IDIOPATHIC CALCINOSIS OF SCROTUM

(A Case Report)

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Introduction

Calcification normally occurs only within bones and teeth. Various pathological changes may result in calcification of one or more tissues. Such calcification may be asymptomatic depending upon the underlying pathological process as well as location and extent of tissue calcium deposition [1]. The factors which give rise to calcification include local tissue injury, tissue alkalosis, altered oxygenation, and other processes leading to hypercalcaemia or hyperphosphatemia [1,2].

Four forms of cutaneous calcification have been reported. These are metastatic calcinosis cutis, dystrophic calcinosis cutis, idiopathic calcinosis cutis and subepidermal calcified nodules. Tumoral calcinosis and idiopathic calcinosis of scrotum are regarded as special manifestations of idiopathic calcinosis cutis [1-3]. Relative uncommonness of the disorder prompted us to report this case of idiopathic calcinosis of scrotum.

Case Report

A 27-year-old male was admitted with complaints of multiple, hard, greyish white nodular lesions on the scrotal skin of 6 years duration. The swellings started as small papules and gradually increased in size and number. Some of the nodular swellings ruptured discharging white chalky material. There was no history of trauma, tuberculosis, diabetes mellitus, drug intake or syphilis. There was no history of carpopedal spasm, weakness, loss of appetite, peptic ulcer or renal calculus. General physical and systemic examination were within normal limits. Dermatological examination revealed multiple hard, greyish white, nontender, nodular lesions varying from 0.5 cm to 2 cm in size mostly around median raphe (Fig 1).

Relevant investigation including haemoglobin, total and differential white cell count, erythrocyte sedimentation rate, urinalysis, blood sugar, urea, uric acid, serum cholesterol, creat-

inine were within normal limits. Serum calcium was 9.0 mg/dl., serum phosphate 3.2 mg/dL and VDRL - nonreactor.

The chalky material from nodular lesions was chemically analyzed and found to be calcium phytate. Radiograph of scrotum revealed multiple radio opaque shadows (Fig 2). Histology of scrotal skin biopsy showed variable sized calcific masses surrounded by granulomatous foreign body reaction. No cyst wall was seen (Fig 3). The patient was treated by excision of nodular lesions. He was followed up for a period of one year. There was no recurrence.

Fig. 1: Multiple greyish white, hard, nontender, nodular lesions of idiopathic calcinosis of scrotum.

Fig. 2: Radiogram of soft tissue scrotum showing multiple radio-opaque shadows.

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Fig. 3: Photomicrograph of scrotal skin biopsy showing calcific mass surrounded by granulomatous foreign body reaction.

Discussion

Idiopathic calcinosis of scrotum manifests as multiple, asymptomatic, greyish white, hard, non-tender, nodular lesions scattered on the scrotal skin. The process begins in childhood or early

adult life. The nodules slowly increase in size and number. Some of the lesions breakdown to discharge creamy, chalky-white material. The cutaneous lesions are frequently misdiagnosed as cysts. The serum calcium and phosphate levels remain normal [3,4]. Histological examination shows variable sized amorphous calcific masses surrounded by granulomatous foreign body reaction.

Our patient had multiple asymptomatic greyish-white hard, nodular lesions, which started in adult life. Some of the lesions in our patient ruptured discharging white chalky material. The patient reported for cosmetic reasons. Histology of scrotal skin in our patient showed variable sized calcific masses surrounded by granulomatous foreign body reaction. No cyst wall was seen. Our patient also had normal serum calcium and phosphate levels. There was no associated chronic disease, endocrine disorder, or other biochemical abnormality. He was followed-up for one year and no recurrence was noted.

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