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Prostatic abscess picked up incidentally on POCUS as a cause of urosepsis

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CASE PRESENTATION:

An 82-year-old male presented to the emergency department with delirium and abdominal pain. The patient's shock index was >1 with HR of 127/ min (sinus tachycardia) and blood pressure of 117/72 mmHg. His temperature was 34°C.

Abdomen was soft with suprapubic tenderness. It was visibly distended with a palpable bladder.

Blood work showed raised inflammatory markers (Lactate 3, WCC 14.65 X 10X9/l, CRP 211 mg/L). Urea was 12.0 mmol/L with creatinine of 98 umol/L.

Point of care ultrasound (POCUS) revealed –

1. Distended urinary bladder with sediments.
2. Hypoechoic areas within a mass behind the bladder, suggestive of prostatic abscess

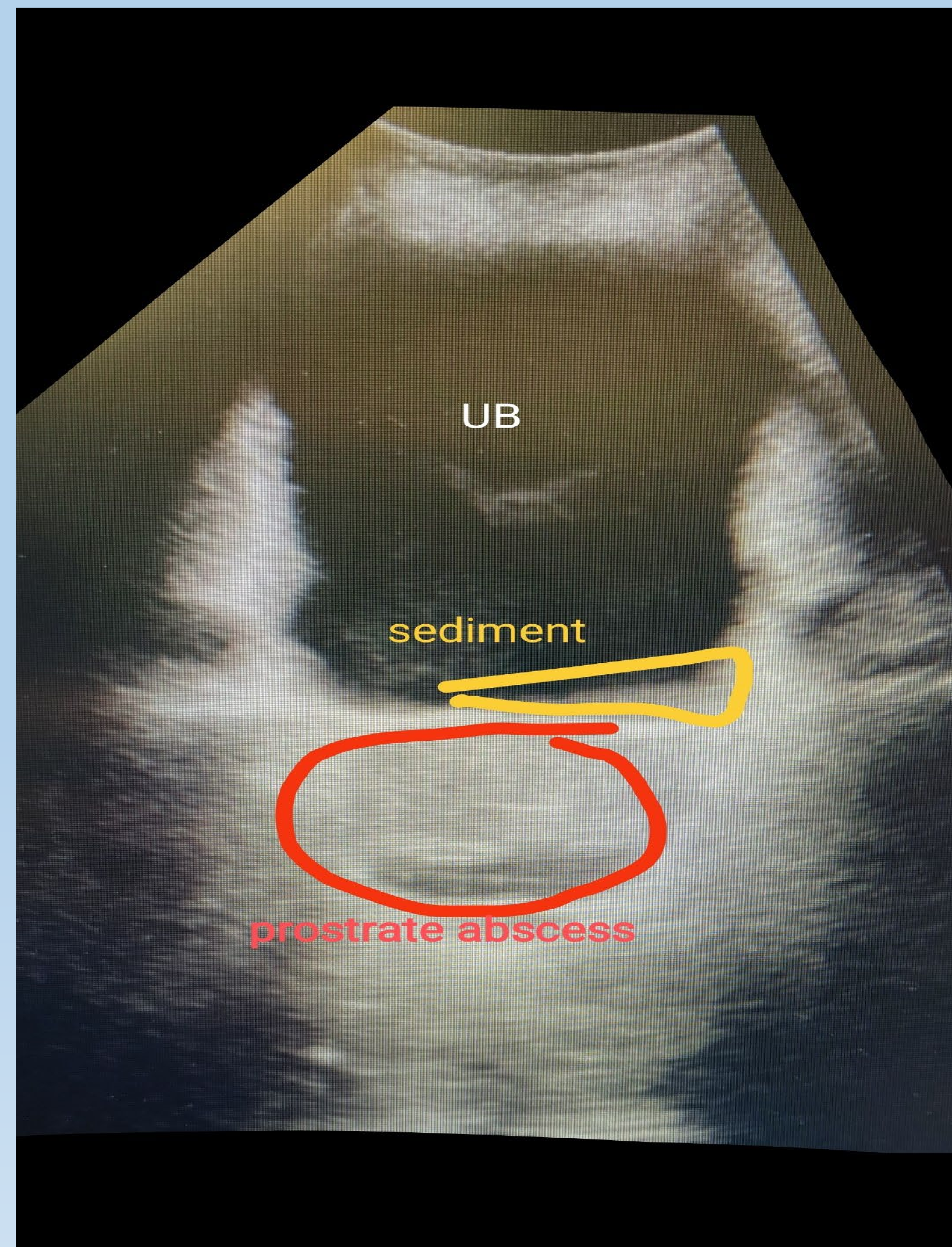
MANAGEMENT AND OUTCOME:

Patient had an emergency CT of abdomen-pelvis which confirmed prostatic abscess.

It was drained under ultrasound guidance and 20 cc of frank pus was aspirated to dryness. E. Coli, resistant to penicillin was grown.

Patient received a 6-week course of ciprofloxacin.

Image showing a distended urinary bladder with sediments/ debris often seen in cystitis with a hypoechoic area within the prostrate gland suggestive of being an abscess.



KEY LEARNING POINT:

Urosepsis is a common presentation in the emergency department, particularly the geriatric population.

Prostatic abscess is a rare cause of urosepsis. Its signs and symptoms are similar to prostatitis. Gram negative infections are the commonest cause; E. coli followed by Proteus. Prostatic abscesses are associated with complications like bacteraemia, emphysematous prostatitis, chronic prostatitis, chronic epididymitis, and metastatic infections (e.g. to the sacroiliac joints).

Although transrectal sonography is a very reliable and the preferred modality to assess prostatic abscesses, it is not readily available in the ED.

Large prostatic abscesses might be seen on POCUS evaluation in the ED, as highlighted in the example above. This helped in the rapid identification of the cause of sepsis, in line with the ethos of *get-it-right-first-time*. It resulted in a fast-tracked decision making on the treatment plan and a tailored antibiotic regimen. The treatment for prostatic abscess is typically drainage and 6 weeks of antibiotics rather than the usual 1-2 weeks of antibiotics [1].

REFERENCE:

(1) PMID: 9490969