Case Report

New Indian Journal of Surgery
Volume 9 Number 2, March - April 2018
DOI: https://dx.doi.org/10.21088/nijs.0976.4747.9218.23

Calcinosis Cutis of the Scrotum

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Abstract

Scrotal calcinosis is a rare benign condition with painless slow growing nodular masses within the dermis of the scrotal skin. It was fi rst described by Lewinskey in 1883. Deposition calcium in the skin, subcutaneous tissue, muscles, and visceral organs is known as calcinosis, and it more common involves skin and it is called calcinosis cutis. There are four types of calcinosis cutis based on their etiology such as dystrophic, metastatic, iatrogenic, and idiopathic. Idiopathic scrotal calcinosis cutis is a rare benign lesion. Metabolic and hormonal work-up is required to rule out other causes. Irrespective of the etiology, surgical excision is required both for confi rming the diagnosis as well as for treatment. The surgical excision should be based on the extent of the nodules and must include even the smallest nodules to avoid rapid recurrence.

Keywords: Calcinosis Cutis; Scrotum; Scrotal calcinosis.

Introduction

Scrotal calcinosis is a rare benign condition with painless slow growing nodular masses within the dermis of the scrotal skin. It was fi rst described by Lewinskey in 1883. Deposition calcium in the skin, subcutaneous tissue, muscles, and visceral organs is known as calcinosis, and it more common involves skin and it is called calcinosis cutis. There are four types of calcinosis cutis based on their etiology such as dystrophic, metastatic, iatrogenic, and idiopathic. It occurs in men aged betwwn 20-40. The etiology of scrotal calcinosis is uncertain. Many authors proposed that scrotal calcinosis represent dystrophic calcification of preexisting structures including; epidermal cysts, eccrine duct milia, eccrine epithelial cysts and degenerated dartoic muscle. Here we are presenting a case report of male suffering from calcinosis cutis of the scrotum.

Case Report

28 yrs old male presented with multiple nodules over the scrotum since last 5 yrs.

No history of trauma

No history of fever

No history of burning micturation.

Serum calcium and phosphorus levels were within normal range.

On examination- multiple nodules were present over the scrotum movable and non tender. No inginal lymphadenopathy. Bilateral testes were palpable. Under spinal anesthesia, affected scrotal skin was excised primary closure was done. Patient had no

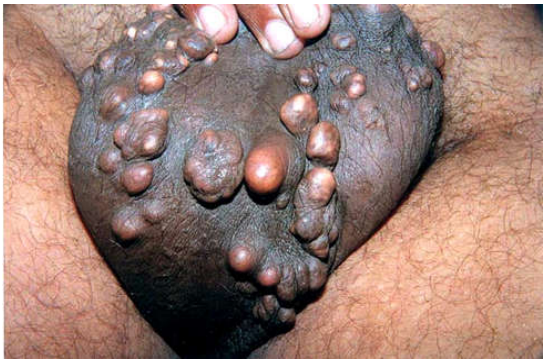

Fig. 1:

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Received on 19.01.2018, **Accepted on** 09.02.2018

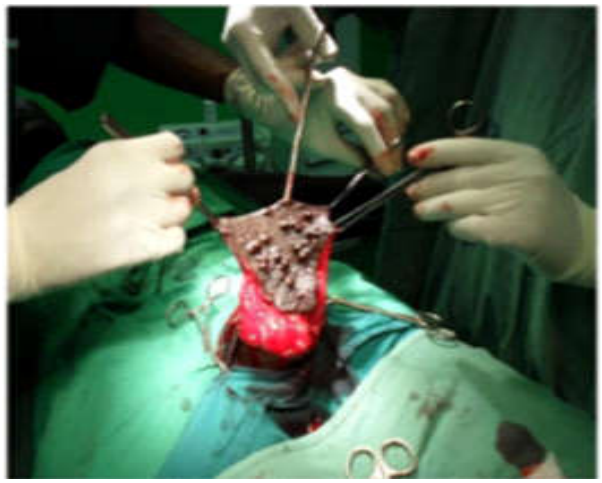

Fig. 2:

