Congenital Urethral Diverticulum With Stone in A 42 Year Old Male Patient: a Case Report

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Abstract

Urethral diverticulum (UD) is a localised out pouching or fusiform dilatation of the urethra. UD commonly found in women and very rare in men. We present a case of 42-years old male suffered from scrotal swelling with hard consistency and lower urinary track symptom (LUTS) for more than 30 years. At first, scrotal mass was suspected as scrotal cancer. An open surgery was perfomed, and a giant stone with diverticulum was found. With limited facilities and the absence of urologist, we performed a stone removal and drainage placement before we referred the patient to urologist for definitive treatment. UD is a very rare case, especially male UD. Doctors and other health workers in rural area must remain aware of rare cases so early diagnosis can be found and further complication can be prevented.
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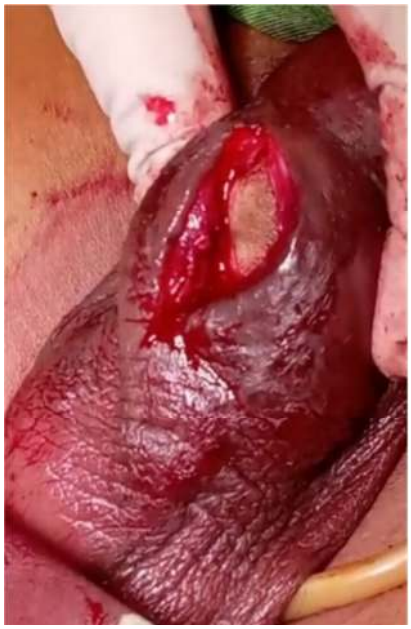
INTRODUCTION

A urethral diverticulum (UD) constitutes a localised saccular dilation that forms out of any point in the urethra's length, contiguous with the true urethral lumen through an orifice with a variable size neck.[2] UD can be either congenital or acquired While two-thirds to 90% of UD cases are acquired, a small proportion of UD cases is congenital.[5]

The congenital UD may result from incomplete development of the urethra.[4] UD are more commonly observed in females because of poor anatomical support of the urethra and physical trauma sustained during childbirth.[3] Therefore, UD occurs far more frequently in women and is very rare in men. We present a case of suspected congenital male UD.

CASE REPORT

We are presenting here a case of an adult of 42 year old with complaints of swelling at penoscrotal regio, slowly progressive in size for 30 years Repeated lower urinary track symptom (LUTS) been reported since then. On physical examination, a swelling with hard consistency was found at penoscrotal regio (Fig. 1). Leukositosis was presented in laboratory finding. Base on patient anamnesis, clinical examination and laboratory finding, scrotal mass suspected as scrotal cancer was diagnosed. Our general surgeon was the leader for the surgery due to lack of urologist at our hospital. The plan was open surgery with scrotal incision. While open surgery was perfomed, a giant stone with 4 cm diameter inside a sac-like bulge with abscess was found inside (Fig. 2) Base on clinical finding, urethral diverticulum was diagnosed. With limited facilities and the absence of urologist, we perfomed stone removal and drainage installation (Fig. 3) for the abscess



before we referred the patient to urologist for definitive treatment.

Figure 1. Clicinal finding from patient while in Emergency Room

(**Figure 2**. A giant stone was found inside a sac-like bulge and stone removal were perfomed)

(Figure 3. Abscess drainage installation after stone removal were perfomed)

DISCUSSION

A urethral diverticulum (UD) is a condition in which a localised saccular of fusiform outpouching forms out of any point in the urethra's length.[2] The prevalence of UD is more commonly found in female[3]. UD may be congenital or acquired in origin.[5] Congenital diverticulum can be located in different places along the urethra, but in the large percentage it is found in the penoscrotal area.[1] it may result from developmental defect of the urethral folds on the ventral aspect of the urethral wall.[3] Several factors have been described as responsible for UD development: strictures; recurrent urinary tract infections, including periurethral suppuration as a result of gonorrhoea, tuberculosis, or chronic urethritis infections; long-term or recurrent catheterisation; urethral or penile surgery; trauma; and erosion from surgical implants or from the use of penile clamps.[2]

Inadequate urine drainage from this outpouching leads to urinary stasis, recurrent urinary tract infections, lithiasis formation, an increase in UD size, urinary leakage or fistulas, incontinence, or even a palpable penoscrotal mass.[2] In this case, we suspect it for congenital UD from the history of scrotal swelling since 30 years ago due to stone that slowly bigger in size because it left untreated.

CONCLUSION

UD is a very rare case, especially male UD. Variety of complaints and other clinical finding can be found in male UD. Doctors and other health worker in rural area must remain aware of variety of rare cases so early diagnosis can be found and further complication can be prevented.

REFERENCES

1. Peev S., Pelov T., Dorosiev E., Mladenov B., Stoeva B., Stoykov B. 2021. A Rare Case of Congenital Anterior Urethral Diverticulum in a Two-Year-Old Boy. Urology Case Report, 39, p.101768

2. Ferreira N., Gaspar S., Oliveira P., Oliveira T., Dias J., Lopes T. 2018. Acquired Male Urethral Diverticula: Diagnosis and Surgical Management. EMJ Urol. 2018;6[1]:62-66.

3. Demmin A., Patel S., Faisal F., Saoud C., Salimian K., Cohen A. 2021. Acquired Male Urethral Diverticulum Complicated by Calculi: A Case Report. Urology Case Report, 39, p.101837

4. Thakur N., Sabale V., Mane D., Mullay A. 2016. Male urethral diverticulum uncommon entity: our experience. Urol Ann, 8 (4) (2016), p.478

5. Putra I. and Mirza H. 2019. Urethral Diverticulum With Urethrocutaneous Fistula and Giant Stone: A case report. Urology Case Report, 27.P.100862.