



## INTRA-TESTICULAR EPIDERMAL INCLUSION CYST- "A RARE CASE REPORT"

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**ABSTRACT** Epidermal inclusion cyst is a benign cyst and it comprises 1% of all testicular tumors. They are usually asymptomatic. Histologically these are made up of squamous epithelium and seen micro pathologically as keratin filled cyst surrounded by keratinizing squamous epithelium.

Case is a 30 Y/M presented with swelling and pain in left inguino-scrotal region with history of bilateral orchidectomy came to our institute for further management. Excision biopsy was done and histopathology was suggestive of Epidermid cyst.

### KEYWORDS :

**Introduction-** Epidermal inclusion cyst<sup>1</sup> also known as Epidermoid cyst<sup>2</sup> is a benign cyst and comprise 1% of all testicular tumors. These are asymptomatic and usually present over the surface of skin. The Cause may be congenital or acquired. These develop out of ectodermal tissue. Histologically these are made up thin layer of squamous epithelium. Epidermoid cysts are usually present over the part of body with little hair These are generally developed between 2<sup>nd</sup> to 4<sup>th</sup> decade<sup>(3)</sup>. They Occur as a result of implantation of epidermal tissue into Dermis and subcutaneous tissue or on the testicles<sup>4</sup>. This abnormal localization of epidermal tissue occurs secondary to defective development closure during intrauterine life or due to traumatic implantation of epidermal tissue. Ultrasonography has been remain the main stay of diagnosis and may present as well circumscribed intratesticular lesion with normal testes<sup>(5,6)</sup> Pathologically these presents as keratin filled cyst surrounded by keratinizing squamous epithelium<sup>(7)</sup>. Excision biopsy is the treatment of choice if these are found symptomatic.

**Case Report-** Patient is a 30 yrs old Male came with complaints of pain and swelling in left inguino-scrotal region since 1 month. Pain was localized, non-radiating, continuous, dull aching with no aggravating factors and relieved with medications. The swelling was localized to root of right side of scrotum with skin over the swelling normal. On examination Swelling present at right inguino-scrotal region around 4 x 4 cm in size, tender, non-pulsatile, non-mobile, non-reducible. There was no associated lymphadenopathy and no other secondary skin changes.

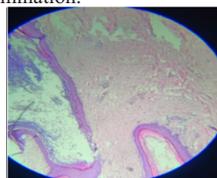
No significant past medical history. There is history of surgery for bilateral undescended testes for which bilateral orchidectomy was done. While surgery the left undescended testes fixed to root of scrotum and right to base of scrotum 1 year back. There is no significant personal, family and addiction history.

Radiological finding of Scrotum showed left testes present at root of scrotum which was heterogenous in texture, ill defined hypoechoic area, with decreased peripheral vascularity with almost absent central vascularity. The finding of right testes was within normal limits.

After that orchidectomy was done and the specimen was sent to pathology for histopathological examination.



**Figure A-** Gross specimen image.



**Figure B-** Microscopic specimen image.

Specimen received is grey brown soft tissue piece measuring 3.5 x3 x1.5 c m. Cut section of specimen show cystic filled with pultaceous material with no testicular tissue identified. Microscopic analysis revealed cyst lined by keratinized squamous epithelium with a granular layer without nuclear atypia and contain keratin. The histological features of epidermal inclusion cyst.

**DISCUSSION** - Epidermoid cyst<sup>1</sup> is a benign lesion, rare and sometimes an incidental finding in micro-pathological examination<sup>(2)</sup>. Accounts 1-2% of all testicular lesions. Majority of patients belong to 2<sup>nd</sup> to 4<sup>th</sup> decade<sup>(3,4)</sup>. Syndromes associated with it include Gardner syndrome, Turcots syndrome<sup>(5)</sup>. Clinical features are indistinguishable from Germ Cell tumor. Ultrasonography has been remain the main stay of diagnosis and may present as well circumscribed intratesticular lesion with normal testes<sup>(6,6)</sup>. In some studies MRI may be diagnostic. Differential diagnosis of intratesticular masses is limited and its unique feature is onion ring appearance<sup>6</sup>. Mico- Pathologically these generally presents as keratinizing squamous epithelium lined cyst<sup>7</sup>. Orchidectomy is required for proper diagnosis.

### CONCLUSION-

Epidermal inclusion cyst was incidental finding in orchidectomy specimen done for Testicular torsion. It is presented as painful mass otherwise it usually presents as painless mass in Inguino-scrotal region. Diagnosis was made by pathological examination of the specimen.

### REFERENCES-

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