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CYSTIC LESION OF THE MAXILLA - CASE REPORT

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ABSTRACT

The authors submit a theme concerning a radiolucent lesion of the maxilla. They emphasize on the fact that the clinical and radiological features are difficult to differentiate extensive cyst lesion from those of other odontogenic or non odontogenic benign tumor arising in the upper jaw. The correct diagnose is very difficult and is possible only after histological examination.

They present a case with a large cystic lesion of the maxilla hystologically proved as keratocyst.

Key words: keratocyst, radiolucency, maxilla

Cystic lesions of the maxilla could be unilocular or multilocular, usually with well-defined sclerotic borders. Differential diagnosis should be made with all bone lesions with radiolucency. They are two big groups-cysts and tumours.

The odontogenic keratocyst is the third most common cyst of the jaws, after the follicular and radicular cysts. Keratocyst most commonly occurs as single lesion in the jaw of otherwise healthy persons more frequently in the mandible than in maxilla. /1,3,7/.

According to Pippi et al. /5/ keratocysts were twice as frequent in women than in men. According to R. Brannon /2/ and St. Vincent /7/ the lesion has a slight predilection for males.

It is twice frequent in the mandible as in the maxilla and the most common sites were maxillary third molar region and maxillary cuspid area. The odontogenic keratocyst comprises 10.5% of the total cysts./2/

Radiographically the keratocyst did not appear to

have a reliable characteristic feature to distinguish it from other radiolucent lesions of jaws. Their appearance could be unilocular, bilocular and multilocular, frequently bordered by a thin sclerotic border of bone and their periphery loculated. They can masquerade as any radiolucent lesion in jaws, but because of their frequent large size, multilocular appearance and clinical behaviour they are often misinterpreted as ameloblastoma. Keratocysts are characterized by a high recurrence rate. /4,6,8,9/

CASE REPORT

A 37 years old woman came to the Oral Surgery Clinic with a facial assymetry caused by a swelling of the left part of the maxilla. She noticed a painless gradually enlarged swelling in this area 2 months ago. The last week a pain appeared; it was constant, pulsating, localized in the region of the left maxillary sinus.

Extraoral examination: a facial assymetry due to a persistent swelling in the region of the left maxilla.

Intraoral examination revealed an expansion of the distal area of the left maxilla, extending towards the buccogingival sulcus. The swelling was slightly painful to palpation and with a bone thickness. The overlying mucosa was intact, normal in colour, non connected with the bone. The missing teeth in the left part of the maxilla were restored 10 years ago.

Lab examinations didn't show deviation from normal ranges.

X-ray examination:

- A panoramic radiograph /Fig. 1/ shows an ovoid well demarkated with osteosclerotic border radiolucent lesion on the left maxilla extending from 21 up to 27 and

measuring approximately 4 cm in diameter. The radiolucency is homogenous, well delineated inferiorly reaching the area of premolars near the alveolar crest, including the apical one third of the root of 25; superiorly up to the left maxillary sinus; mesially radiolucency reaches the apex of 21 and distally –near the root of 27. /Fig. 2, 3/

- Water's projection X-ray shows overshadowed left maxillary sinus /Fig. 4/.

- CT /CCT, ACT/ reveals a polycystic formation which is localized in the base of the nasal and maxillary cavities expanding ventrally the anterior wall of the maxilla. /Fig. 5, 6/

The patient underwent a surgical treatment.

Intraorally an incision and mucoperiosteal flap were made; the buccal cortical bone was trepanated. The lesion was a cyst cavity situated in the alveolar process reaching in medial direction 21, distally up to 27 and cranially – near the floor of the left maxillary sinus cavity.

The cyst was dissected from the underlying bone; teeth 23 and 25 were extracted and the apex of 22 was resected.

The bone edges were made smooth, the flap was closed.

The postoperative period was normal; the threads were removed on the 7 th day.

The history and the clinical and radiographic findings suggest a benign odontogenic tumor or cyst. The histological result showed: a keratocyst.

DISCUSSION:

A variety of cysts and tumours have well-circumscribed, multicystic appearance:

-ameloblastoma is most frequently unicystic; the multicystic type is rare. Some cases showing a unicystic appearance on panoramic radiograph, may have been multicystic on CT

- central giant cell granuloma/CGG/-has a predilection for women at any age; may present a unilocular or multilocular radiolucency; grows slowly by expanding and thinning the cortical plate

- central mucoepidermoid carcinoma-multilocular radiolucency similar to ameloblastoma -usually show cyst formation with cystic cavities

- adenomatoid odontogenic tumour-usually presents as painless swelling producing expansion of the overlying bone; appears as a unilocular radiolucency

- ameloblastic fibroma-unilocular or multilocular radiolucency with well defined borders

- odontogenic mixoma – multilocular radiolucency

- keratocyst

The most common feature of these lesions is their X-ray image:

unilocular or multilocular well delineated radiolucency.

