



## IDIOPATHIC SCROTAL CALCINOSIS – A CASE REPORT WITH REVIEW OF LITERATURE

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**ABSTRACT** Scrotal Calcinosis is a rare condition which is characterised by the presence of multiple calcified nodules within the scrotal skin. It is mostly asymptomatic and patients come to clinical attention for cosmetic reasons. We report one such case in a 29 year old male with scrotal swelling since 4 months with no other complaints. Excised scrotal wall histopathologically showed normal skin lining and dermis showed multiple calcified nodules surrounded by foreign body giant cell reaction and chronic inflammatory cell infiltrate. Based on this features a diagnosis of Idiopathic Scrotal Calcinosis was made.

**KEYWORDS :** Scrotal Calcinosis, Idiopathic Calcinosis, Scrotal mass.

### INTRODUCTION

Scrotal calcinosis is uncommon and rare condition of the scrotal skin. It is characterised by multiple hard yellowish calcified intradermal nodules on the scrotal skin wall. It mainly occurs in the age group of 20-40 years.

The pathogenesis of scrotal calcinosis is still not clear but it is said to occur in patients with normal calcium and phosphate metabolism.

Idiopathic scrotal calcinosis is a subtype of this condition, first described by Lewinsky.

Only 123 cases have been reported in literature (Abdelhak Khallouk).

### Case Report

A 29 year old male patient presented with complaints of multiple swelling over scrotum past 4 months. They initially started with 4 to 5 swellings with gradual increase in size and number of swelling.

On Local Examination - Multiple firm, painless, solid, yellow nodules was present all over the scrotal wall not adherent to deeper structure on either side of midline, size around 1 to 3 cm.

Serum calcium and phosphate levels were within normal limits. Other blood investigations were in normal range.

USG Scrotum - Multiple nodules over scrotal wall, not adherent to deeper structure were seen. There was no scrotal wall edema, bilateral testis were normal.

Clinical Diagnosis was Multiple Sebaceous Cyst.

Subtotal excision of scrotal skin was performed with good aesthetic result.

Grossly we received two skin covered soft tissue masses each - 6.5x4x4cm & 6x5x3cm.

External surface was skin covered, bosselated with multiple grey-white nodules showed multiple calcified areas, gritty to cut. (Figure 1)

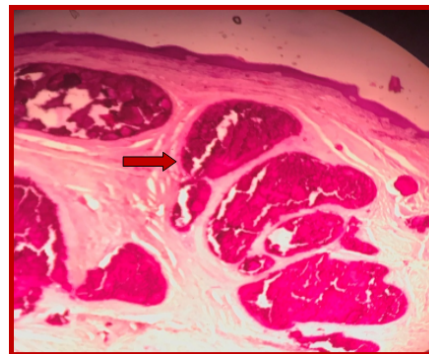


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**Figure 1:-Gross showing skin with multiple grey-white nodules showing calcification.**

Microscopy showed normal skin lining. Underlying dermis shows nodules of granular basophilic calcified material. Foreign body reaction along with chronic inflammatory cells were seen around the nodules. Stroma showed fibrovascular tissue. Keratin filled cysts were not seen. There was no evidence of tumor or infective focus in the sections studied.

(Figure 2).



**Figure 2:- H&E Showing normal skin lining and calcified nodules (Arrow).**

Based on above histopathological features a diagnosis of Idiopathic Scrotal calcinosis as done.

### DISCUSSION:-

Idiopathic scrotal calcinosis was described by Lewinski in 1883 was named by Shapiro et al in 1970 (Abdelhak Khallouk Rrv Urology 2011).

Santos & Sarma proposed primary & secondary classification of scrotal calcinosis.

In primary, there is no definite cause & in secondary, causes are identified as calcification of epidermal cyst, calcific degeneration of dartos muscle (Shailendra K Saxena).

Hicheri et al reported a rapid growing variant which occurs in 3 months as compared to others which take several years to develop (Usman M. Tela Volume 2012).

Saad & Zaatari suggested that scrotal calcinosis might result due to inflammation of the epidermal cyst followed by dystrophic calcification within the keratin of the cyst.

However, as reported in majority of reported cases, evidence of keratinous cyst was seen in our case(Uro today Vol 2 2009).

Veress and Malik and Feinsten also said that minor trauma may also be the cause(Uro today vol 2 2009)there was also no history of trauma in our case.

Scrotal Calcinosis is a benign scrotal lesion reported mostly in 3rd and 4th decade similar to the age group of our patient(29 years). However it is said that the age group 9 to 85 years of age and is more common in dark coloured race(Usman M. Tela volume 2012).

Most patient come for cosmetic reason while other may present with pustules, ulceration & discharge of chalky material. In our case also similar to patient came for cosmetic reasons without any problem. (Abdelhak khallouk)

Clinically they can be mistaken for other scrotal lesion like solitary neurofibroma, ancient schwannoma, calcified onchocercoma etc. Histopathology examination is therefore said to be gold standard for definitive diagnosis(Usman M. Tela volume 2012).

It will said that the condition of scrotal calcinosis is idiopathic only when all local or systemic favouring factors contributing to the development of calcification was ruled out (Abdelhak Khallouk).

Further Dare and Axelsen used immunohistochemistry and CEA antibodies to show involvement of eccrine duct milia in scrotal calcinosis and called it hydra calcinosis of scrotal skin.

Carson also highlighted the role of nanobacteria in extraskelatal calcifications ( Usman M. Tela).

As in majority of cases serum calcium and phosphate levels was within normal limits in our case (Vol 2 2009).

In our case after ruling out the possibility of keratinous cyst , metastatic calcification and skin adenexal structure neoplasms, we gave the final diagnosis as 'Idiopathic Scrotal Calcinosis'(Abdelhak Khallouk).

#### **Conculsion:-**

Scrotal calcinosis is an uncommon disease with multiple scrotal nodules needs to be differentiated from other causes of scrotal swelling.

Excision and histopathology helps to confirm diagnosis.

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