Giant Dentigerous Cyst

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Abstract

Dentigerous cyst - a cyst of dental origin, though common in lower jaw is relatively uncommon in upper jaw. Here a 14 years, F, presented with huge swelling of unilateral maxilla and clinicoradiologically diagnosed as dentigerous cyst is being reported along with brief review of literature.

Key Words

Dentigerous cyst, Dentigerous cyst maxilla

Dentigerous cysts are formed around the crowns of developing teeth. They may also form in relation to unerupted teeth. They comprise 15% of all jaw cyst. It is thought to arise from the remains of the enamel organ after enamel formation is complete. The cyst is attached around the neck of the tooth near the amelocemental junction (Philip Mc Loughlin).

Case Report

N. M., 14 Years, F, presented with the chief complaints of gradually increasing swelling of left maxilla since last 3 years (Fig 1). She had no history of facial pain or nasal bleeding, difficulty in chewing of food and opening of mouth. But she felt difficulty of looking downwards as vision of left eye was obstructed by the huge swelling.

On Examination

A 7 cm X 7 cm nontender bony swelling found on the antero lateral wall of left maxilla, a small portion of which had egg shell crackling laterally. The swelling pushed the lower eye lid a little upwards. Palate and dentition was normal. No loosening of teeth was found. Anterior rhinoscopic examination showed - lateral wall of nose slightly pushed medially on left side.

Fig. 1. Clinical Photograph (Pre-treatment)

Routine hematological investigations were within normal limit. X-ray showed a radiolucent swelling of antero lateral wall of left maxilla with a radioopaque shadow in it indication a tooth (Fig 2). Bony outline was intact. CT scan showed (Fig. 3) - a homogeneous soft tissue shadow of left maxilla with intact bony margin. A tooth was found within it. The mass was limited within the maxilla.

Treatment

The cyst was removed with an intact canine tooth through sublabial approach without any injury to nasal cavity mucosa or palate. Patient had an uneventful recovery (Fig. 4).

Fig. 2. X-ray PNS (OM VIEW) showing unerupted tooth inside the cyst

Discussion

Dentigerous cyst are thought to originate from accumulation of fluid between the reduced enamel and the completed tooth (Nishit Shah et al, 1995)

They are commonly associated with an unerupted permanent tooth either one of the regular teeth or supernumary tooth as seen in our case., but may occasionally be associated with a deciduous tooth.

The cyst is attached to the neck of a tooth - so the crown of the tooth lie, within the cyst (Burket). This was also seen in our case.

Dentigerous cyst attain a large size and resorb the root of a adjacent tooth (Struthers PJ, Shear M). The mass may push the orbital floor or lateral nasal wall as seen in our case.

Fig. 3. CT scan of left maxillary antrum showing the outline of the cyst

In long standing cases, neoplasia may arise in the wall of dentigerous cyst—commonly plexiform ameloblastoma and squamous cell carcinoma (Gardners G et al, Berenholz et al, Maxymiw et al).

Treatment is surgical excision - most of the authors prefer Weber Fergusson incision for removal of large cyst. Small cyst may be removed by sublabial incision.

In our case- removal of the mass was done through sublabial approach considering the sex and age of

Fig.4. : Clinical Photograph (Post - Treatment)

the patient in contrast to the usually accepted methods.

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