CONCLUSION:

Radiological features of extensive maxillary odontogenic keratocyst found were well-defined radiolucencies with uni and multilocular appearance. A definitive diagnosis cannot be determined based on the history, clinical and radiographic evaluation. The correct diagnosis is very difficult and is possible only after histological examination

This case shows that big bone lesions could be asymptomatic. The case is interesting because of the lack of clinical symptoms and the presence of big bone lesions. Differential diagnosis includes all cysts of jaws and tumours from odontogenic and non odontogenic origin.

This case presents the necessity of preoperative exact X-ray information for the correlation between the lesion, nasal and maxillary cavity and teeth. This is important for precisizing the extent and the kind of the operation.

The authors mention the importance of regular patient follow-up examinations and imaging studies in order to detect and treat recurrent lesions.

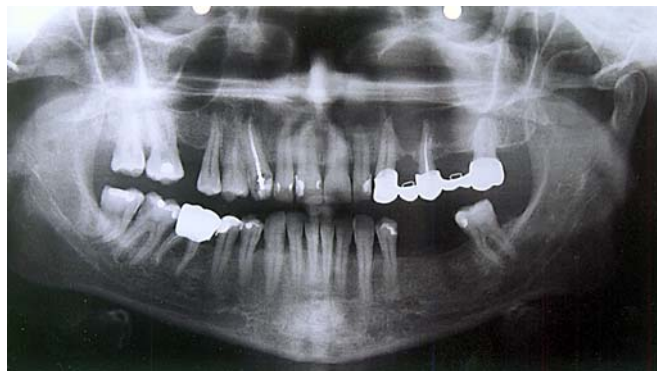


Fig. 1.



Fig. 2.

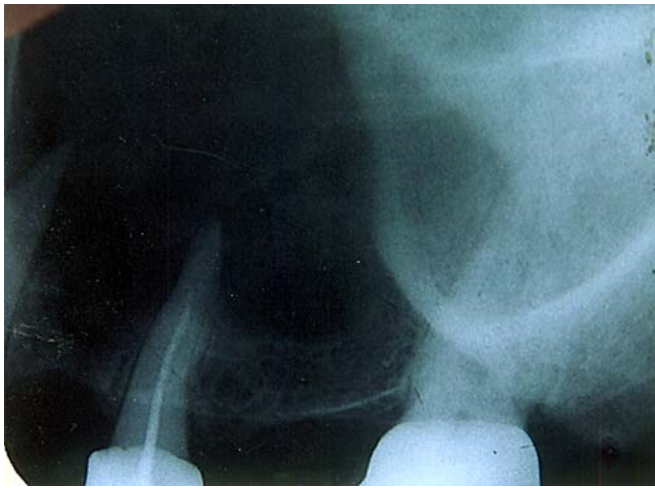


Fig. 3.



Fig. 4.

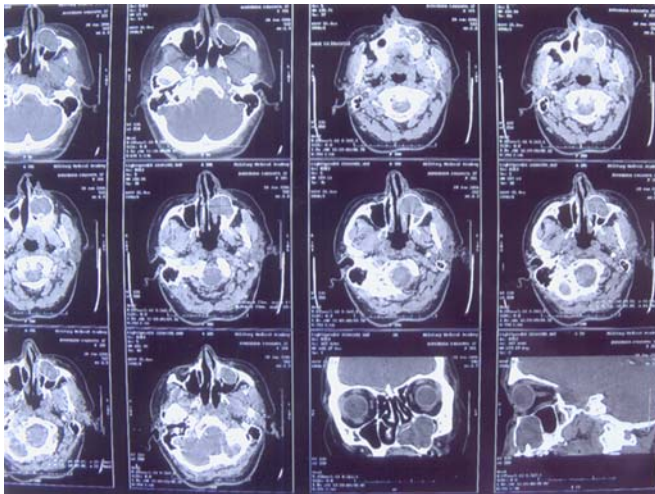


Fig. 5.

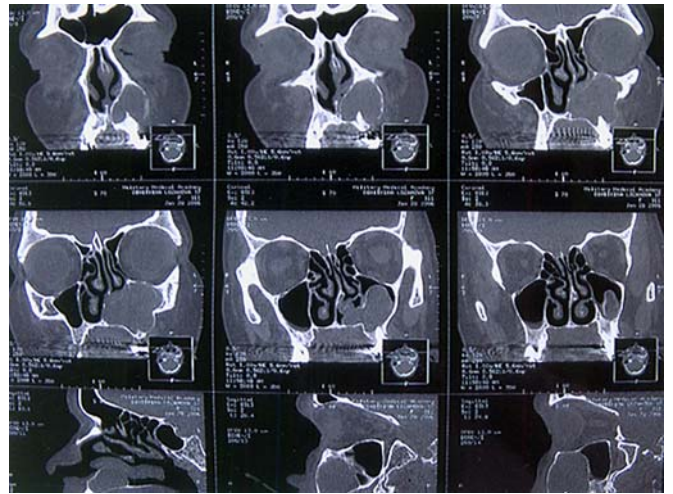


Fig. 6.

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