E-ISSN: 2616-3470
P-ISSN: 2616-3462

www.surgeryscience.com
2021; 5(1): 90-91
Received: 24-11-2020
Accepted: 28-12-2020

Surya Prakash Vaddi
Department of Urology, Yashoda Hospital, Somajiguda, Hyderabad, Telangana, India

Seshu Mohan Khetavath
Department of Urology, Yashoda Hospital, Somajiguda, Hyderabad, Telangana, India

Rajesh Reddy KRV
Department of Urology, Yashoda Hospital, Somajiguda, Hyderabad, Telangana, India

Datta Prasad M
Department of Urology, Yashoda Hospital, Somajiguda, Hyderabad, Telangana, India

Corresponding Author:
Seshu Mohan Khetavath
Department of Urology, Yashoda Hospital, Somajiguda, Hyderabad, Telangana, India

Congenital preputial epidermal inclusion cyst with long skin pedicle removed in a 30 year old male patient: A rare case report and review of literature

Surya Prakash Vaddi, Seshu Mohan Khetavath, Rajesh Reddy KRV and Datta Prasad M

DOI: https://doi.org/10.33545/surgery.2021.v5.i1b.595

Abstract
Epidermal inclusion cysts are benign lesions that can develop in any part of the body and are rare to occur in penis. We report a case of congenital preputial epidermal inclusion cyst of in a 30 year old male patient. The swelling was of 4x3cm in size with a long skin pedicle of 4.2cm. Excision and primary closure of the preputial cyst was done and histopathology confirmed the diagnosis. To our knowledge no case has been reported in literature till date with such a long pedicle of congenital preputial epidermal inclusion cyst.

Keywords: Preputial cyst, congenital epidermal inclusion cyst, Skin pedicle, Painless penile swelling

Introduction
A 30 year old male presented with history of painless penile skin swelling since birth. Swelling was slowly increasing in size and becoming prominent on penile erection. Patient denied any history of childhood surgeries or injuries over penis. Patient does not have lower urinary tract symptoms. On examination there was 4.0x3.0 cm non-tender midline preputial swelling present on ventral side of penis, with 4.2 cm long pedicle of penile skin. The swelling had smooth surface, yielding on pressure, doughy in consistency, with no evidence of punctum or signs of inflammation. (Figure 1).
Excision of swelling was planned in view of cosmetic reasons and difficulty in sexual intercourse. Cyst excision was done under local anesthesia and defect was closed with 4-0 polyglactin suture (Figure 2A, B, C). Postoperative recovery was uneventful. On cut section, it contained cheesy material (Figure 2D) and histopathological examination showed skin lined tissue with an underlying cyst lined bystratified squamous epithelium, and cyst filled with keratinous debris with no evidence of adnexal structures, dysplasia, or derivatives of other germ cells. (Figure 2E) Patient on follow up since 6 months and there is no evidence of local recurrence.

Discussion
Epidermal inclusion cysts are also known as epidermoid cyst, epidermal cyst, infundibular cyst, inclusion cyst, and keratin cyst. These cysts can occur anywhere on the body, and are very rare over the penis. They may be congenital or acquired (secondary to trauma or penile surgery). Lesions may remain stable or progressively enlarge over time [1].
The aetiology is unknown in congenital cases, but it may represent a monolayer teratoma of germ cell origin or an abnormal embryogenic closure of the median raphe [2]. Epidermal inclusion cysts, demonstrate the implantation of epidermal elements into the dermis layer of the skin in acquired cases. In general epidermal inclusion cysts have less than 1% chances of malignant transformation although till date no case of malignant transformation of penile epidermal inclusion cyst has been reported [3].
The indications for the treatment of these cysts includes secondary cystic infection, difficulty in sexual intercourse, cosmetic reasons, or obstruction of the urinary tract. Complete excision followed by primary closure is the best treatment option [4]. Histopathology will confirm the diagnosis and excludes other cystic lesions of penile skin. Key diagnostic histopathological features includes, the cyst should be (i) surrounded by penile tissue, (ii) filled with keratin only,

and (iii) lined with surrounding fibrous connective tissue, (iv) with an inner lining of stratified squamous epithelium and without dermal appendages [5]. Long term follow up is required in view of local recurrence or malignant transformation.

Conclusion

Preputial congenital epidermal inclusion cysts are rare and cyst with very long pedicle has not been reported so far in the literature.

Fig 1: A-D: Preputial cyst with long pedicle of skin and yielding on digital compression.

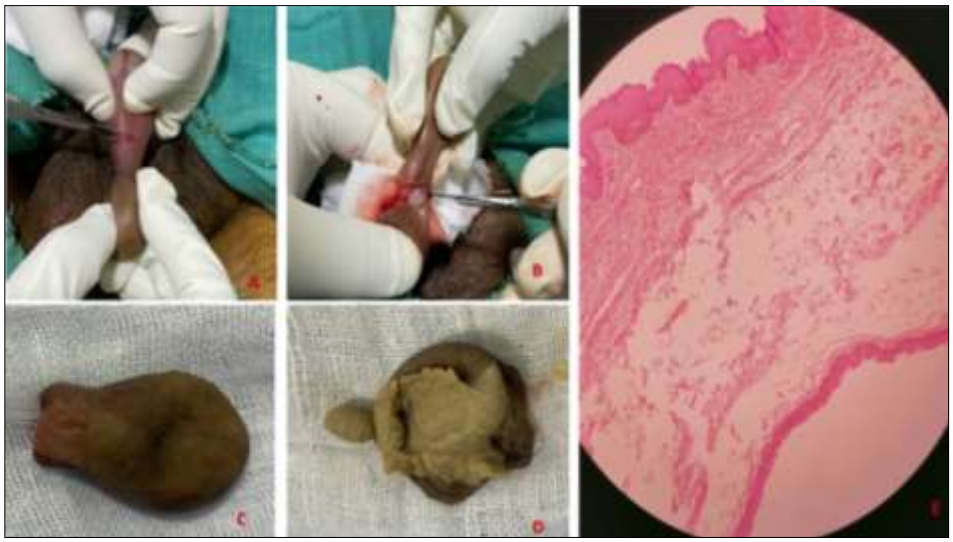

Fig 2: (A-C) Excision of the cyst. (D). Cut section revealing cheesy like material. (E).Histopathology confirming epidermal inclusion cyst.

References

1. Zito PM, Scharf R. Stat Pearls [Internet]. StatPearls Publishing; Treasure Island (FL): Cyst, Epidermoid (Sebaceous Cyst) [PubMed] 2020.
2. Suwa M, Takeda M, Bilim V, Takahashi K. Epidermoid Cyst of the Penis: A Case Report and Review of the Literature. International Journal of Urology 2000; 7(11):431-433.
3. Apollos JR, Ekatah GE, Ng GS, McFadyen AK, Whitelaw SC. Routine histological examination of epidermoid cysts; to send or not to send? Ann Med Surg (Lond) 2017;13:24-28.
4. Kawai N, Sakagami H, Awata S, Kojima Y, Tatsura H, Sasaki S. Epidermoid cyst of the scrotum: A case report. Acta Urol. JPN 1996;42:609-11.
5. Walter JB, Israel MS. Tumour and tumour-like conditions; in General Pathology, ed 5. London, Churchill Livingstone, 1979;27:335.