

IDIOPATHIC CALCINOSIS OF SCROTUM

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A 36-year-old-male had two, slowly increasing, asymptomatic, hard nodules on the scrotum without any preceding history of trauma, inflammation or any scrotal disease, for the last 8 years. Serum calcium and phosphorus levels were normal. Histopathology revealed calcified masses without any inflammatory reaction or epithelial lining.

Key words : Scrotal, Calcinosis, Idiopathic.

Calcinosis of the scrotum was first described in 1885 by Lewinsky.¹ Nearly 50 cases have been reported since then. It is a rare, benign disorder characterized by solitary or multiple, firm, painless, papules or nodules on the scrotum that usually appear during childhood or early adult life and tend to enlarge slowly. The lesions are 1 mm to 2 cm in diameter, skin-coloured to yellowish-white, usually asymptomatic and may drain a chalky-white material from the ulcerated nodules. Histopathologically, the lesions show masses of calcium within the dermis without any evidence of an epithelial lining. Treatment consists of excision, although further lesions often develop subsequently.

Case Report

A 36-year-old male had two, gradually increasing, asymptomatic, nodular swellings on the scrotal skin for the last 8 years without any history of preceding or accompanying symptoms except for a feeling of heaviness of the scrotum. There was no past history of trauma, inflammation, skin disease involving the scrotum or a pre-existing systemic disorder. There had been no discharge from the lesions and no history of urinary symptoms. The swellings were 1.5 × 2.5 cm and 3.5 × 3 cm in size, non-tender, hard, skin-coloured and nodular firmly attached to the scrotal skin (Fig. 1). The testes were normal.



Fig. 1. Nodules on the scrotum.

The skin elsewhere was also normal. General and systemic examination revealed no abnormality.

The routine hematological examinations including serum electrolytes, calcium, phosphorus, alkaline phosphatase, total serum proteins and urinalysis were normal. A serological test for syphilis was negative. Biopsy of the nodule showed a mass of dermal and subcutaneous calcium stained darkly basophilic with fracturing throughout. There was no surrounding reaction or epithelial lining.

Comments

The nature and cause of calcinosis of scrotum is not clear. The patients are generally in good health without any clinical or biochemical evidence of hypercalcemia or hypophosphatemia. The condition, however, may occur with increased frequency in infants, secondary to meconium

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peritonitis with leakage of meconium through the processus vaginalis during fetal life.^{2,3} and in testicular tumours especially the teratomas, gonadoblastomas and Leydig-cell tumours.⁴ Further, repeated minor scrotal trauma and inflammation may contribute to the calcification of scrotal tissue.⁵ Many workers believe that the lesions represent dystrophic calcification of the dartos muscle,⁶ epidermoid cysts,⁵ steatomas,⁷ xanthomas,⁸ fibromas,⁹ lymphangiomas¹ or eccrine duct milia.¹⁰ A stratified squamous epithelial lining surrounding these nodules has also been observed by some workers.^{5,10} However, others could not find any evidence of an epithelial lining around the calcification and considered the condition to be idiopathic.¹¹⁻¹⁵ Our case also failed to substantiate any of the previously theorized causes of idiopathic calcinosis of scrotum (ICS). It has been suggested⁵ that ICS begins with dystrophic calcification either within the keratin of the epidermoid cyst or in the adjacent dermis associated with rupture of the cyst wall and granulomatous inflammation with eventual destruction of the cyst wall leaving only the dermal collection of calcium.

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