

Case Report

Mucoid Cyst of The Penile Skin: A Rare Entity

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ABSTRACT

A 9-year old male patient was admitted to our clinic for circumcision. Physical examination revealed a mass in the prepuce. After excision of the mass, histopathological examination was consistent with a mucoid cyst of the penile skin, which has been rarely reported. Pathologists and clinicians dealing with genitourinary system pathology should be familiar with this rarely encountered entity.

Key Words: Mucoid cyst, penile skin

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INTRODUCTION

Mucoid cysts include a lining of pseudostratified columnar epithelium which is often associated with intraepithelial mucous cells and/or mucous glands. Mucoid cysts of the penis most likely arise from ectopic urethral mucosa which is sequestered in the penile skin during embryologic development¹.

CASE REPORT

A 9 year-old male child was admitted to our clinic for circumcision. Routine physical examination revealed a cystic and mobile mass of about 1 cm in diameter at the ventral aspect of the glans penis. The swelling appeared to be subcutaneous with no local erythema or heat. After routine examination of the patient, surgical excision was performed. Macroscopically, the excised tissue (2.5 x 2 x 0.2 cm) was found to contain skin fragments and a cyst of 0.8 cm diameter beneath the skin. Microscopic investigations revealed a cystic structure covered by a stratified columnar epithelium containing mucin-secreting cells, consistent with a mucoid cyst of the penis (Figs. 1 and 2). After the excision, the patient was discharged uneventfully.

DISCUSSION

Mucoid cysts of the penile skin are found on the prepuce or glans penis. The cyst lining is pseudostratified columnar epithelium¹. Intraepithelial glands or "Morgagni's lacunae" (one-layered cylindrical intraepithelial glands), Littre's glands (tubuloacinar mucinous glands present along the corpus cavernosum), and bulbourethral or "Cowper's glands" (mucous acinar structures located deeply at the level of the membranous urethra) are the glandular structures associated with the urethra². Mucoid cysts of the penis are often associated with intraepithelial mucous glands¹.

Epidermoid cysts of the glans penis have also been reported³. These cysts result from implantation and proliferation of epidermal structures in the dermis and are lined by stratified squamous epithelium⁴. Epidermoid cyst is the most common cystic lesion of the penis. It usually occurs on the penile shaft and varies in size from 0.1 to 1 cm in diameter. Mucoid cysts are located on the prepuce or the glans and range from 0.2 to 2 cm in diameter⁵. However, compared to epidermoid cysts, mucoid cysts of the penile skin are extremely rare. There are a few case

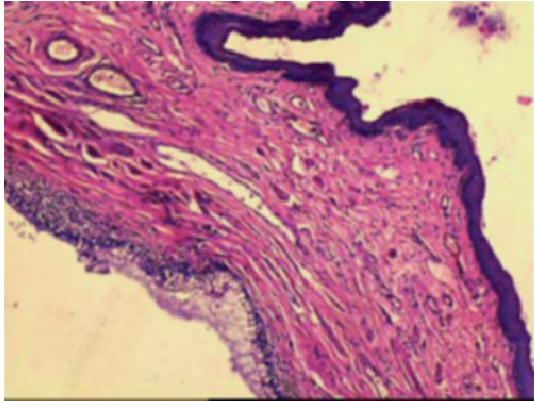


Fig. 1: Mucoid cyst beneath the epidermis of penile skin (H&E X50).

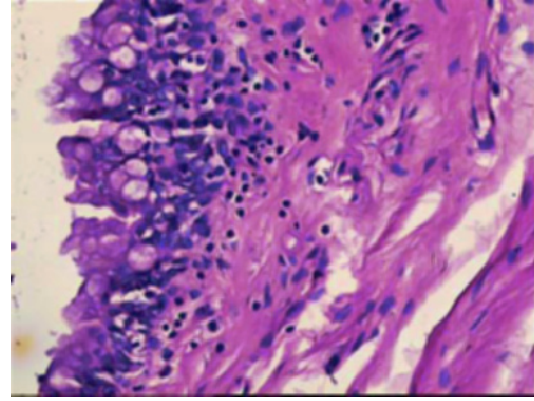


Fig. 2: Cystic structure surrounded by pseudostratified columnar epithelium containing mucin secreting cells (H&E X200).

series reported in the literature¹, but the true incidence is unknown. Muroid cyst also needs to be differentiated from median raphe cyst of the penis, which generally occurs along the median raphe on the ventral surface of the penis. Median raphe cysts which are usually asymptomatic are lined by urothelium or squamous epithelium⁴.

CONCLUSION

Mucoid cyst of the penile skin is a rare entity, even rarer in the pediatric age group. The only therapeutic option is surgery. Differentiation from other cysts of the penis more commonly seen in the pediatric age group can be done by examining the lining epithelium of the cyst. Urologists and pathologists dealing with genitourinary system pathology should be familiar with this rarely encountered entity.

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