

Commentary

HSI Journal (2023) Volume 4 (Issue 2):492-493. <https://doi.org/10.46829/hsijournal.2023.12.4.2.492-493>Open
Access

Urethral calculi: An uncommon but important cause of urinary retention in females

Kwaku ASAH-OPOKU

*¹Department of Obstetrics and Gynaecology, University of Ghana Medical School, College of Health Sciences, University of Ghana, Accra, Ghana**Received October 2023; Revised November 2023; Accepted November 2023***Keywords:** Urine retention, Urethral calculus, female*Cite the publication as Asah-Opoku K (2023). Urethral calculi: An uncommon but important cause of urinary retention in females. HSI Journal 4(2):492-493. <https://doi.org/10.46829/hsijournal.2023.12.4.2.492-493>*

Urinary retention is a stressful situation that requires appropriate and prompt management [1]. When it occurs, it leads to anxiety, pain and lower abdominal discomfort [1]. When it is long-lasting, the backpressure of urine that results from the obstruction can lead to hydronephrosis and hydroureter, which can lead to kidney injury. Urethral obstruction in females is caused by previous incontinence surgery, urethral stricture and external obstruction of the urethra, such as from pelvic tumours like uterine fibroids and cervical cancer, among others [2]. Urethral obstruction from urethral stones has an incidence of 1 - 2% and is reported to be very rare in females due to their comparatively short and straight urethra [3-5]. Kyei [6], in this edition of the HSIJ, has clearly illustrated, using medical imaging, a case of urethral obstruction in a nulliparous lady caused by urethral obstruction from a calculus. This is instructive and provides several learning points.

In terms of history, the young lady had no previous history that would point towards a urinary tract calculi, such as previous pelvic pain and haematuria, except for the two-day history of the frequency of micturition. Examination revealed a distended bladder. This may be a pointer to an obstructive uropathy. However, because urethral calculus is an uncommon cause in females, it is likely to be missed. Without paying close attention to examining the urethra, one can miss out on the diagnosis of pelvic examination. Investigations such as an abdominopelvic ultrasound scan

and CT scan are helpful in the diagnosis of urethral obstruction from a stone as well as helping to assess the other parts of the urinary tract for more stones and also obtaining information regarding pelvic tumours causing urethral obstruction. Clinicians need to have the possibility of the diagnosis in mind to be able to clinch it at the examination. This is because, in spite of all the progress made in medical care in Ghana, some health centres may still lack or have faulty radiological equipment. Making the diagnosis early helps to relieve the obstruction early and helps to alleviate the uncomfortable symptoms of pain and anxiety. It also reduces the risk of urethral damage from a locally impacted stone and damage to the kidneys caused by backpressure from the obstructed urine. A urethral examination should, therefore, constitute an important part of the patient clinical evaluation in cases of urinary retention.

With regards to management, the strongest temptation when a large urethral stone is noticed will be to try to milk it out through the external urethral meatus. The author has forcefully emphasized the fact that this is not encouraged because of the adverse effects of causing urethral damage and subsequent urethral stricture [7]. It is expected that the urethral stone will be gently manipulated back into the urinary bladder to relieve the obstruction, and then the plan will be for subsequent definitive management of the stone currently located in the urinary bladder. Urethral calculi are a rare but important cause of urethral obstruction leading to urinary retention in females, and all clinicians need to be aware of this and understand diagnostic and management principles. This is important in improving care outcomes for patients.

* Corresponding author

Email: kasah-opoku@ug.edu.gh

REFERENCES

1. Panicker JN, Selai C, Herve F, Rademakers K, Dmochowski R, Tarcan T, von Gontard A, Vrijens D (2020) Psychological comorbidities and functional neurological disorders in women with idiopathic urinary retention: International Consultation on Incontinence Research Society (ICI-RS) 2019. *Neurourol Urodyn* 39:.
2. Malde S, Solomon E, Spilotros M, Mukhtar B, Pakzad M, Hamid R, Ockrim J, Greenwell T (2019) Female bladder outlet obstruction: Common symptoms masking an uncommon cause. *LUTS: Low Urin Tract Symptoms* 11: 72–77.
3. Hamza B, Bello A, Tolani M, Makama J (2021) An impacted urethral stone: a rare cause of acute urinary retention in women-case report. *Afr J of Urol* 27:138
4. Koga S, Arakaki Y, Matsuoka M, Ohyama C (1990) Urethral Calculi. *Br J Urol* 65:288–289.
5. Arya M, Kumar L, Kumar R, Baid M, Tiwari R (2016) Large urethral calculi in females. *Int J Sci Appl Res* 3:1–4
6. Kyei M (2023) Urethral calculus causing retention of urine in a female. *HSI J* 581–582
7. Sungur M, Baykam M, Çalışkan S, Lokman U (2018) Urethral calculi: A rare cause of acute urinary retention in women. *Turk J Emerg Med* 1

Thank you for publishing with

