A Case Report on giant extratesticular epidermoid inclusion cyst

Arshadullah Khan, Farrukh Alim Ansari, Farid Uddin Baqai, Arsalan Ghazi, Samra Shaukat and Madeeha M Haniffa

Abstract
An 83 year old man presented to the surgical OPD with the complaint of painless giant swelling in the scrotum for 5 years. The swelling was initially small in size, which increased to the size of a small football. Clinical examination revealed an extra-testicular swelling which was soft in consistency and the testis was palpable separately. After all baseline investigations, it was operated. Findings revealed a cyst containing cheesy white material. On histopathological examination, it was confirmed to be a case of epidermoid cyst of the scrotum. Giant extra-testicular epidermoid inclusion cyst is a rare entity. We are reporting it to increase the awareness of the management of giant scrotal swelling.

Introduction
Epidermoid inclusion cysts are the most common condition of the skin. These can occur in different parts of the body like the face, neck, scalp and trunk. The term Epidermoid inclusion cyst can be defined as the implantation of epidermal material into the dermis. It may result from proliferation of epidermal cells within the circumscribed space of dermis. An Epidermoid cyst is a benign condition and which is well circumscribed, and encapsulated. Histopathologically, it consists of the cystic lining of stratified squamous epithelial cells without any cutaneous adnexal structures in the stromal tissue. The extra-testicular epidermoid inclusion cyst is a rare condition as compared to an intratesticular cyst, which is a common benign condition.

While searching the literature, only a few cases have been reported around the spermatic cord, perineal area, etc. In this report a giant epidermoid cyst from the posterior wall of the scrotum has been reported.

Case Report
An 83 year old man came to the surgical clinic with the complaint of an irreducible swelling in the scrotum which was there for the last 5 yrs. Initially, a small swelling was noted on the left side of the scrotum. The swelling increased, gradually and finally occupied the whole of the scrotum. The patient described his scrotum as a bag in a bag, due to the giant swelling. He was uncomfortable and the swelling was irreducible. It was measured to be about 20 x 18 x 22 as shown in picture No.1. It was soft in consistency, transillumination was absent, and was separable from both the testis and overlying skin. The skin surface appeared to be normal. The patient also had some symptoms of bladder out flow obstruction.

All baseline investigations were done including ultrasound prostrate and scrotum. The ultrasound revealed well defined hypo echoic area in the scrotum separated from the testis like a hematoma, an organized hydrocele with 65 gm weighing prostrate with a post residual volume of 15 ml.

For excision of cystic mass an operation was planned. The cyst was identified as a well circumscribed mass in the scrotum and the testis was separately present in the upper part of scrotum. The whole mass was excised as shown in pic 2. It arose from the posterior wall of scrotum, containing yellowish white cheesy material in it.

Histopathology was done and it confirmed that the cystic mass was an epidermal inclusion.

Discussion
The epidermoid cyst is a condition of the skin and commonly occurs on the scalp, face, neck, trunk and back. It is characterized histologically by stratified squamous epithelial lining of the wall containing loosely packed lamellae of keratin debris, cholesterol,
and water, without teratomatous elements and skin appendages in the stromal tissue\(^2\)

As discussed earlier it is commonly present all over the body but rarely occurs in the genital and perineal areas\(^4\). The main contributing factor for the development of epidermoid cyst is mechanical pressure and a history of minor trauma\(^5\). However, as extra-testicular epidermoid cyst can develop due to abnormal closure and is associated with a degenerative process of the median raphae and urethral groove\(^6-7\). An Epidermoid cyst can be inflamed and infected, resulting in regional pain and tenderness, and may be associated with foul smelling cheesy discharge. However, malignant transformation may be indicated by a rapid increase in size, and bleeding is rarely reported\(^8\).

As far as radiological diagnosis is concerned an ultrasound is the investigation of choice for inguinoscortal swelling. Ultrasound is helpful to differentiate between inguinal and scrotal swelling, testicular and extra-testicular swelling and cystic and solid swellings. However this may not provide a confirmatory diagnosis. Besides an ultrasound, a CT scan or MRI may be used especially if the extension of mass into the pelvic cavity is suspected.

The main treatment of epidermoid cyst is a complete excision of the cyst. Recurrence may occur if a portion of the wall of the cyst remains during surgical removal. The case of giant extra-testicular epidermoid cyst is a rare presentation and after intensive literature search very few cases have been reported nationally. For these cases diagnosis was difficult and provisionally the swelling was considered to be a hematoma, an organized hydrocele and an inguinal hernia in our differential diagnosis.

Hence, we concluded that epidermal inclusion cyst should be considered as a rare differential diagnosis of scrotal swellings. Surgical excision may be performed with great care in these types of patients in order to avoid iatrogenic injury.

Reference

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