

When *Cryptococcus neoformans* Hides in Plain Sight: A Case of Pelvic Abscess and Osteomyelitis

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Introduction

Cryptococcus neoformans, a fungal pathogen commonly linked to pulmonary and central nervous system infections in immunocompromised individuals. However, it can occasionally present as osteomyelitis and abscesses, even in those without significant immunosuppression, though such cases are rare.

Case report

A 72-year-old man presented with fever, left groin swelling and pain. His medical history included Type 2 Diabetes Mellitus, chronic venous insufficiency with recurrent lower limb cellulitis, and prostate carcinoma previously treated with surgery and chemoradiotherapy. Months prior, he had received prolonged antibiotics for pyelonephritis and osteomyelitis of the pubis symphysis and left superior pubic ramus. He had no neurological or respiratory symptoms.

Imaging done revealed a rim-enhancing collection in the left proximal gracilis/adductor muscles and chronic, non-healed fractures with erosions in the pubic bones.

Pus drained from the left thigh grew *Proteus mirabilis* and *Morganella morganii*.

A subsequent culture grew *Cryptococcus neoformans* complex after prolonged incubation, and a pubic bone biopsy also confirmed *Cryptococcus* species. Serum cryptococcal antigen was positive at a titre of 1:80.

He was started on a course of oral fluconazole.

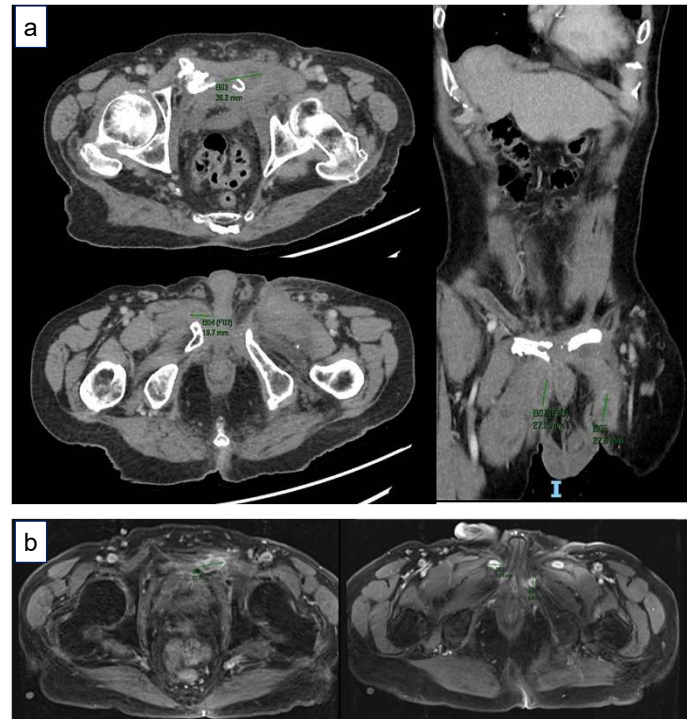


Image a: CT Abdomen Pelvis showed known non-united fractures of the pubic tubercle and bilateral superior pubic rami with small fluid collections surrounding the pubic symphysis.

Image b: MRI Pelvis noted multiple small rim enhancing collection at the left adductor muscle, adductor longus muscle, and bilateral groin regions; as well as fractures of bilateral pubis with mild marrow oedema and enhancement within bilateral superior pubic rami/pubic body fracture site.

Learning points

- This case highlights that *Cryptococcus neoformans* can infect atypical sites, such as bones, mimicking bacterial infections.
- Prolonged culture incubation and targeted biopsy are essential for identifying fungal pathogens in chronic, refractory infections while serum cryptococcal antigen testing is a valuable diagnostic tool, even in the absence of pulmonary and neurological involvement.
- Effective treatment requires a multidisciplinary approach, including anti-fungal therapy and surgical intervention.