CASE REPORT

Idiopathic Calcinosis Cutis over Back

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Abstract:

Calcinosis Cutis is characterized by the deposition of calcium salts in the skin and subcutaneous tissue. Idiopathic Calcinosis Cutis is a rare condition and hence is usually a diagnosis of exclusion. Idiopathic Calcinosis Cutis occurs in the absence of known trauma, inciting agent or metabolic defect. This is a case report of an adult female presenting with Idiopathic Calcinosis Cutis over the back. The exact mechanism of occurrence of this condition is not known. Patients are usually managed with pharmacotherapy, surgery being reserved for those with pain, recurrent infection and impaired function. The lesions are known to recur and a periodic follow-up of these patients is essential.

Keywords: Calcification, Recurrence, Surgery

Introduction:

Calcinosis Cutis (CC) is characterized by the deposition of calcium salts in the skin and subcutaneous tissue. Based on etiology, CC is classified into: dystrophic calcification (localized/ wide spread tissue damage), metastatic calcification (abnormal calcium and phosphate metabolism), idiopathic calcification and iatrogenic calcification [1]. Idiopathic Calcinosis Cutis (ICC) is a rare condition and hence is usually a diagnosis of exclusion [2]. This is a case report of an adult female presenting with Idiopathic Calcinosis Cutis.

Case Report:

A 40-year-old housewife presented to the surgical Out-patients Department with a progressively increasing swelling on the back since birth and associated pain for 5 months. There was no history of similar lesions over the breast, genitalia or any other site. There was no history of trauma or pathologic lesions. No history of fever or loss of weight or appetite was present. On examination, there was single oval, smooth, well defined edge, non fluctuating, non trans-illuminant, nonpulsatile, irreducible, mobile, tender swelling with variegated consistency on the back near right scapular region measuring 8x5 cm (Fig. 1). There were no signs of inflammation. Blood Tests revealed serum calcium of 9.39 mg/dL (8.9-10.3), serum phosphorus of 3.41 mg/dL (2.5-4.5), urinary calcium of 1.18mg/dL and normal parathyroid assay. X-ray (Fig. 2) and Ultrasonography of swelling demonstrated calcinosis. FNAC revealed the accumulation of calcium salts in the dermis. The swelling was excised in toto (Fig. 3) and histopathologyreport revealed tissue comprising of fibrocollagenous tissue admixed with mature adipocytes, congested blood vessels and large area of calcification features consistent with CC (Fig. 4). The patient was administered antibiotics for 10 days and advised periodic follow up.

