CLINICAL IMAGE



Acute urinary retention by fungus balls of Candida

Go Anan D | Makoto Sato

Department of Urology, Tohoku Medical and Pharmaceutical University, Sendai, Japan

Correspondence

Go Anan, Department of Urology, Tohoku Medical and Pharmaceutical University, 1-15-1 Fukumuro, Miyagino-ku, Sendai, Miyagi 983-8536,

Email: goanan@tohoku-mpu.ac.jp

Abstract

In the cases of rapid obstruction of urethral catheter, resulting in urinary retention, due to excessive floating material, such as a large number of spherical masses, fungus balls of Candida may be present.

KEYWORDS

Candida, dysuria, fungus ball, spherical masses, urinary retention

CASE PRESENTATION 1

A man with acute cystitis experienced acute urinary retention causing severe dysuria. Hence, a urethral catheter was implanted, which was rapidly obstructed due to spherical masses. A large number of spherical masses causing urinary retention or urethral catheter obstruction could be due to fungus balls of Candida.

An 80-year-old man presented with hematuria and pyuria. He experienced severe dysuria after 2 weeks and

underwent urethral catheter implantation due to acute urinary retention. Rapid obstruction of the urethral catheter occurred due to spherical masses. A considerable amount of spherical mass with gas was detected in the bladder on CT (Figure 1). Cystoscopy revealed excessive spherical, soft, white masses, and no fistula in the bladder (Figure 2). These masses were washed out of the bladder during cystoscopy. Fungus balls were suspected under a microscope (KOH) and voriconazole treatment was

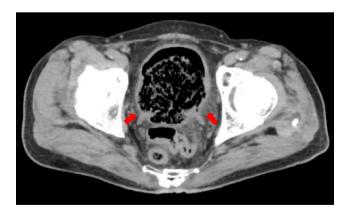


FIGURE 1 CT revealing excessive spherical masses with gas in the bladder (arrows)

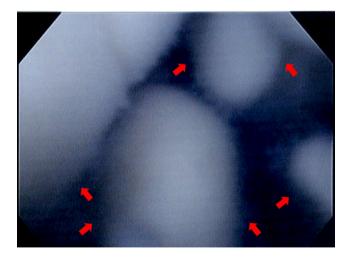


FIGURE 2 'Fungus balls' observed during cystoscopy (arrows)

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes. © 2021 The Authors. Clinical Case Reports published by John Wiley & Sons Ltd.

initiated. For infection control, the urethral catheter was removed and intermittent self-catheterization was initiated. Furthermore, he was diagnosed with type 2 diabetes mellitus at 60 years of age.

Candida tropicalis was detected in his urine culture; therefore, Candida cystitis was diagnosed. After 2 weeks of voriconazole therapy, ultrasound revealed no fungus balls, and improvement of dysuria was observed. He could also urinate independently. When patients with diabetes mellitus and dysuria have excessive deposition in the bladder, as assessed by ultrasound or CT, performing cystoscopy is useful to detect the presence of fungus balls.^{1,2} Early suspicion of fungus balls could aid in the removal of the patient's urethral catheter.

ACKNOWLEDGMENT

None.

CONFLICT OF INTEREST

None declared

AUTHOR CONTRIBUTION

All authors have contributed in writing and reviewing the manuscript.

INFORMED CONSENT

We have obtained the consent of the patient for publication.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no datasets were generated or analyzed during the current study.

ORCID

Go Anan https://orcid.org/0000-0001-8325-2606

REFERENCES

- 1. Behzadi P, Behzadi E, Ranjbar R. Urinary tract infections and *Candida albicans. Cent European J Urol.* 2015;68(1):96-101.
- 2. Thomas L, Tracy C. Treatment of fungal urinary tract infection. *Urol Clin North Am.* 2015;42(4):473-483.

How to cite this article: Anan G, Sato M. Acute urinary retention by fungus balls of *Candida. Clin Case Rep.* 2021;9:e04691. https://doi.org/10.1002/ccr3.4691