

Case report

Olgu sunumu

Idiopathic scrotal calcinosis presenting as three nodules, one being 7-cm in diameter

Biri 7 cm çapında üç nodülün eşlik ettiği idiyopatik skrotal kalsinozis

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Medicine Faculty of İstanbul University, İstanbul**Summary**

Idiopathic scrotal calcinosis is a very rare and benign disease characterized by asymptomatic, painless, and calcified nodules within the scrotal wall. A 44-year-old man presented with a 20-year history of scrotal nodules which had gradually increased in size and number, causing itching and slight pain. Physical examination revealed three very firm scrotal nodules with diameters of 4, 5, and 7 cm, respectively. Nodules were excised without any complication. Histopathological examination showed no epithelial lining or true cysts or cyst remnants and the diagnosis was made as idiopathic scrotal calcinosis. To our knowledge, the size of the biggest nodule also represents the largest nodule hitherto reported in the scrotum.

Key words: Calcinosis/pathology/surgery; cysts/pathology; scrotum/pathology.

Özet

İdiyopatik skrotal kalsinozis, skrotumda asemptomatik, ağrısız kalsifiye nodüllerle karakterize, çok nadir görülen selim bir hastalıktır. Kırk dört yaşında erkek hasta, skrotumda 20 yıldır var olan ve giderek büyüyen kaşıntı ve hafif ağrıya yol açan nodüllerle başvurdu. Fizik muayenede, skrotumda çapları 4, 5 ve 7 cm olan, çok sert üç nodül görüldü. Nodüller eksize edildi ve hiçbir komplikasyonla karşılaşılmadı. Histopatolojik incelemede epitel hattını veya gerçek kist veya kist kalıntısını düşündüren bir bulguya rastlanmadı; tanı idiyopatik skrotal kalsinozis şeklinde kondu. Bildiğimiz kadarıyla, 7 cm'lik nodül bugüne kadar skrotum nodülleri için bildirilen en büyük nodüldür.

Anahtar sözcükler: Kalsinozis/patoloji/cerrahi; kist/patoloji; skrotum/patoloji.

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Idiopathic scrotal calcinosis is a very rare and benign condition characterized by the existence of asymptomatic, painless, calcified nodules (solitary or multiple) within the scrotal skin. There is no consensus on the pathogenesis of calcified nodules. It is still unclear whether the nodules develop from the calcification of the epithelial inclusion cysts or their remnants^[1] or the condition is really idiopathic.^[2-6]

We report a case of idiopathic scrotal calcinosis consisting of three calcified nodules, one of which seems to be the largest nodule hitherto reported.

Case report

A 44-year-old man presented with a 20-year history of scrotal nodules which had gradually increased in size and number. Physical examination revealed three scrotal nodules with diameters of 4, 5, and 7

cm, respectively. The nodules were very firm and skin-colored (Fig 1). Although the patient's symptoms were mild such as itching and slight pain in the largest nodule, he felt uneasy about the appearance of his scrotum. He had no history of trauma or any metabolic disorder and his family history was unremarkable. Laboratory findings including serum electrolytes, and levels of creatinine, urea, uric acid, alkaline phosphatase, calcium, and phosphate were all within normal limits. Nodules were excised separately without any complication.

Histopathological examination revealed dark, basophilic, brittle, often fractured deposits of calcium surrounded by fibrosis, and signs of foreign body giant cell reaction at the edge of deposits. Neither epithelial lining nor true cysts or their remnants were observed (Fig 2). These features were consistent with idiopathic scrotal calcinosis.



Figure 1 Appearance of the three big nodules in the scrotum, with the largest measuring 7 cm in diameter.

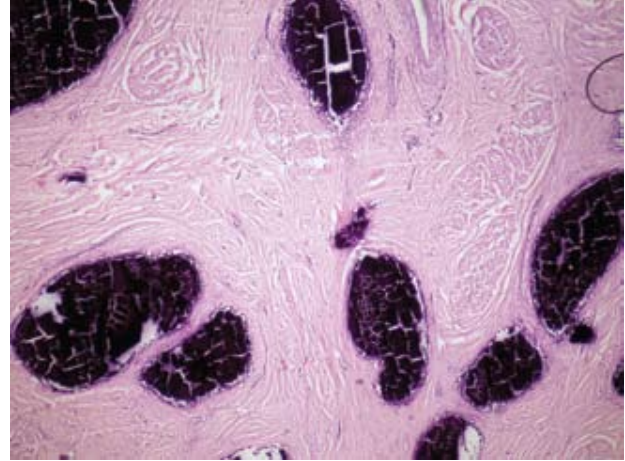


Figure 2 Dark basophilic, fractured deposits of calcium embedded in hyalinized dermal connective tissue (H-E x 20).

Discussion

Shapiro et al.^[7] named scrotal calcinosis as 'idiopathic calcinosis of the scrotum' because they had found no evidence for residual cysts or epithelial lining in a careful review of histopathological data of nine previous cases and in their own 13 cases.

Although there are about 100 cases reported in the literature, the pathogenesis of the condition is controversial. Swinehart and Golitz^[8] and Saad and Zaatari^[1] reported similar results supporting the hypothesis that scrotal epidermoid cysts in varying stages of inflammation coexisted with scrotal calcinosis and epidermal inclusion cysts constituted the basic abnormality. However, many others failed to find any epithelial lining of the calcified lesions or any epidermoid cysts.^[2-5] Takayama et al.^[6] found no cysts or cyst remnants in electron microscopic examination of an excised specimen from a 39-year-old man with idiopathic calcinosis of the scrotum. In a review by Yahya and Rafindadi,^[9] only 19 of 100 reported cases presented evidence for a true cyst or epithelial lining surrounding the calcific nodules.

We did not observe any cysts or cyst remnants in our patient and, to our knowledge, the 7-cm sized nodule seems to be the largest one among previously reported nodules.

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