Median Raphe Cyst: Clinical And Histological Images

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Median raphe cyst is a rare, benign cyst of congenital origin. It is usually located along the median raphe which extends from urethral meatus to the anus, with the ventral aspect of penile shaft being the most common location.

A 25-year-old unmarried man presented to us with a 4-year history of swelling on his glans. This was asymptomatic and gradually progressive with no prior history of sexual contact or trauma. Genital examination revealed two well defined yellowish cystic swellings of size 0.5 x 0.3 cm and 0.3 x 0.2 cm in the perifrenular area (Figure 1). The cysts were excised under local anesthesia and histopathological examination revealed a cystic lesion lined partly by stratified squamous epithelium and partly by pseudostratified columnar epithelium (Figure 2 A, B).

Median raphe cysts develop along the median raphe of the male external genitalia with the most cases having been reported in young patients.¹ They are believed to arise from trapped tissue outside of the urethral groove.² The nomenclature for these cysts
has been varied including “mucoid cyst,” “genitoperineal cyst,” “para-meatal cyst,” “hydrocystoma,” and “apocrine cystadenoma.”

Median raphe cysts can occur at any site on the ventral side of the genital area, including the parameatus, glans penis, penile shaft, scrotum, or perineum. Sometimes, they can present as a cordlike or canaliform induration on the median raphe. The differential diagnosis includes epidermal inclusion cyst, urethral diverticulum, steatocystoma, glomus tumor, dermoid cyst, and pilonidal cyst. Histopathologically, median raphe cysts can be classified into 4 types: urethral, epidermoid, glandular, and mixed, the most common of which is the urethral type. The present case shows the urethral type.

Treatment of median raphe cysts is usually local excision and aspiration for cosmetic and symptomatic purposes. Potential complications include development of urethral fistulas. While most are asymptomatic, some can impact quality of life due to pain and difficulty voiding. Given the rarity of the condition as well as its various presentations, median raphe cysts are often overlooked or misdiagnosed.

Median raphe cysts are rare non-venereal genital dermatoses. A bilateral paramedian location has not been reported in literature to the best of our knowledge. Exposure to various presentations of such cysts is imperative to improve quality of life and address patients’ cosmetic concerns.

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