Epidermoid Cyst of Glans Penis in an Adolescent Male: A Common Entity at an Uncommon Site

N S Nayana¹, Mohd Jassem Hassan², Sabina Khan¹, Nehal Ahmed¹, Sujata Jetley⁴
¹Demonstrator, Department of Pathology, Hamdard Institute of Medical Sciences, New Delhi, India, ²Assistant Professor, Department of Pathology, Hamdard Institute of Medical Sciences, New Delhi, India, ³Associate Professor, Department of Pathology, Hamdard Institute of Medical Sciences, New Delhi, India, ⁴Professor and Head, Department of Pathology, Hamdard Institute of Medical Sciences, New Delhi, India

Epidermoid cysts are benign lesions occurring anywhere in the body, but it is a rare entity over glans penis. Even though a few cases are been reported in adult age group, epidermoid cyst occurring at glans penis in young age is very rare. The etiology in penile area is not specific, but it may represent a monolayer teratoma of germ cell origin or an abnormal embryogenic closure of the median raphe. Being benign its harmless, but secondary infections are common which gives an indication for surgical removal of the cyst. Here, we report a case of epidermoid cyst in a 14-year-old boy who came with painless swelling over the glans penis.

Keywords: Adolescent, Epidermoid cyst, Glans penis

INTRODUCTION

Epidermoid cysts represent the most common cutaneous cysts. They can occur anywhere on the body, and the most frequent sites involved are face, scalp, neck, and trunk.¹ Epidermal cyst refers to those cysts that are the results of the implantation of epidermal elements in the dermis. It can also result from the proliferation of epidermal cells within a circumscribed space of the dermis.² Penile epidermoid cysts are uncommon and usually congenital.³ The etiology in penile area is not specific, but it may represent a monolayer teratoma of germ cell origin or an abnormal embryogenic closure of the median raphe.⁴ We report a case of a cyst arising from the penis in a 14-year-old boy without any trivial history of injury. The case was managed successfully by excision of the swelling.

CASE REPORT

A 14-year-old boy presented with painless swelling over glans penis for 1 month. He had no history of trauma, inflammation, urinary tract infection, hematuria, or dysuria. On examination, the swelling was at midline anterior aspect of glans penis size of around 1 × 1 cm, cystic in consistency. Other general physical examination was completely normal, and the hematological profile was under normal limits. Surgical procedure was done with removal of cystic mass along with overlying skin under local anesthesia. The specimen was submitted to further histopathological examination. Grossly, skin covered mass measuring 1 × 1 cm. Cut section showed two tiny cysts both measuring 0.2 × 0.2 cm filled with pultaceous material. Microscopy revealed two tiny cysts seen lined by stratified squamous epithelial lining filled with keratin. Cyst was covered by the overlying skin. It did not contain either skin appendages or germ cells (Figures 1 and 2). With these histopathological findings, a diagnosis of epidermoid cyst of the glans penis was performed.

DISCUSSION

Epidermoid cyst is very uncommon in the glans penis. Khanna et al, reported the first case of epidermoid cyst in glans penis in 1991.⁵ Two reports of epidermoid cyst of the glans penis in children was noticed in a study by Papali et al. in 2008.⁶ Penile cystic diseases can occur in varying size and length, and they are usually solitary, only rarely being multifocal. The etiology of penile epidermoid cyst is unknown; still, some of the reports stated that this lesion may arise from abnormal embryological closure of the median raphe or may be acquired after mechanical implantation, such as that involving injection of epidermal fragments. It is also been reported after hypospadias repair, penile girth enhancement surgery, and circumcision⁷ The
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Criteria proposed for diagnosis of epidermoid cysts of the glans penis are the following: It should be surrounded by penile tissue, filled with keratin material only, with an inner lining of stratified squamous epithelium, without any dermal appendage. The differential diagnosis of cystic structures in the genital region includes an extensive range of conditions. Among the more serious diseases, urethral diverticula and urethrocutaneous fistula are important but can usually be ruled out by both physical examination and the conditions evident upon voiding. The best treatment procedure for simple epidermal cyst of the glans penis is complete excision. Aspiration and simple drainage cannot be recommended due to the risk of recurrence. Neoplastic transformation of epidermoid cysts is rare, and it has never been reported in penile cases; in any case, a long follow-up after surgical removal is highly recommended.

CONCLUSION

Epidermal cyst of the glans penis is a rare entity in young age. It is harmless until the development of secondary bacterial infection. However, the surgical removal and regular follow-up are a must to avoid complications.

REFERENCES


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