

EPIDERMOID CYST INVOLVING THE RIBS

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SUMMARY: *Epidermoid cyst involving the ribs:* Epidermoid cyst of bone are quite rare. They are usually located in the skull and distal phalanges. The case we are reporting on is an epidermoid cyst involving the ribs. We could not find any previous report in this location. Succesful removal of the affected ribs was made. The patient is symptom-free in one-year of follow-up period.

Özet: Kaburgaları tutan bir epidermoid kist vakası: Kemiklerin epidermoid kistleri oldukça seyrektir. Bu kistler, genellikle kafatası ve distal falanksları tutarlar. Tebliğ ettiğimiz vaka, kaburgaları tutan bir epidermoid kist olgusuna aittir. Literatür araştırmamızda, bu lokalizasyondaki bir olguya rastlanılmamıştır. Kist içeren kaburgalara başarılı bir cerrahi müdahale yapılmış olup hasta bir yıllık takip-te semptomsuz bulunmuştur.

Compared with common epidermal cyst of the dermis, epidermal inclusion cycts inside the bones are quite rare. These cysts, also called keratin, sebaceous or squamous cysts, do not seem to be as rare or indeed, many isolated observations are actually not reported(4).

Epidermoid cysts are found exclusively in the distal phalanges (Byers et al. 1966, Lerner and Sautwick 1968) and the majority in the skull (Roth 1964, Dahlin 1978) (1,2,3).

CASE

The case we are reporting has unusual clinical appereance. A 30-year-old man, a florist, was first admitted to a local clinic with a mass on his left thoracic wall, sixteen years ago. Local excision of the tumor was performed with no histologic examination. A new mass had progressed over the same area, on midaxillary line, following a long uneventful period. The biopsy of the tumor revealed an epidermoid inclusion cyst. Then, the patient was admitted to our clinic with a complaint of mass and chest pain.

The mass was at the level of seventh and eight thoracic ribs and over the midaxillary line. It was horizontally located 5 x 10 cm in size. The lesion was painful in deep palpation, also fixed to the underlying structure.

Routin chest X-ray showed no pathology. Also, there was no sign of resected ribs relating previous operations.

The laboratory tests were in normal limits. ESR was 26 mm/h. Tuberculin test was also negative.

The patient was operated upon on april 22, 1985. An insicion over the eight rib revealed that seventh, eight and nineth ribs were affected. The intercostal spaces were also involved. The cystic cavities of the ribs contained a whitish-yellow caseaum-like substance. These ribs and intercostal spaces were resected with underlyign local pleura. The cystic process affected these ribs as long as 10 cm in lenght and two cm near to the vertebrae. The patient was discharged on the thirteenth day of operation.

In pathologic examination, cross-section of the resected ribs revealed replacement of the bone by circumscribed multiple cystic lesions containing soft friable white material (Fig 1).

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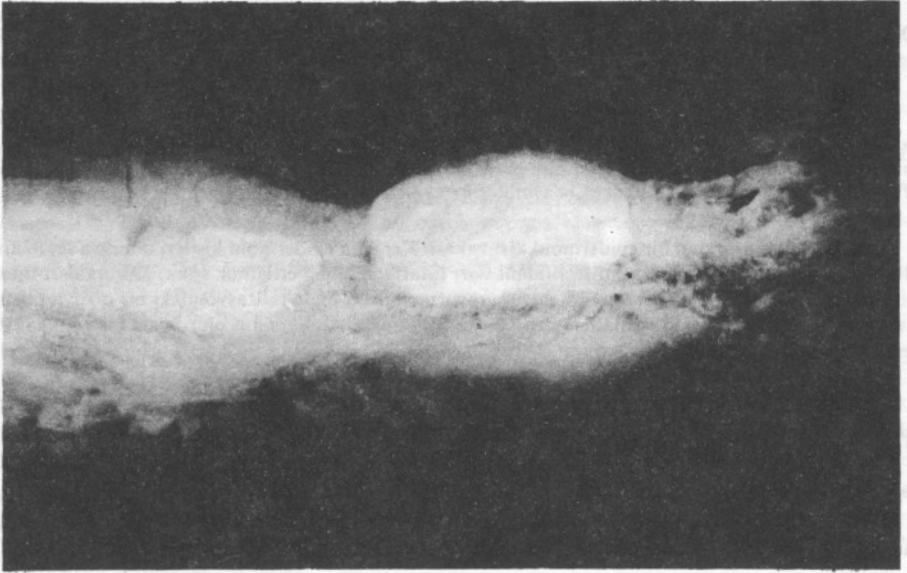


Fig 1: Cross-section of the resected ribs revealed replacement of the bone by circumscribed multiple cystic lesions containing soft friable white material.

Microscopically, the cysts were lined by stratified squamous epithelium with a well defined granular cell layer and laminated mass of keratin within the lumens (Fig 2,3). Several small fragments of squamous epithelium were dispersed in the surrounding soft tissue and foci of multinucleated foreign body giant cells, lymphocytes and plasmocytes.