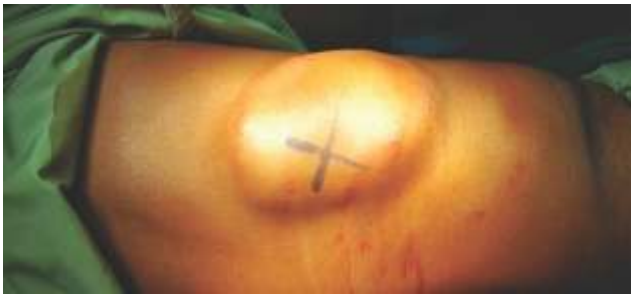


Fig. 1: Swelling over Back

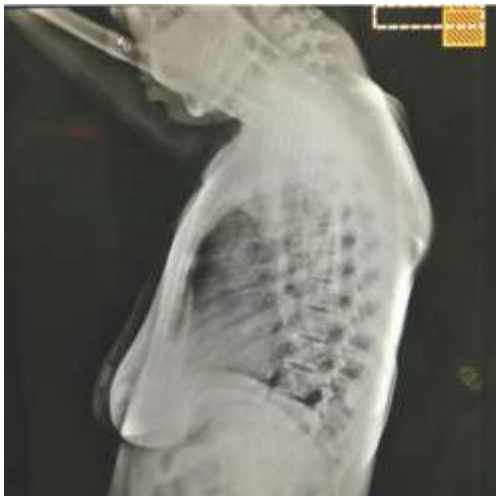


Fig. 2: X-Ray showing Calcified Nodules over Scapular Region

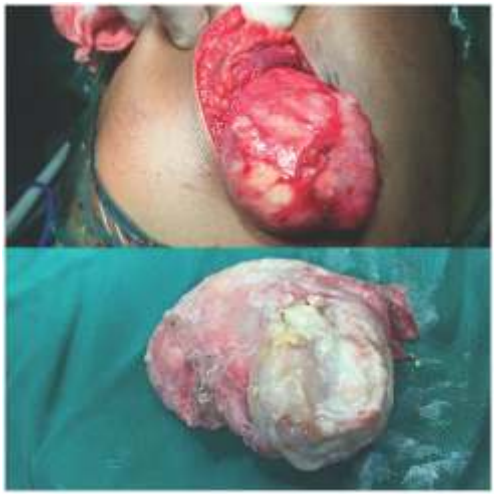


Fig. 3: Excised Specimen

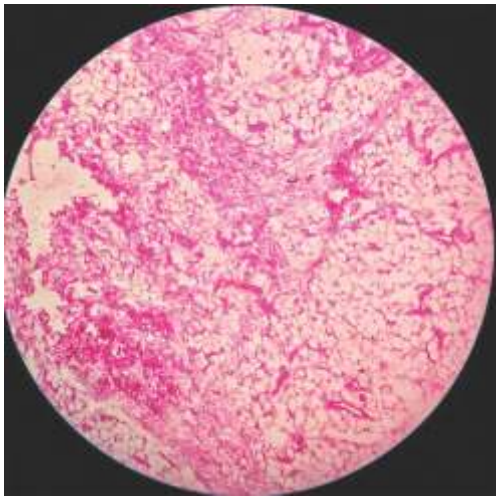
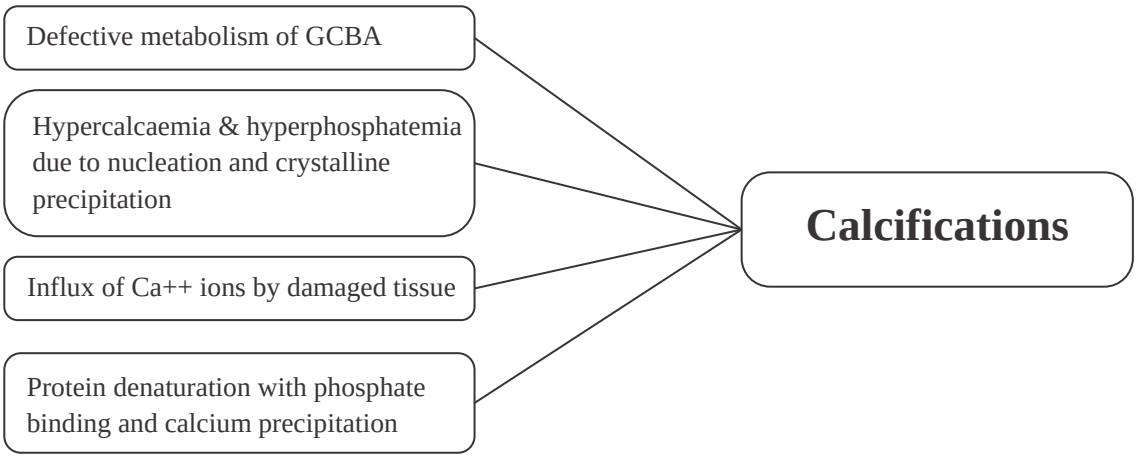


Fig. 4: HPE Findings

Discussion:

CC was initially described in 1855 by Virchow [3]. Dystrophic variety is the commonest and is associated with Calcinosis, Raynaud's phenomenon, Esophagealdysmotility, Sclerodactyly, Telangiectasia (CREST) Syndrome and dermatomyositis [4]. ICC occurs in the absence of known trauma, inciting agent or metabolic defect.

It can be classified as sub-epidermal calcified nodule, tumoral calcinosis, calcinosis cutis circumscripta, calcinosis universalis, scrotal calcinosis and milia-like calcinosis. Tumoral Calcinosis manifests as masses around joints in otherwise healthy adolescents and sub-epidermal nodules occur on head and extremities in children [5, 6]. The disease is usually seen over vulva, scrotum, penis and breast [7]. The histopathological examination usually shows calcium deposits in the dermis, with or without foreign-body giant cell reaction. Blood vessels may also contain calcium deposits [5]. Our case did not have any history of trauma or parenteral calcium therapy, had all blood investigations within normal limits and histopathology revealed areas of calcification in the dermis.The exact mechanism of occurrence of this condition is not known. Various treatment options have been outlined for ICC. Medical treatment includes bisphosphonates, warfarin, probenecid, colchicine, intra-lesional corticosteroids, magnesium or aluminum antacids and diltiazem [10, 11]. Surgical excision is usually done in patients presenting with painful lesions, as in our case. Recurrent infections, ulceration and impaired function are also indications for surgical



Possible Mechanism [8, 9]

intervention [5]. However, recurrence rates are reported to be high [12].

Conclusion:

ICC is a rare occurrence and usually a diagnosis of exclusion. Medical treatment is usually prolonged and offers limited benefits. Surgery is done in cases with pain, recurrent infections, ulceration and functional impairment. A periodic follow-up of patients is warranted to check for recurrence.

References

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