



## A RARE CASE OF MULTIPLE EPIDERMOID CYST OF THE SCROTUM IN 44-YEAR OLD MALE PATIENT

### General Surgery

**Dr. Hamikchandra Patel\***

Senior Resident, Baroda Medical College, Vadodara. \*Corresponding Author

**Dr. Paresh Damor**

Senior Resident, Baroda Medical College, Vadodara.

**Dr. Bharat Dharajiya**

Senior Resident, Baroda Medical College, Vadodara.

**Dr. Pranay Khobragade**

Third Year Resident, Baroda Medical College, Vadodara.

### ABSTRACT

Multiple epidermoid cyst is relatively rare condition now a day. They are asymptomatic, but cosmetically unaccepted. Once infected cause fatal complication like Fournier's gangrene and septicemia. They are successfully managed surgically by complete excision with good cosmetic result and minimum morbidity. Here we report a case of 44 years old male patient with symptom of multiple epidermoid cyst over scrotum for last 10 years. In this case complete excision of scrotal wall with cyst followed by mobilizing scrotal skin and primary suturing was done.

### KEYWORDS

Epidermoid Cyst, Scrotum, Complete Excision.

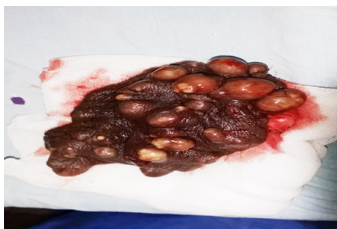
### INTRODUCTION:

A epidermoid cyst is most common benign epithelial cyst occur commonly over hair bearing area of body mostly head, face, back.[4] Multiple epidermoid cyst of scrotum is relatively a rare condition now a day, occur due to blocked of duct of sebaceous gland. Epidermoid cyst usually asymptomatic. Histologically comprises a cyst lined by stratified squamous epithelium, filled with loosely packed lamellae of keratin, cholesterol, and water with no cutaneous adnexal structure in the stromal tissue.[1] Diagnosis is based on clinical finding. Gold standard treatment of multiple epidermoid cyst involve complete excision of cyst with its content with minimum morbidity and good cosmetic result.[5] Long standing epidermoid cyst may develop scrotal calcinosis via dystrophic calcification.[1]

**Case report:** A 44-year old male patient comes to outpatient department of SSGH hospital, Vadodara, labourer by occupation with complaint of multiple swelling over scrotum since 10 years. Since last 4 days patient developed severe itching of scrotal skin around some swelling. Initially there were 2 -3 small swelling over left side of scrotum which gradually increases in size and number. But did not consulted a doctor before. Continuous severe itching of swelling brought him to doctor. On examination patient has multiple swelling over scrotum, firm in consistency, non-tender, varies from 1 to 2.5 cm in size, arises from scrotal wall, not adherent to underlying structure and testis. Diagnosis of multiple epidermoid cyst was made on clinical findings.



**Fig. 1 Multiple epidermoid cyst of scrotum at the time of presentation**



**Fig. 2 Excision of scrotal sebaceous cyst with scrotal wall**

Surgery was planned for excision of cyst. Patient was taken for surgery. Entire scrotal skin involving cyst was excised under spinal anesthesia. Specimen was sent for histopathological examination. Bare testis was closed by mobilizing remaining scrotal wall and sutured in midline. Drain was kept for 48 hours.



**Fig. 3 Postoperative wound site with midline suturing and drain in situ**

Postoperative period was uneventful and patient discharged on 4th postoperative day. Suture was removed on 9<sup>th</sup> postoperative day. Patient was followed up for next 3 weeks patient had no complain and had a thin midline scar.

