



LETTER TO THE EDITOR

Penoscrotal abscess originating from the corpus spongiosum

Korpus spongiosumdan kaynaklanan penoskrotal apse

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To the Editor,

An 89-year-old male patient presented with complaints of scrotal swelling and pain. The patient has a history of coronary artery disease, cerebrovascular events, and hypertension, with no reported history of diabetes or smoking. Upon examination, urethral meatal stenosis and posterior scrotal swelling with a palpable mass were noted. No signs of redness or inflammation were observed. Considering a presumptive diagnosis of a mass, scrotal ultrasonography (USG) was initially requested. However, due to patient non-compliance and procedural limitations, the lesion could not be demonstrated. Subsequently, scrotal magnetic resonance imaging (MRI) was performed for further investigation. The scrotal MRI revealed a multilocular collection originating from the corpus spongiosum, extending to the scrotum and perineum, with a notable increase in vascularity in the surrounding soft tissue. The lesion exhibited peripheral contrast enhancement and central diffusion restriction (Figure 1). The laboratory results revealed a white blood cell count (WBC) of 10,900/mm³ and a C-reactive protein (CRP) level of 86.1 mg/L (Normal range: 0 – 0.5 mg/L). Other blood investigations remained within their normal ranges. The cytobacteriological examination of urine indicated leukocyturia with 52 white blood cells/mm³ and hematuria with 31 red blood cells/mm³. The urine culture was assessed for contamination, and the result was negative. The patient was diagnosed with a penile abscess and was initiated on oral antibiotic treatment with cefixime 400 mg (1x1) for 10 days. Complete regression was achieved with antibiotic therapy, and drainage was

not required. For urethral meatal stenosis, the patient was recommended for meatotomy.

Penile abscess is quite rare and is generally observed in the corpus cavernosum. Patients typically present with complaints of pain and swelling in the penis. Considering all penile abscesses, they can occur spontaneously, but the most common causes are trauma, injection, and widespread infection¹. Corpus spongiosum abscess has been reported in the literature in five cases. Cases of corpus spongiosum abscess have been reported spontaneously without any apparent cause, after uncontrolled diabetes mellitus, and following urethral balloon dilation². Spontaneous penile abscess may be predisposed to conditions such as uncontrolled diabetes mellitus (following immunosuppression) and urethral meatal stenosis (urethral disruption causing extravasation of infected urine). In our case, there was urethral meatal stenosis. Due to the rarity of penile abscess, there is no specific treatment protocol. Drainage of the abscess and targeted antibiotic therapy can be considered the fundamental treatment. If an antibiogram has not been performed, broad-spectrum antibiotics can be selected³.

The established treatment for an abscess is drainage. Following the MRI scan, confirming the diagnosis of an abscess in our case, oral treatment was initiated until hospital admission for the procedure. When the patient arrived for hospital admission, the abscess had rapidly regressed, eliminating the need for drainage. In our case, it regressed without the need for drainage. However, in cases of delayed treatment, life-threatening complications such as Fournier's gangrene can develop. In conclusion, the rarity of

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penile abscess, especially corpus spongiosum abscess, underscores the importance of recognizing predisposing factors and considering them in

diagnosis. The successful resolution with antibiotic therapy highlights the importance of prompt and targeted treatment in urological emergencies.

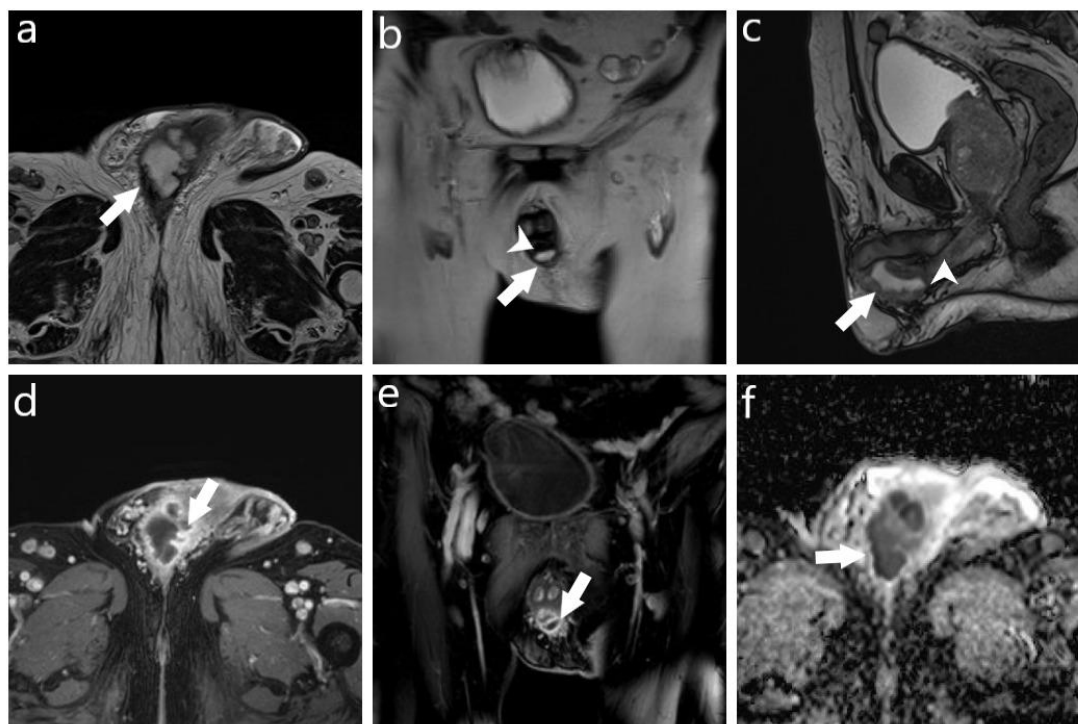


Figure 1: Magnetic resonance imaging (MRI) findings of corpus spongiosum abscess

In the T2-weighted axial (a), coronal (b), and sagittal (c) images, a multilocular collection (arrow) extending from the corpus spongiosum (arrowhead) to the penoscrotal region is observed. Post-contrast T1-weighted axial (d) and coronal (e) images reveal peripheral contrast enhancement (arrow) and a notable increase in vascularity in the adjacent soft tissue. The apparent diffusion coefficient (ADC) map (f) demonstrates a distinct hypointense appearance consistent with the abscess (arrow).

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REFERENCES

1. Garcia C, Winter M, Chalasani V, Dean T. Penile abscess: a case report and review of literature. *Urol Case Rep.* 2014;2:17-9.
2. El Bote H, Lakssir J, Bellouki O, Boughaleb A. Periurethral abscess in corpus spongiosum caused by urinary tract infection: A case report and review of literature. *Urol Case Rep.* 2023;48:102401.
3. Kachare M, Alamgir K, Mane N. Periurethral abscess in corpus spongiosum diagnosed on ultrasonography: a rare case report. *J Med Ultrasound.* 2021;30:135-7.