CASE REPORT

A Case Report on Calcinosis Cutis

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Keywords : Calcinosis cutis; Serum Phosphate

ABSTRACT

A 55-year old female presented with Swelling over right upper buttock region. Investigation was suggestive of Calcification on imaging as well as FNAC(fine needle aspiration cytology). Excision was done under local anaesthesia. Calcinosis Cutis may be caused by trauma, inflammation, varicose veins, tumors, infections, connective tissue disease, hyperphosphatemia, and hypercalcemia. Calcinosis cutis commonly occurs in patients with systemic sclerosis. It was first described by Virchow in 1855.[1] It is said to be due to friction causing degeneration of skin and immediate deeper structure with increased local alkalinity of the tissue causes precipitation of the calcium leading to solid, hard, swelling in the skin. Cut section shows hard, yellowish material.[2]

INTRODUCTION

Calcinosis cutis is defined as a condition in which hydroxyapatite crystals of calcium phosphate deposited in the skin and subcutaneous tissue. It is classified into five main types: dystrophic, metastatic, idiopathic, iatrogenic, and calciphylaxis. Dystrophic calcification is the most common cause of calcinosis cutis and is associated with normal laboratory values of calcium and phosphorus. There is an underlying disease, systemic sclerosis, dermatomyositis, mixed connective tissue disease, or lupus, that induces tissue damage and creates a nidus for calcification. Metastatic calcification has abnormal serum levels of calcium and phosphorus with deposition occurring after calcium phosphate product exceeds 70mg/dl. Idiopathic calcification has no underlying tissue damage or abnormal laboratory values. It includes tumoral calcinosis, subepidermal calcified nodules, and scrotal calcinosis. Iatrogenic calcification is caused by administration of calcium or phosphate containing agent and inducing precipitation of calcium salts. Calciphylaxis involves calcification of small and medium-sized vessels and is associated with chronic renal failure and dialysis. The disorder is classified as calcinosis circumscripta if it is limited to an extremity or joint. Calcinosis universalis occurs when there is diffuse involvement of subcutaneous and fibrous structures of muscles and tendons.[3]

MATERIALS & METHODOLOGY

A 55 year-old female Patient presented with swelling over right upper outer buttock since 3 years. Clinically, there was no evidence of any inherited or connective tissue disorder. On examination,Single Swelling was situated 2 Cms posterior to Right Anterior superior Iliac Spine on upper outer quadrant of right gluteal region, spherical, 6 Cms by 5 Cms, lobular surface, indistinct edge, without impulse on coughing or any change in overlying skin, without any dilated veins over it. It was dull on Percussion.

Inorganic Phosphorous (PO4) level was 15.6 mg/dl (normal range 2.7 -4.5 mg/dl). Parathyroid hormone level was 2.82 pg/ml (normal range 15-68 pg/ml). Serum. Calcium level 9.2 mg/dl (normal range 8.4-11 mg/dl). Chest X-ray & Dorso-lumbar & Lumbo-Sacral Spine were normal. Pelvic Both Hip X-ray showed a Right Calcified mass separate from Right Hip bone. FNAC was suggestive of extensive Calcification, few degenerated Squamous epithelial cells, mixed inflammatory infiltrate, Scant cellularity over fluidish background. With Written and informed Consent, in left lateral position, approximately 5 Cms skin incision along the langers lines was made, excision was done.

Post-operatively, Patient was discharged on second day. There was no post-operative Surgical Site Infection. Skin stitches were removed on 7th Day. Inorganic Phosphorous (PO4) level was 5.1 mg/dl (normal range 2.7 - 4.5 mg/dl). Parathyroid hormone level was 23.95 pg/ml (normal range 15-68 pg/ml). Serum Calcium level 8.5 mg/dl (normal range 8.4-11 mg/dl). Post-operatively , phosphate level returned to normal range with good cosmesis.

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Figure 1 : Single multi-lobulated Swelling over & Intra-operative view Right Upper outer buttock

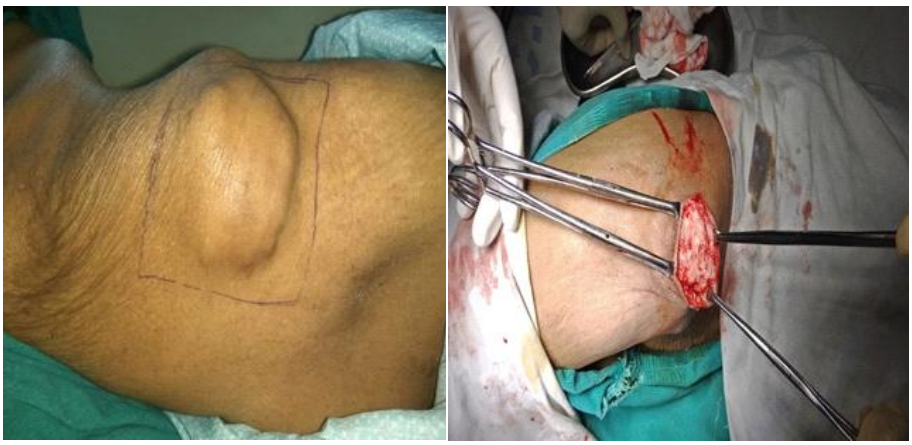
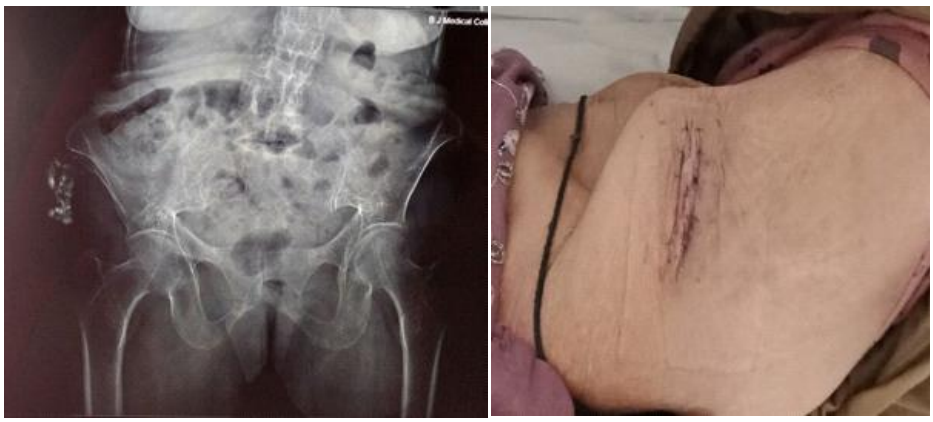


Figure 2 : Pelvic Both Hip-X ray showing Calcified lesion & post-operative site



DISCUSSION

Treatment for calcinosis cutis can be challenging. Effort must be made to identify the cause and blood levels of Calcium, parathyroid hormone, phosphate levels should be focussed. The treatment for small calcified deposits and large localized lesions is surgical excision which is curative and also allows histopathological examination that is required for confirmation of the diagnosis, whereas systemic therapy is required for disseminated and extended calcinosis. The disorder is classified as calcinosis circumscripta if it is limited to an extremity or joint.[4] Various reported treatment modalities with beneficial effects include warfarin, bisphosphonates, minocycline, ceftriaxone, diltiazem, aluminium hydroxide, probenecid, intralesional corticosteroids, intravenous immunoglobulins, curettage, surgical excision, carbon dioxide laser, and extracorporeal shock wave lithotripsy.[5]

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