Calcifying Odontogenic Cyst

Ishwar Singh, Dept. of ENT, Lata Gathwala, Dept. of Oral Surgery,
Rohit Sharma, Dept of Pathology, H. K. Singh, Dept. of ENT, S. P. S. Yadav, Dept. of ENT,
Medical College and Hospital, Rohtak-124 001

Calcifying odontogenic cyst is also known as keratinising – calcifying epithelial odontogenic cyst cystic keratinising tumour and Gorlin's cyst. Gorlin (1962) described it as a separate entity, coined the term 'calcifying epithelial odontogenic cyst' and described 15 new cases. This unusual lesion shares the characteristics of a cyst as well as solid neoplasm (Shafer 1983). The cyst is rather rare and comprises 2% of all odontogenic lesions including developmental cyst and tumours.

CASE REPORT

S, twenty years' male presented in otolaryngology service with a gradually increasing swelling of right cheek of six months duration. It was painless to begin with but subsequently there was pain off and on which used to subside after a course of antibiotics and anti-inflammatory drugs. Examination revealed a 4 cm x 4 cm swelling extending from just below the inferior orbital margin to the gum line of the upper lip. The gingivolabial sulcus was obliterated, but the hard palate was normal. The swelling was projecting into right nasal cavity and partially obstructing it. X-ray PNS (Fig.1) revealed diffuse haziness. Clinical diagnosis of nasolabial cyst was entertained. Caldwell–Lucs operation was carried out. The anterolateral wall of the maxilla was found to be eggshell thin. The cyst was found to be filling the whole of the antrum. There was minimal bleeding. Intranasal antrostomy was done. The post operative period was uneventful. Patient was discharged after two days. The histopathology was reported as calcifying odontogenic cyst (Fig.2).

DISCUSSION

The calcifying odontogenic cyst can involve any

Fig-1

X-ray PNS showing opacity of right maxilla

age group ranging between ranges being 7 and 82 years with a mean age of 20 years. Almost 50% of cases are below 31 yrs. it is equally distributed among both the sexes (Freedman 1975, Altini and Farman, 1975, Nagao et al 1983, Sahni 1985). The present case was a 20 years old male. The mandible and maxilla are equally involved by the calcifying odontogenic cyst (Freedman, Nagao et al 1983). In the presenting case the right maxilla was involved. It usually presents as a painless, slow growing swelling (Thawley, Panje 1987; Shafer 1983) but in one

Fig-2

Cyst lining of squamous epithelium with focal keratinisation and calcification within stellate reticulum. H & E x 100.

third cases there may be pain (Freedman 1975, Sahni et al 1985) as was also observed with the present case. Radiographically lesions appear as radiolucencies with well demarcated borders and variable amount of calcified radiopaque material

may be scattered through out the radio lucency (Shafer, 1983; Thawley and Panje, 1987). The X-ray PNS showed radio opacity in the present case. Sometimes it may be associated with unerupted tooth (Altini, Farman 1975). The cyst wall is lined by squamous epithelium six to eight cells in thickness, with a prominent basal layer of the columnar cells and a loose appearing middle layer that resembles stellate reticulum. The cells towards the lumen exhibit keratinisation calcification and karyolysis resulting in ghost cell appearance. Ghost cells are pale, eosinophilic, swollen epithelial cells that have lost the nucleus but show a faint outline of the cellular and nuclear membrane.

Excision is the standard accepted modality of treatment and recurrence is very rare after complete excision. However, very occasionally there may not only be recurrence but malignant transformation also (Shafer 1983, Thawley, Panje 1987).

References

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Corrigendum

Please read the name of the Book published in September, 1997 issue of IJOL & HNS in page 298 as Fundamentals of Ear, Nose and Throat and Head-Neck Diseases—6th Edition and not as Fundamentals of Ear, Nose and Throat Diseases by S. K. Dey.