Case Report

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Multiple scrotal epidermoid cysts: a case of cosmetic infertility

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ABSTRACT

A 48 years old man presented to the surgical OPD with a history of multiple painless swellings on his scrotum for 20 years. He had avoided all sexual relations with his wife due to potential embarrassment. A clinical diagnosis of scrotal epidermoid cysts was made. Both testes were normal on ultrasound. Upon surgery, the scrotal skin was thoroughly excised, and primary closure of skin was done. Postoperative period was uneventful. The patient engaged in intercourse with his partner two weeks after surgery. The man and his partner were referred to the psychiatry unit for appropriate counselling. Scrotal epidermoid cysts cause significant psychological handicap. In Asian countries, the taboo of seeking medical assistance for genital conditions still exists. The treatment of scrotal epidermoid cysts requires a team of surgeons, psychologists, and psychiatrists.

Keywords: Genitourinary tract, Painless swellings over the scrotum, Scrotal epidermoid cysts

INTRODUCTION

Sebaceous cyst is a small, dome-shaped cyst that develops in the skin, filled with a thick, greasy, cheeselike substance. 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 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 the accumulation of the sebum leading to the development of retention cyst.² 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.3 The typical outpatient surgical procedure for cyst removal is to numb the area around the cyst with a local anesthetic, then to use a scalpel to open the lesion with either a single cut down the center of the swelling or an oval cut on both sides of the center point.⁴ If the cyst is

small, it may be lanced instead. The person performing the surgery will squeeze out the contents of the cyst, then use blunt-headed scissors or another instrument to hold the incision wide open while using fingers or forceps to try to remove the cyst wall intact. If the cyst wall can be removed in one piece, the "cure rate" is 100%.⁵

CASE REPOERT

A 48 years old man presented to the surgical outpatient department with complaints of infertility after 20 years of marriage. On further questioning, he gave a history of multiple painless swellings on his scrotum for the past 20 years (Figure 1A). He had undergone an incomplete surgery with a practitioner of native medicine which resulted in recurrence. He had avoided all sexual relations with his wife due to potential embarrassment. On examination, the patient had multiple firms, non-tender swellings in the scrotum. Differential diagnosis of either scrotal sebaceous cysts or calcinosis cutis was made. Ultrasound of the scrotum showed that both tests were normal. Semen analysis was done and the results came back normal. Serum calcium, phosphate, and alkaline

phosphatase were all within limits. The patient was taken up for surgery after adequate counseling. A thorough excision of the scrotal skin was followed by primary closure of skin in midline under spinal anesthesia (Figure 1B). The scrotal skin along with cysts was sent for histopathological examination. Postoperative period was uneventful with the wound healing Histopathological examination showed cystic spaces lined by squamous epithelium thus confirming the diagnosis. Two weeks after surgery, the patient reported that he had engaged in sexual intercourse with his wife. The man and his partner were referred to the psychiatry unit for appropriate sexual health counseling.

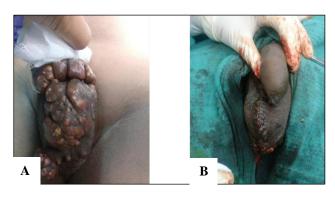


Figure 1: (A) Presentation before surgery, (B) after sutures.

DISCUSSION

Epidermoid cysts are a common occurrence on hairy areas of skin including face and back. Scrotal epidermoid cysts are less common and often present as multiple cysts occupying the entire scrotum. In many cases, removal of entire scrotal skin with reconstruction using flaps is needed. Epidermal cysts are lined by stratified squamous epithelium and contain loosely packed keratin debris and cholesterol. Epidermoid cysts usually have no malignant potential but there have been rare cases of squamous cell carcinoma reported from epidermal cysts.⁷ The pathogenesis of the epidermoid cyst is not precisely known, but there are different theories about the embryonic origin of this lesion. One theory suggests that it arises from ectopic cutaneous tissue (dislocation of this tissue into the neighboring area).8 It is also suggested that they are end results of a monolayer teratoma derived from germ cells.9 They may occur due to traumatic implantation of the epidermal tissue into the dermis and the subcutis. Complete surgical excision is the only treatment for this condition. 10

CONCLUSION

Scrotal epidermoid cysts cause a significant handicap cosmetically. This might cause sexual issues for many men. In South Asian countries the tobacco of seeking medical help for genital conditions still exists. The treatment of scrotal epidermoid cysts requires a multi-disciplinary team which includes the surgeon, psychologist, and the psychiatrist.

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