS:

Intraoral biopsy of the palatal swelling for nature of the lesion followed by surgical management.

DISCUSSION: Pathology encountered in the posterior maxilla could have a dental origin and spread to involve the sinus or originate from maxillary sinus and spread to the dentition. The differential diagnosis of a maxillary antral lesion includes lesions of sinonasal, odontogenic and minor salivary gland origins. Odontogenic cysts and tumors are high on the differential diagnosis when a lesion is encountered in the tooth-bearing area of the jaws and/or there is dental structure within the lesion. These include radicular cyst, odontogenic keratocyst, ameloblastoma, adenomatoid odontogenic tumor, ameloblastic fibroma, odontogenic myxoma, and glandular odontogenic cyst.

Massive lesions in maxillary posterior region can invade and resorb sinus walls, orbital floor and nasal wall. CBCT is a very good imaging modality to obtain a multiplanar view of the lesion and its extent. Resorption and expansion of the walls can be thus clearly studied with CBCT scan. Obtaining transagittal views help to evaluate root resorption better, usually noted in ameloblastoma and malignant tumours. (Figure #1.3)

Since maxillary ameloblastoma has a predominantly painless and slow growth, there is commonly a delay in its recognition which may extend into structures like orbit, nasal cavity and oral cavity. In the following case, the lesion extended into the left maxillary antrum up to the lower concha of the nose and the inferior orbital wall without penetrating these structures



*Figure #1.3:
Multiple axial
and
trans-sagittal
views
of the left
maxillary sinus
seen
showing expansion
and resorption
of the cortices.*

CONCLUSION:

Any unexplained radio-opacity in the maxillary sinus of an older individual should be evaluated for malignant neoplasms of the maxillary sinus.

CBCT provides multiple sections through the sinuses at different planes, it contributes to the final diagnosis and determination of the extent of the disease.

Case Courtesy: Dr.Raghuwanshi's Mastermind CBCT (Cone Beam CT) 3D Digital Dental Imaging Centre, Porvorim, Goa. Ph: 0832-2417555.