

# ADENOMATOID ODONTOGENIC TUMOUR (A.O.T.) A TUMOUR NOT SO COMMON, A CASE REPORT.

Dr. Ekta Badani, M.D.S. (Oral & Maxillofacial Surgery), People's Dental College & Hospital.  
Dr. Suhas.S., MDS (Oral Medicine & Radiology), College of Dental Surgery, Manipal.  
Dr. Ravi Prakash, M.D.S.(Oral Pathology), Peoples Dental College & Hospital  
Dr. Rinky Nyachhyon, B.D.S., People's Dental College & Hospital.

## INTRODUCTION

An uncommon tumour of odontogenic origin, Adenomatoid odontogenic tumour comprises only 0.1 percent of the tumours of the jaws and 3 percent of all odontogenic tumours. Literature review from the last century reveals about 310 similar case reports.

This benign tumour occurs typically in young persons in the second or third decade of life with a predilection for females and in the anterior segment of maxilla. It is frequently associated with an unerupted tooth but may occur in a normally erupted dentition.

We report a case of A.O.T. seen in the Out patient department of the Dental College, B.P.K.I.H.S.

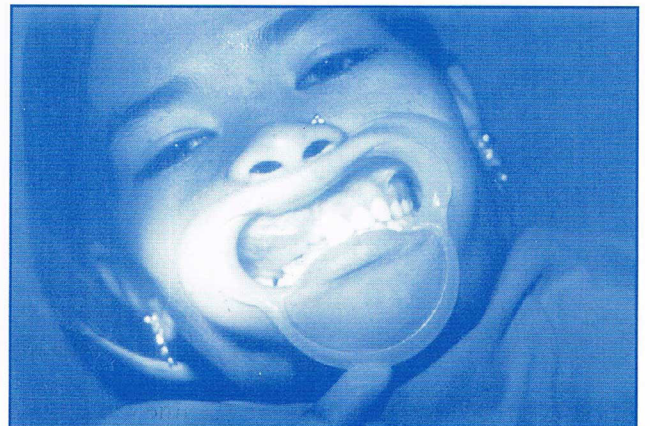
## CASE REPORT

A fifteen year old girl visited the dental OPD with a chief complaint of swelling on the right side of the cheek noticed since one year and also complained of missing teeth. There was no history of pain. Swelling was insidious in onset and was progressively increasing in size. There was no history of trauma, tooth extraction, nasal obstruction, epistaxis and fever.

Examination of extra oral swelling revealed a hard non – tender swelling in right maxilla approximately 3x4cms.in size obliterating the nasolabial fold . The swelling had pushed the right lateral wall of the nose medially.



Intra oral examination revealed a hard non – tender swelling extending from upper left central incisor region to upper first molar region. Palatal as well as buccal cortical plate expansion was noticed with



obliteration of buccal and labial sulcus. Upper right deciduous canine was over retained and mobile. Permanent upper right central incisor, lateral incisor and canine were missing clinically. Over lying mucosa was normal. No sinus or discharge was seen.

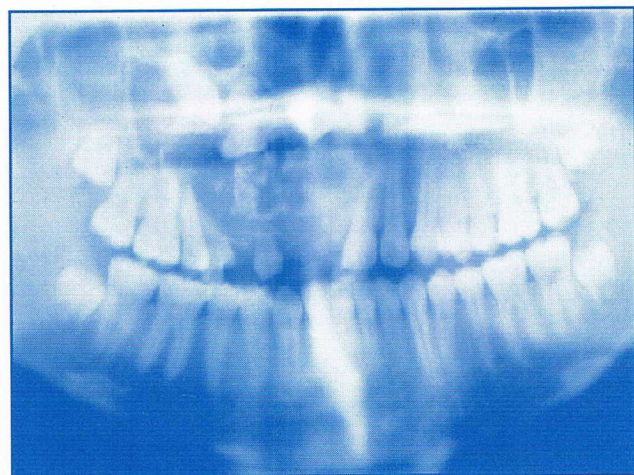
## RADIOGRAPHIC EXAMINATION:

Upper occlusal radiograph revealed a well - defined radiolucent area approximately 3x4 1/2 cm in the right maxilla which contained specks of irregular



calcified masses inside it. Impacted teeth were seen. Expansion of cortical plates was also confirmed.