DISCUSSION

More than one hundred cases of squamous cyst involving either the skull or phalanges have been reported in the literature. Most of the authors reporting on squamous cyst of the terminal phalanges have suggested that the cyst is of traumatic origin, resulting from displacement of epidermis into the dermis by a mild to severe crushing type of injury, frequently involving a nail bed (1,4). But it is not possible to determine previous injury in all cases.

Also, some authors suggest that most of the cysts located in the skull are of non-traumatic origin, while some are (1,4).

The case we are reporting on is an unusual location of epidermoid cyst of bones, in thoracic ribs. We could not find any previous report in this location. Also, the patient has no history of trauma. On the other hand, the lesion affected three ribs as long as 10 cm in length. The intercostal spaces were affected too. Another interesting point of the case is the previous operation, which was performed sixteen years ago, with no histologic examination. It is difficult to determine whether it is recurrence or not.

Adequate treatment consists in removal of the cyst and its wall by curettage or removal of the involved portion of the bone like in our case (1,4). The aim of this report is to review an unusual case of epidermoid cyst of the ribs.

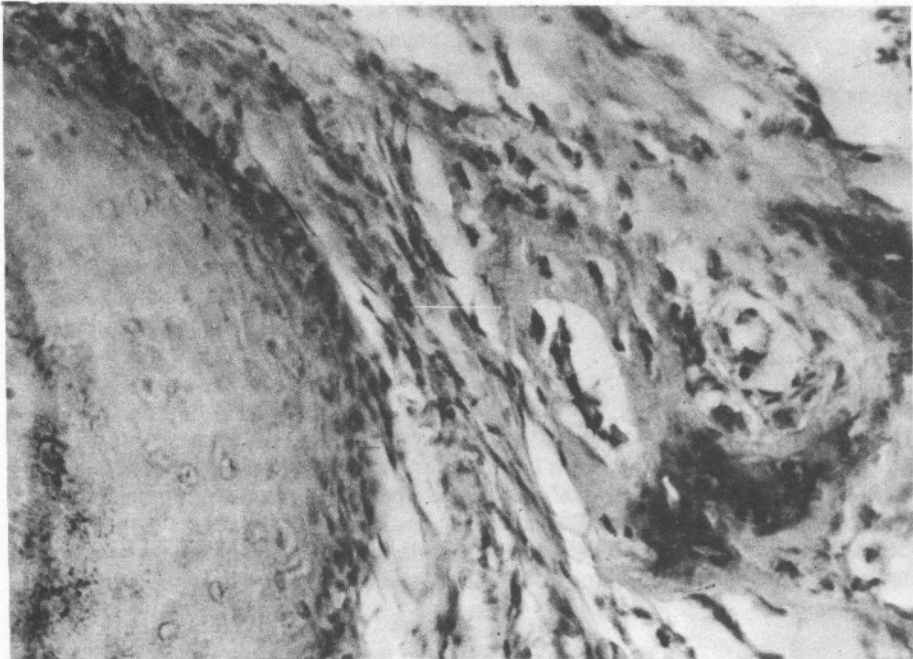
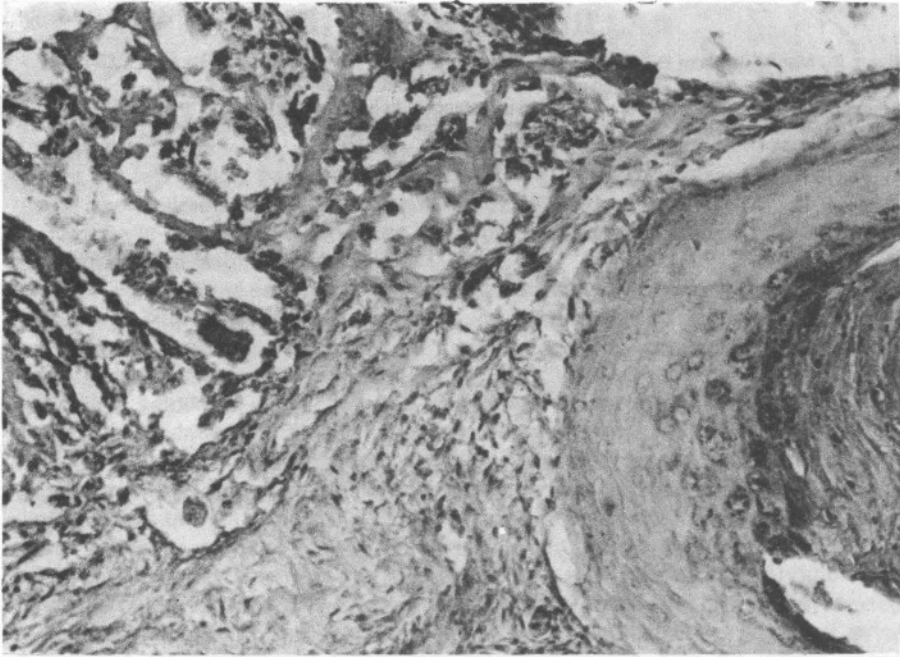


Fig 2 and 3: Microscopic examination shows, the cysts are lined by stratified squamous epithelium with a well defined granular cell layer and laminated masses of keratin within the lumens (H.-E.X125).

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