### DISCUSSION

A epidermoid cyst is most common epithelial cyst. It is a retention cyst due to blocked of duct of sebaceous gland. Multiple epidermoid cyst of scrotum is relatively a rare condition now a days than its usual occurrence over head, face, back and other hair occurring area of body more common in adult and middle-aged people.[4] It is also known as sebaceous cyst but misnomer as it does not contain sebum. Epidermoid cyst histologically comprises a cyst lined by stratified squamous epithelium, filled with loosely packed lamellae of keratin, cholesterol, and water with no cutaneous adnexal structure in the stromal tissue.[1] Cyst appear as pearly white, slowly growing nodules, filled with cheesy material arises from scrotal wall[4]. Epidermoid cyst may be single or in group varies from 1 cm to 4 cm in size. There are different theories in pathogenesis of epidermoid cyst as exact pathogenesis is unclear. Most common being duct obstruction of sebaceous gland. Other include traumatic implantation of epidermal tissue under dermis and subcutis, developmental defect of sebaceous duct, as end result of monolayer teratoma.[6] Diagnosis is based on clinical examination. Ultrasonography of scrotal region is done to rule out involvement of underlying structure (testis) and free fluid in tunica vaginalis sac on either side. Epidermoid cyst usually non tender but may get infected and become tender with pus and foul smelling discharge. Rupture of cyst initiate intense inflammatory response and that's brought the patient to doctor. Single infected cyst can be drain completely without complication. If not treated properly it may spread in surrounding skin and scrotal wall. Once scrotal skin involved infected portion must be

excised by wide local excision to avoid fatal complication of necrotizing fasciitis (Fournier's gangrene) and septicemia.[8] All though malignant potential is extremely low, basal cell carcinoma, squamous cell carcinoma rarely develop within cyst.[4] Calcification of epidermoid cyst and scrotal calcinosis occur via dystrophic calcification over long period of time.[1] Gold standard treatment of multiple epidermoid cyst of scrotum is complete excision of cyst with its content followed by scrotoplasty. [5] Incomplete removal of cyst capsule leads to recurrence. Coverage of bare area of testes done after debridement of infected skin and taking care of local infection. Smaller defect closed by mobilization of scrotal wall as scrotal skin is much lax structure and can mobilize without hampering vascularity. While larger defect involve excision of total scrotum where primary suturing not possible can be close either by inner thigh placement of testis, pedicle inguinal flap technique, split thickness skin grafting. Making thigh pouch is cosmetically unacceptable for patient. Pedicle inguinal flap for coverage of bare testes provide better cosmetic result than skin grafting and inner thigh pouch.[6,7,8]

## CONCLUSION

Multiple epidermoid cyst of scrotum is relatively rare condition and should be promptly treated to avoid fatal complication like Fournier's gangrene and septicemia.

## REFERENCES

1. Bologna JL, Jorizzo JL, Schaffer JV. eds. *Dermatology*, 3rd ed. Philadelphia, Pa: Mosby Elsevier; Chap 37; 2012:1817-1827.
2. Cruz AB, Aust JB. Lesions of the skin and subcutaneous tissue. In: Hardy JD, Kukora JS, Pass HI, eds. *Hardy's Textbook of surgery*. Philadelphia: Lippincott; 1983:319-328
3. Tanaka T, Yasumoto R, Kawano M. Epidermoid cyst arising from the spermatic cord area. *Int J Urol*. 2000;7:277-9
4. Dambro TJ, Stewart RR, Carroll BA. The Scrotum. In: Rumack CM, Wilson SR, Charboneau JW, eds. *Diagnostic ultrasound*. 2nd ed. St Louis, MO: Mosby; 1997:791-821
5. Klin B, Ashkenazi H. Sebaceous cyst excision with minimal surgery. *Am Family Phys*. 1990;41:1746-8.
6. Kochakarn W, Hotrapawanond P. Scrotal reconstruction using thigh pedicle flaps: long-term follow-up of 12 cases. *J Med Assoc Thai*. 2001 Dec; 84(12): 1738-42.
7. Cannistra C, Kirsch-Noir F, Delmas V, Marmuse JP, Boccon-Gibod L. Scrotal reconstruction by inguinal flap after Fournier's gangrene. *Prog Urol*. 2003 Sep; 13(4): 703-6
8. PMohite, A Bhatnagar. A Case Of Multiple Sebaceous Cysts Over Scrotum In A 35 Years Old Male. *The Internet Journal of Surgery*. 2006 Volume 9 Number