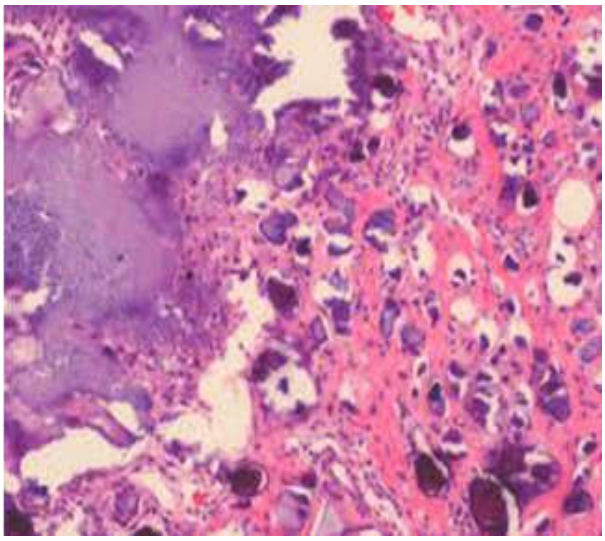

Fig. 3:

Fig. 4:

intra and postop complications. Later on histopathological report was calcinosis cutis of the scrotum.

Discussion

Scortal Calcinosis is a rare and benign condition first described by Lewinski in 1883. Scrotal calcinosis is usually asymptomatic but occasionally causes heaviness, itching, ulceration, and chalky white exudative discharge. The patient mainly comes for cosmetic reasons Initially, it resembles the color of scrotal skin later it changes into yellowish nodules. The delay between the occurrence of the disease and therapy is often several years because of the benign course and negligible symptoms encountered by the patients.

The pathogenesis of SC is unclear and controversy exists as to whether the disease is idiopathic or the result of dystrophic calcification of preexisting structures including epidermal cyst, eccrine epithelial cyst, and degenerated dartoic muscle. However, some researchers found that dystrophic calcifications of the dartos muscle was the basis of Scrotal calcinosis and they suggested that degeneration and necrosis of the dartoic muscle are the initial events in the pathogenesis of disease. In dystrophic calcifi cation, there must be a local favoring condition such as preexisting epidermal cyst, eccrine duct milia, eccrine epithelial cyst, degenerated dartos muscle, and connective tissue disorders such as scleroderma, systemic lupus erythromatous, dermatomysositis, and minor trauma. Calcifications that are not associated with tissue damage or metabolic disorders are called idiopathic scrotal calcinosis. In our patient, there was no history of any connective tissue disease and trauma, and his serum values of calcium and phosphorus were normal.

Differential diagnosis are teratoma, gonadoblastomas, leydig cell tumors, calcifi ed onchocercoma, neurofi broma, ancient schwannomas, steatomas, lipomas, fi bromas, and scrotal calcinosis may also be due to chronic epididymitis, calcifi ed appendix testis, appendix epididymis, and sperm granuloma due to sperm extravasation and hematoma.

Although there is no clerality about the pathogenesis of this condition, the only treatment recommended is surgical. Indeed, surgical management cures the aesthetic disorder and enables the confirmation of the diagnosis of Scrotal Calcinosis on histological examination.

If Scrotal Skin is extensively involved, excision

followed by complex scrotal reconstruction using meshed split thickness skin graft as the scrotal skin is recommended. Risk of recurrence is also under debate topic.

Conclusion

Idiopathic scrotal calcinosis cutis is a rare benign lesion. Metabolic and hormonal work-up is required to rule out other causes. Irrespective of the etiology, surgical excision is required both for confi rming the diagnosis as well as for treatment. The surgical excision should be based on the extent of the nodules and must include even the smallest nodules to avoid rapid recurrence.

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