Giant urethral diverticulum calculus revealed by peri-urethral abscess

Gros calcul dans un diverticule urétral révélé par un abcès péri-urétral

Sahbi Naouar[1], Hamza Boussaffa[2], Mohamed Amri[3], Raja Naouar[4], Salem Braiek[1],Rafik El Kamel[1]

1-Service d'urologie, Hôpital Ibn El Jazzar de Kairouan / Faculté de Médecine de Sousse,
2-Service d'urologie, Hôpital Ibn El Jazzar de Kairouan / Faculté de Médecine de Tunis,
3-Service d'urologie, Hôpital Ibn El Jazzar de Kairouan / Faculté de Médecine de Monastir,
4-Service des urgences- Hôpital Djerba / Faculté de Médecine de Monastir,

RÉSUMÉ

Le diverticule urétral chez l'homme est rare. Nous rapportons le cas d'un diverticule de l'urètrebulbaire contenant un gros calcul compliqué d'un abcès péri-urétral chez un homme de 40 ansdécouvert à l'occasion d'une tuméfaction inguino-scrotale gauche. A la lumière de ce cas nousinsistons sur l'importance de rechercher la présence d'un diverticule urétral chez les hommesjeunes qui présentent des troubles urinaires afin d'éviter les complications secondaires à cettepathologie.

Mots-clés

Diverticule; calcul; urètre; abcès.

SUMMARY

Urethral diverticulum of the male is uncommon. We report a case of bulbar urethraldiverticulum with contained giant calculus presenting as left inguino-scrotal swellingsecondary to peri-urethral abscess in a 40 year-old male. In the light of this case weemphasize the importance of investigation for the presence of urethral diverticulum in youngmale individuals presenting with voiding disturbances to prevent related complications.

Key-words

Diverticulum; calculus; urethra; abscess.Résumé

Lower urinary tract particularly the urethra is an unusual site for urolithiasis accounting for less than 1% of urinary calculi (1). The urethral calculi are mostly migratory in nature originating in the urinary bladder and upper urinary tract (1). Native or primary calculi are rare and usually develop in association with urethral foreign body and diverticulum (1, 2). Giant calculus developed in a pre-existing anterior urethral diverticulum (UD) is seldom encountered in clinical practice. We herein report a 40 year-old male with peri-urethral abscess secondary to giant UD calculus to highlight this unusual occurrence.

OBSERVATION

A 40 year-old male presented to the emergency room with a large left-sided hemi-scrotal swelling. He reported a three-month history of dysuria and micturition burning. There was no other significant history. Physical examination showed a tender, cystic scrotal swelling and a large indurated swelling in the left inguinal area, with neither crepitus nor necrotic skin change. His temperature was 39°C and his vital signs were stable. Urgent computed-tomography (CT) scan of pelvis showed a 2.3 x 2.6 x 4.6 cm (antero-posterior x width x height) calcification in close proximity to the bulbar urethra and a 5.6 x 4.2 x 6.8 cm rim-enhancing fluid collection inferior to the calcification extending to its left side (Figure 1).

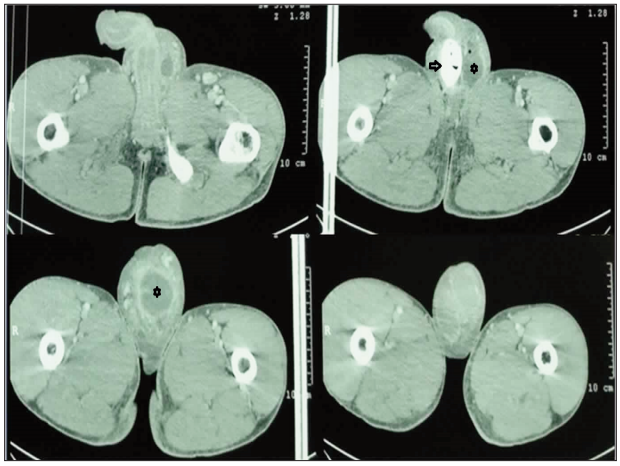

Figure 1. CT scan showing a large anterior urethral calculus (arrow) with a peri-urethral rim-enhacing fluid collection (star).

An emergency operation was performed under general anaesthesia. The abscess was evacuated and drained through a large left inguino-scrotal incision. A bulbar UD with parietal defect communicating with abcess cavity was noted peroperatively. Impacted large calculus was visible through the parietal defect of the diverticulum. The defect was enlarged allowing extraction of the calculus. An 18-Fr Silicone Foley catheter was inserted over a guidewire and its position confirmed by urine issue from the bladder. Diverticulum excision was performed without layer suture. The stone was measured 5 cm in height (Figure 2). The patient was kept on antibiotic according to sensitivity. The scrotal swelling gradually subsided and the patient was discharged with the urethral catheter on seventh postoperative day. The catheter was removed on 21st postoperative day. The patient voided normally after the removal of the catheter. Follow-up micturating cystourethrogram (MUCG) showed no obstruction with complete emptying of bladder. The patient was asymptomatic after 6 months of follow-up.

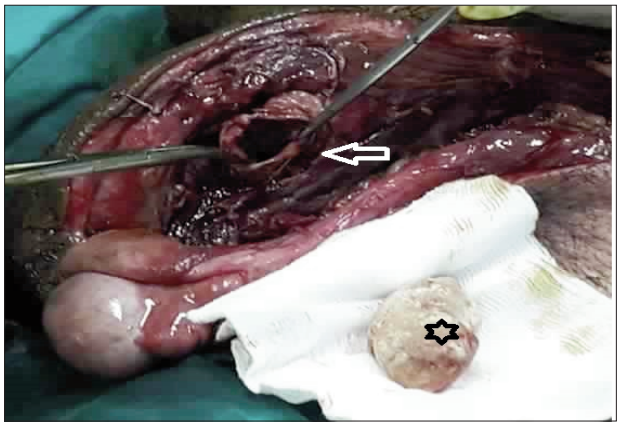

Figure 2. Operative picture showing the bulbar urethral diverticulum (arrow) with extracted calculus (star).

CONCLUSION

Congenital UD is rare in men and has been reported to occur exclusively in the anterior urethra. It may present itself at any age, from infant to adult and may remain asymptomatic until complications arise. Diagnosis is usually made by MCUG or retrograde urethro¬gram. Cystourethroscopy is diagnostic as well as therapeu¬tic. Management options are multiple and depend upon the size of the diverticulum and the degree of obstruction. Transurethral resection of the distal obstructing lip may be sufficient in cases with small, well-supported diverticula. Plication of redundant diverticular wall is yet another option. However, open diverticulectomy and anatomic reconstruction is recommended for large diverticula. This case illustrates the importance of investigation for the presence of UD in young male individuals presenting with voiding disturbances to prevent related complications such as peri-urethral abscess.

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