A Case Of Multiple Sebaceous Cysts Over Scrotum In A 35 Years Old Male

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Abstract

Multiple sebaceous cysts over the scrotum is a rare condition and requires excision if infected or cosmetically unacceptable. Grossly enlarged or infected cysts require total excision of the scrotal wall followed by the coverage of bare testes. We are reporting a case of infected multiple sebaceous cysts on the scrotum. Total excision of scrotal wall followed by the fasciocutaneous flap coverage was done in this case.

INSTITUTION OF WORK

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INTRODUCTION

A 35 year old male came with the chief complaints of small multiple swellings all over the scrotum since last one and half years. The swellings were painless initially but 8 days before patient presented to us, swelling located on the right side of the scrotum near perineum became painful which spread all over the scrotum within 4 days. Then the swellings near the root of penis as well as near the perineum started oozing foul smelling watery discharge followed by the development of pus inside the swellings.

Figure 1

On examination multiple swellings were found arising from the scrotal skin largest measuring 1.5 cm. The scrotal wall was inflamed and tender on touch. The swellings were pearly white in color as seen in the picture and were firm in the consistency. Swellings near the root of penis were fluctuant and tender. Scrotal wall could be moved easily over the testicles and there was no collection in the tunica vaginal sac clinically.

Ultrasonography of the local part revealed testes of normal consistency without free fluid in the tunica vaginal sac.

The patient was taken for surgery and entire scrotal wall is excised baring the testes. Blood supply of the scrotal wall was compromised but active bleeding was present on the cut margins after total excision of the scrotal wall. Testes were dressed in Vaseline gauze and broad spectrum antibiotic were started for initial 2 days till pus culture report revealed Pseudomonas auriginosa organism sensitive for antibiotic Ceftazidime which is then started. Patient was treated with daily dressing using normal saline till healthy granulation tissue was seen over the testes and cut margins of the scrotal wall and the repeated wound cultures were negative for any organisms. The process took a week after which patient was again posted for the coverage of bare testes. Excess granulation tissue over the testes was scraped delicately taking care of hemostasis. Superficial pudendal artery (branch of Femoral Artery) based pedicle flaps of quadrangular shape were raised from both the thighs and rotated over the bare testes as shown in picture 2 and tied in the midline.
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Figure 2
Figure 2 (Pedicle flap)

Figure 3
Figure 3 (Tying over of flaps)

The triangular areas left behind after the rotation of the flap on medial side of both the thighs was covered by the split thickness skin graft harvested from lower part of the right thigh. Corrugated drains were kept under both the flaps and the finally it looked like picture 3.

Figure 4
Figure 4 (final picture)

Drains were removed after 48 hours and the patient was discharged after 8 days. Patient was under follow up for 8 months in which he recovered well with a fine scar over the wound without any complications.

DISCUSSION

A sebaceous cyst is a small, dome-shaped cyst that develops in the skin, filled with a thick, greasy, cheese-like substance \[^{1}\]. Sebaceous cysts are very common and can occur in any area of hair-bearing skin, but mostly on the scalp. They are also found on the face, neck, back and scrotum. The cyst is looks like a hemisphere on the skin. It is whitish or skin-colored. Cysts usually vary in size from 1cm to 4cm in diameter. They occur singly or in groups. The cysts are usually painless but may become red and painful if infected. Etiology is unclear but duct obstruction of a sebaceous gland in the hair follicle can result into accumulation of the sebum leading to development of retention cyst. Other causes include a developmental defect of the sebaceous duct or traumatic implantation of surface epithelium beneath the skin. They can develop at any age but are usually first noticed in adult life.

Multiple sebaceous cysts over the scrotum are a rare condition and men use to ignore the lesions, as the condition is painless. But the cyst being in proximity with potentially infective area may catch infection from genitourinary tract. Cyst becomes painful if becomes infected and may burst to discharge pus. Single infected cyst can be drained without complications. Untreated it may spread in surrounding cysts and finally scrotal wall as seen in our patient. Once the scrotal skin is infected the infected portion has to be widely excised to avoid necrotizing fascitis of the scrotum (Fournier's gangrene) and septicemia.
Coverage of the bare testes after the debridement of infected skin is done once the local infection is taken care of which usually takes 1-2 weeks. If the defect in scrotal wall is small secondary suturing with little mobilization of the scrotal wall can close it. Larger defects can be covered with split thickness skin grafting but the normal feel of moving of testes inside the scrotum cannot be achieved as graft lies directly on the bare testes. In case of total excision of the scrotal wall testes can be placed in the thigh pouch created on the medial side of the thigh. Testes are protected from the trauma by this method but it is cosmetically unacceptable for patient.

Cannistra C et al [1] used the technique of pedicle inguinal flap for the reconstruction of the scrotum in cases of Fournier gangrene and allow cover of the scrotal region with relatively thick, sensitive tissue with limited scarring and functional sequel. We used fascio cutaneous flap from anterior aspect of both the thighs and sutured them in the midline over the bare testes. The triangular raw areas developed due to elevation and rotation of the flap should not be tried to close under tension which not only compromise the viability of the flap but also hamper the ballooning effect of the neo-scrotum by stretching and flattening it. The reconstruction as described above is technically demanding but the thick fasciocutaneous flap is protective for testes from trauma as well as balloon like appearance of neo-scrotum is cosmetically acceptable.

Kochakarn W et al [3] published a series of 12 cases proposed implantation of the exposed testes in the upper thigh pouch and delayed reconstruction of the scrotum using thigh pedicle flaps with excellent results. Monteiro et al [4] describes about the technique of covering testes in Fournier's gangrene with inner thigh flap. Infection is the most common complication followed by the flap necrosis. Flap necrosis can be avoided by designing broad based flaps.

CONCLUSION
Multiple sebaceous cysts over the scrotum is a rare condition but should be promptly treated if infected to avoid fatal sequels such as Fournier's gangrene. Pedicle inguinal flap technique for the coverage of bare testes provides better cosmetic results than skin grafting and inner thigh pouch implantation of testes.

References
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