OPG revealed a well – defined radiolucent area of size 6 1/2 x 4 1/2 cms. extending antero – posteriorly from midline of maxilla till the right upper first molar region. It also showed impacted central



incisor, lateral incisor and canine. Canine was pushed towards the orbital floor. It also revealed specks of irregular calcified masses distributed through out the radiolucent area. Flaring of the roots was seen but with no evidence of root resorption.

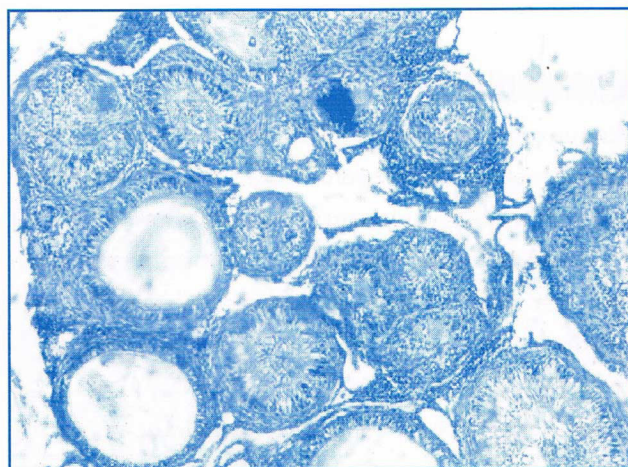
Based on the clinical features, site, age and sex predilection and radiographic features it was

provisionally diagnosed as adenomatoid odontogenic tumour.

Aspiration was attempted with no yield.

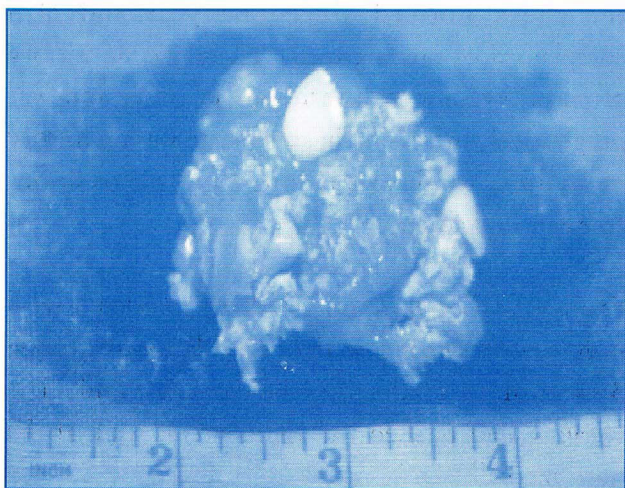
## MICROSCOPY

H&E section of biopsy specimen viewed under 10x magnification showed sheets, strands and cords of epithelial cells that differentiate in places into columnar cells resembling ameloblasts. Few areas



showed tubules and adenomatoid like appearance consisting of central space enclosed by columnar cells, which are arranged radially in a single layer with thin layer of homogenous eosinophilic material in contact with the free ends of the cells. Scattered calcifications were also seen. The histopathological diagnosis was confirmatory of Adenomatoid odontogenic tumour.

This was later surgically excised under general anaesthesia. Macroscopically, the tumor was



approximately 4x4 cm in size containing a well-defined fibrous capsule. Teeth were embedded in the tumor mass. It also contained calcified structures. The root of the lateral incisor was dilacerated.

Postoperative healing was uneventful and the case is under follow up.

## DISCUSSION

Adenomatoid odontogenic tumour was first reported by Dreibradt as pseudo- adenoma adamantium in 1907. This tumour has a chequered terminology and it was Stafne who identified it as Adenomatoid Odontogenic Tumour in 1948. The origin of the tumour is considered to be from residual odontogenic epithelium, some authors suggest to call it hamartoma of residual odontogenic epithelium.

It is commonly seen in females and affects the anterior part of the maxilla. It is frequently associated with an unerupted tooth but may occur in a normally erupted dentition, where it is known as an extrafollicular variant. Irregular root resorption and dilacerations are only infrequently reported in literature.

Radiographs generally show a clearly demarcated radiolucent lesion and also there is frequently some calcification in the tumour.

Clinical, radiographic, macroscopic and microscopic findings in the present case are consistent with descriptions of the lesion in dental literature.

Tumour behaviour is that of a benign lesion of variable growth potential and does not demand radical surgery.

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