

## Case Report

# Giant median raphe prepuceal cyst in an elderly male

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**Received:** 04 October 2015

**Revised:** 12 March 2016

**Accepted:** 31 March 2016

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## ABSTRACT

Median raphe cysts are midline developmental cysts that can be found anywhere from anus to urinary meatus. Commonly reported sites of their occurrence are the shaft of the penis & the glans of penis. Their presence in prepuce is extremely rare. Mucus cyst of the penis, genitoperineal cyst of the medium raphe, parameatal cyst, hydrocystoma and apocrine cyst adenoma of the penile shaft, have been considered synonymous by most of the authors publishing their case reports. The present case is 76 years old, married male having 04 sons & 03 daughters, presented to Surgical OPD with history of swelling at the tip of penis since childhood that has rapidly progressed in last 06 months to big size. Examination there was a 6 cm by 5 cm cystic swelling hanging from the prepuce in the midline. The patient was subjected to Circumcision along with total excision of the cyst under local anaesthesia. Histopathology revealed benign prepuceal cyst. There was no recurrence till 06 months follow up. The literature review revealed no such big sized prepuceal cyst in such an extreme age.

**Keywords:** Median Raphe, Prepuceal cyst, Giant, Elderly male

## INTRODUCTION

Median raphe cysts are midline developmental cysts that can be found anywhere from anus to urinary meatus. Commonly reported sites of their occurrence are the shaft of the penis & the glans of penis.<sup>1</sup> Very rarely they are present in prepuce also in addition to presenting in scrotum and perineum.<sup>2</sup> Mucus cyst of the penis, genitoperineal cyst of the medium raphe, parameatal cyst, hydrocystoma and apocrine cystadenoma of the penile shaft, have been considered synonymous by most of the authors publishing their case reports.<sup>3</sup> Furthermore, the Differential diagnoses include epidermal cysts, lipomas, esteatocystomas, dermoid cysts, pilonidal cysts, tyson glands cysts and urethral diverticulums.<sup>4</sup> The cysts are usually small, soft, freely movable, asymptomatic masses unless they are complicated by infection and difficulty coitus.<sup>5</sup> The present case is a giant median raphe cyst of prepuceal skin in an elderly male. The literature review is devoid of such big sized prepuceal cyst in such an

extreme age. In view of rarity of the case due to size of the cyst, site of occurrence and extreme age it is being presented here to enrich the surgical literature.

## CASE REPORT

A 76 years old male, married having seven children, from average socioeconomic status, presented in our outpatient department with a 6 months history of a rapidly growing swelling that was otherwise present since childhood on the tip of his penis. The patient desired a treatment for psychosocial and cosmetic reasons. He denied any history of local trauma or surgery in the past and there was no discomfort during his sexually active life. General physical examination was unremarkable. Local examination revealed a non-tender cystic swelling of the size 6 cm by 5 cm in cranio-caudal dimensions, hanging down from the prepuce. Investigative parameters were within normal limits. The patient was subjected to Circumcision along with total excision of the cyst under

local anaesthesia. Histopathology revealed benign prepuceal cyst. There was no recurrence till 06 months follow up.



**Figure 1: Giant prepuceal cyst.**



**Figure 2: Approximately 6 cm by 5 cms craniocaudal dimensions as measured on adult palm.**



**Figure 3: Circumcision along with total cyst excision in progress.**



**Figure 4: Cyst excised in toto.**



**Figure 5: Completion surgery.**

## DISCUSSION

Memert P went on describing median raphe cyst for the first time.<sup>6</sup> Median raphe cysts are rare benign congenital lesions developing along the midline from urethral meatus to the anus. Although they are referred to as 'median raphe cysts', they can also present as cordlike or canaliform indurations on the median raphe, which are very rare.<sup>7</sup>

The cysts are usually small, soft and freely movable masses. In general, they are asymptomatic, unless when they are complicated by infection or difficult coitus.<sup>4,8</sup>

Although the pathogenesis of the disease has not been well understood by the medical fraternity yet various developmental theories put forth are 'tissue trapping' either due to a defective fusion of the urethral folds or an anomalous outgrowth of the epithelium, which becomes sequestered and independent after the primary closure of the median raphe. The anomalous developmental rest of the periurethral glands of Littre and blockage of the paraurethral ducts.<sup>9</sup>

In most of the patients, the cysts, which are asymptomatic or unrecognised during childhood, may progress slowly and become symptomatic during adolescence or adulthood.<sup>4</sup> Their proximal location in most of the cases make them asymptomatic. Only one case of a spontaneous onset after an intense sexual intercourse has been documented. Further, they get complicated by infection, trauma or can make coitus difficult, as has been reported by various authors.<sup>6,10,11</sup>

Median raphe cysts may regress spontaneously. Also small and asymptomatic cysts in infants can be observed without excision. Symptomatic cyst, secondary infection, pain and cosmetic reasons compel the patients for treatment. Complete local excision is the preferred treatment of choice.<sup>12,13</sup>

Our case is giant median raphe cyst 6 cm by 5 cms located in the prepuce that is a very rare site for such occurrence. Furthermore, the extreme age of presentation added to its rarity. In the present case, in addition to experiencing penile heaviness, there was a peculiar indication for the treatment that patient never wanted to

become a laughing stock after his death when people shall recognised such a big sized cyst on his penis. Other than Rosalba R who went on reporting a rare case of a young adult man with a 5×5 cm nodule on the prepuce (ventral face), which appeared 2 years ago and interfered with his sexual function, there is no other case of such a huge median raphe cyst reported in the surgical literature has been gathered from extensive PubMed and Scopus search.<sup>3</sup>

## CONCLUSION

Early acute post cholecystectomy pancreatitis is a rare entity. Immediately MRCP accompanied with altered enzymes (lipase and amylase) and liver function tests is diagnostic. Aggressive supportive care is the mainstay of treatment in cases where there is no obstruction in the CBD. However if there is an impacted stone or sludge ball seen on MRCP then endoscopic intervention is mandatory.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Bhasin SK, Loach R, Sharma G, Gorka V. Giant median raphe prepuceal cyst in an elderly male. Int Surg J 2016;3:1018-20.