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Intraosseous Epidermoid Inclusion Cyst of Distal Phalanx: A Rare Entity

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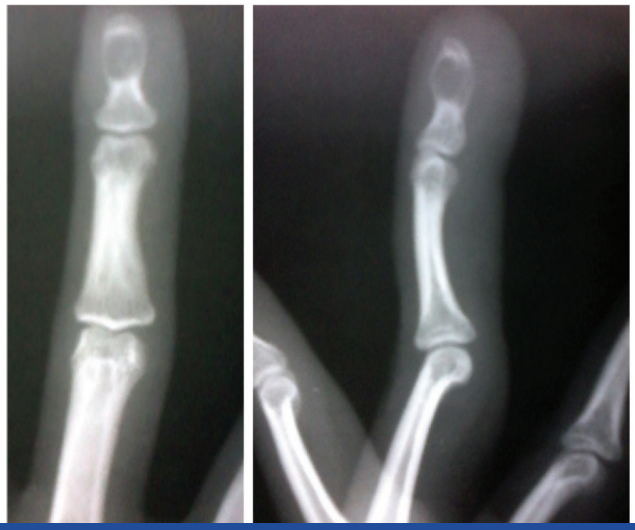
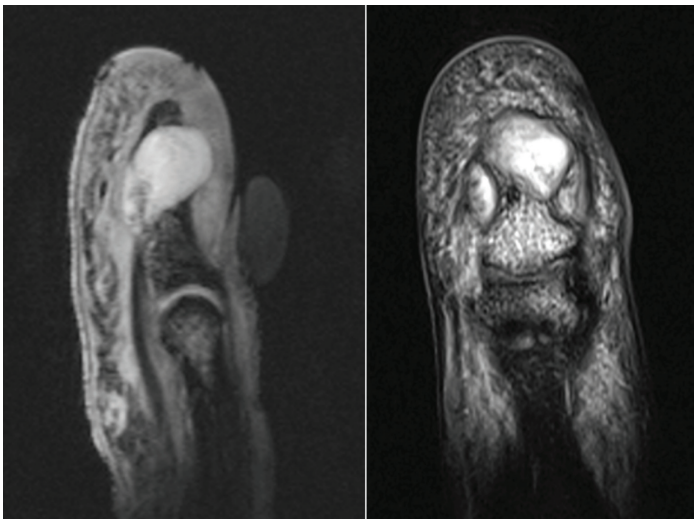
Keywords: Curettage, Epidermoid cyst, Lytic lesion

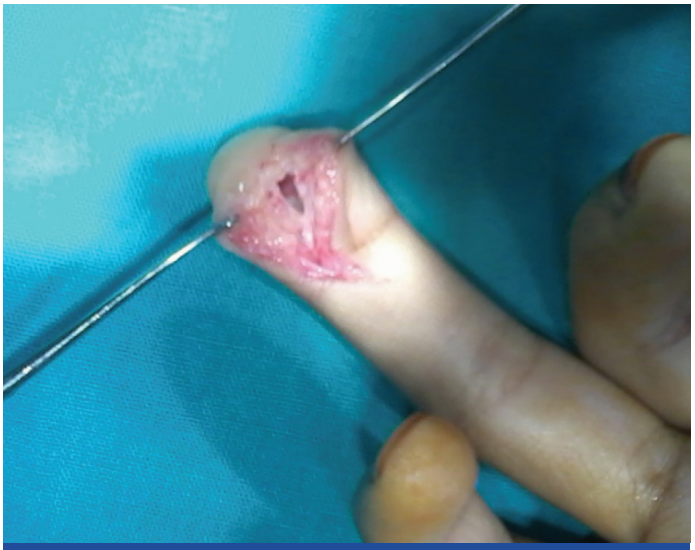
A 20-year-old female came with complaints of pain and swelling of the distal phalanx of the left middle finger. There was history of minor blunt trauma 1 year before presentation. Radiological examination revealed an expansile lytic lesion [Table/Fig-1a&b]. MRI suggested an 8mm by 6mm expansile hypointense lesion in the distal phalangeal region with cortical breach [Table/Fig-2a&b]. At surgery, lesion contained a creamy material which was proven on histopathology to be Epidermoid inclusion cyst (EIC). Intralesional curettage was undertaken and the defect thus created was filled with bone grafting [Table/Fig-3]. Lesion healed well in 3 months and there was complete pain relief [Table/Fig-4a&b]. At final follow-up of four years, there was no evidence of recurrence.



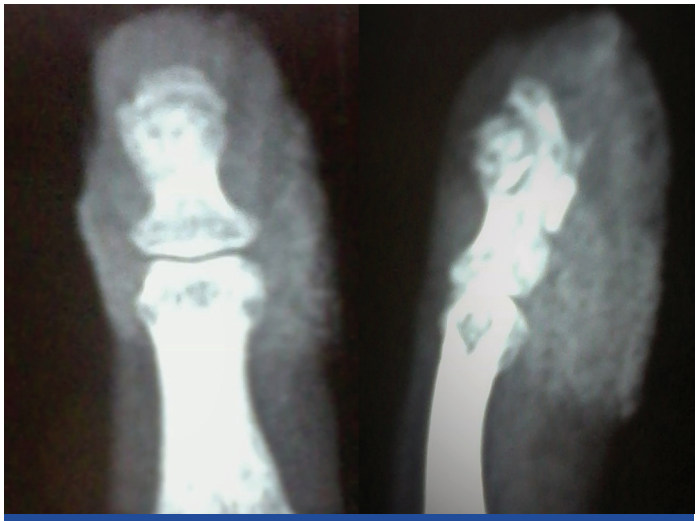
[Table/Fig-1a&b]: Pre-operative radiographs antero-posterior and lateral of distal phalanx of middle finger showing expansile lytic lesion.



[Table/Fig-2a&b]: MRI (T1 images) showing hypointense homogenous mass, in the distal phalanx of middle finger with cortical breach.



[Table/Fig-3]: Intraoperative defect after curettage



[Table/Fig-4a&b]: Three months postoperative anteroposterior and lateral radiograph showing healing of lesion after curettage and bone-grafting.

Epidermal inclusion cysts (EIC) of the bone are an uncommon entity with a few case reports in orthopaedic literature [1-4]. It may be the result of major or minor digital trauma to the terminal phalanx which may have occurred many years prior to the presentation.

The differential diagnosis of EIC includes enchondroma, glomus tumour, aneurysmal bone cyst, chronic infections or metastasis [5,6]. It is difficult to differentiate these entities on clinical and radilogical examination. Histopathological examination helps in arriving at a definitive diagnosis.

Intralesional curettage and bone grafting has yield successful clinical and radiological results in the reports published till date [1,3,7]. There is no short-term recurrence reported in literature.

Epidermoid inclusion cyst should be considered as one of the differential diagnosis in cases of expansile lytic lesions of distal phalanx, especially when there is history of blunt or penetrating trauma. Intralesional curettage and bone grafting is the accepted treatment of choice with low risk of recurrence.

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