



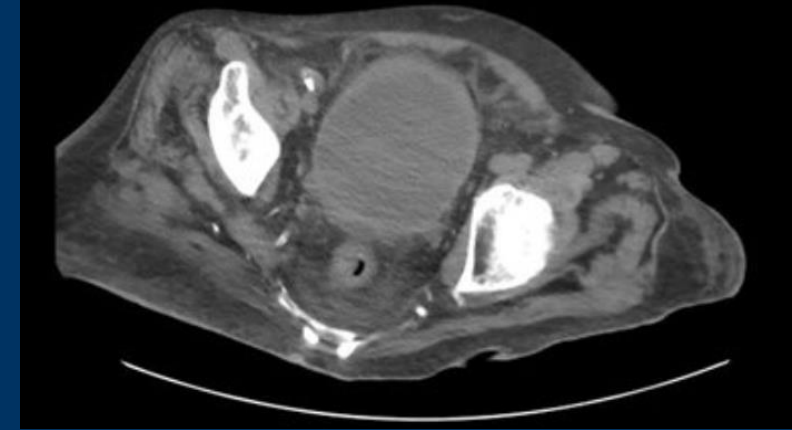
Introduction

- Pyocystis is the accumulation of pus in the bladder which is a form of severe lower urinary tract infections in anuric or oliguric chronic dialysis patient.
- Because of the rarity of entity, pyocystis is not usually included in differential diagnoses of penile discharge.
- It is challenging to diagnose and can lead to serious morbidities such as sepsis and even death.
- We describe a case of pyocystis in a dialysis patient with penile discharge.

Case Presentation

- A 79-year-old Caucasian male with ESRD on hemodialysis and multiple comorbidities originally presented to the hospital with volume overload.
- On hospital day 2, we noticed the patient was having purulent discharge from the urethral meatus

- and left lower quadrant abdominal discomfort.
- Patient denies any sexual activity for the past 3 years.
- Patient was afebrile and his vital signs were normal. Genitourinary exam revealed distended bladder and purulent discharge at the urethral meatus.
- CBC showed elevated white cell count (15000/ μ l). Urine sample was unable to obtain. Penile discharge was sent for genital comprehensive culture including Chlamydia and gonococcus which were negative.
- Ultrasound showed distended bladder with bilateral hydronephrosis.
- CT scan showed significant bladder distention filled with proteinaceous material (see picture).
- Broad-spectrum antibiotics were initiated, and urology was consulted for further guidance. Foley catheter was inserted and subsequently drained 300ml of purulent discharge. Genital culture grew Escherichia coli.
- Patient was successfully treated with aggressive bladder irrigation and antibiotics.



Discussion

- Pyocystis is usually recognized as a complication of urinary diversion procedures, however, it can also occur in patients with chronic dialysis.
- Physician's recognition of pyocystis as a potential complication of the defunctionalized urinary bladder is crucial as it is associated with increased morbidity and mortality.
- The treatment includes urinary catheterization, bladder irrigation, and antibiotics. Recurrent pyocystis can be treated with cystectomy.