



# Bilateral emphysematous pyelonephritis with concurrent emphysematous cystitis: Case report and literature review

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## Introduction-Purpose:

Emphysematous pyelonephritis is a necrotic infection characterized by the production of gas in the renal parenchyma, pelvic floor or perinephric tissue, while emphysematous cystitis is a clinical entity characterized by the presence of gas within the wall of urinary bladder. Interestingly, although both diseases are common in patients with diabetes, they are rarely combined.

**Material-Method:** We report a rare case of a 65-year-old diabetic man who presented to the ED with fever, headache and diffuse abdominal pain for four days. The patient had a normal level of consciousness, BP = 110/75 and 120 heartbeat per minute. Laboratory test showed leukocytosis WBC: 54.8 K /  $\mu$ l with 93.5% neutrophils, HGB: 11.3, HCT: 33.7, CRP: 234 and biochemical test showed procalcitonin: 295.6, LDH: 2300, Ur: 144 and Cr: 7.2. The patient underwent abdominal CT (Figure 1,2,3) which showed the presence of air in the renal parenchyma, pelvic floor, ureters and bladder and was diagnosed with bilateral emphysematous pyelonephritis and emphysematous cystitis. The patient went to the operating room where percutaneous nephrostomies were placed on both sides.



Figure 1.

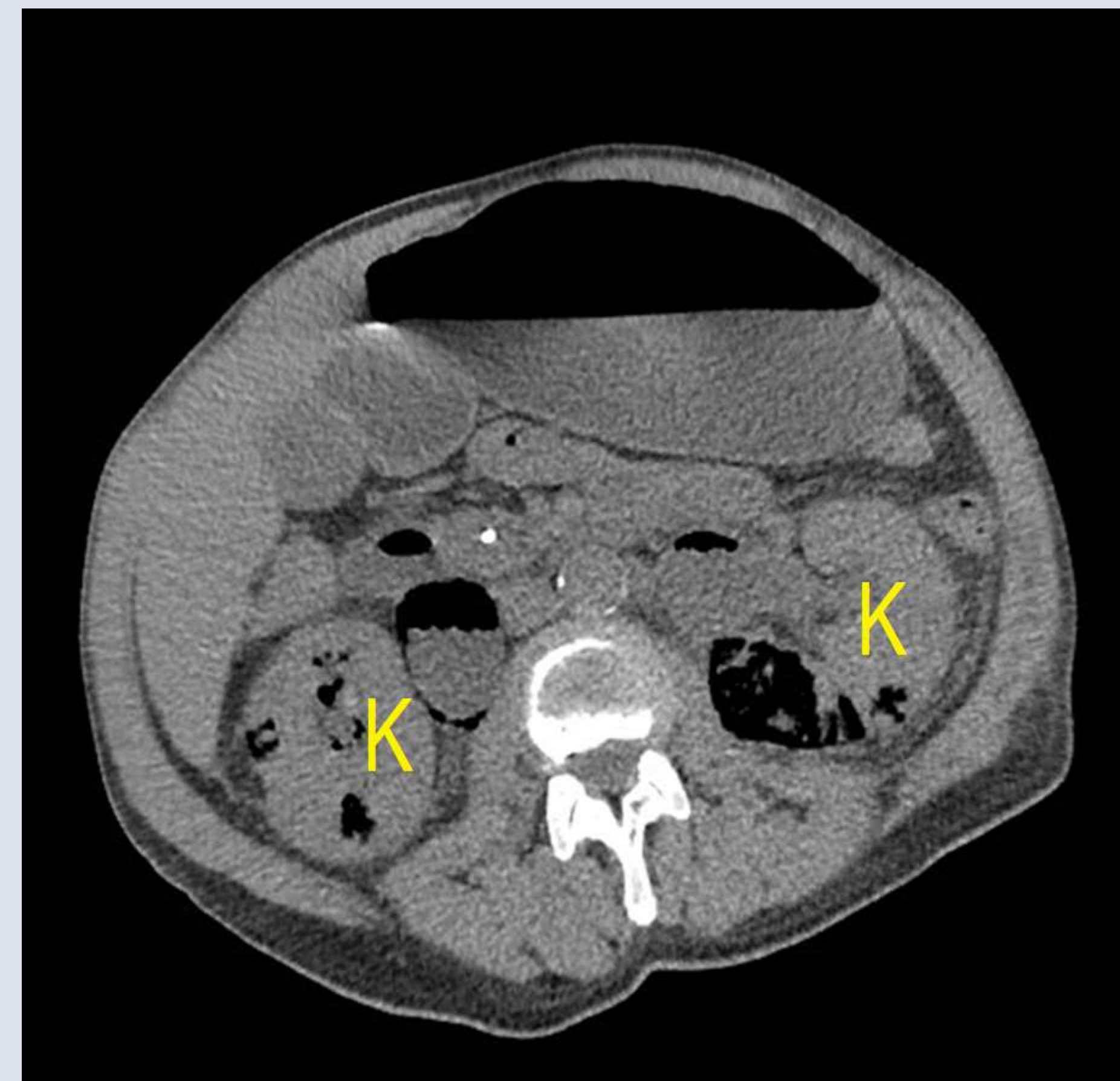


Figure 2.



Figure 3.

K:Kidney B:Bladder

**Result:** The patient on the 2nd day of hospitalization passed away of cardiac arrest due to hemodynamic instability associated with septic shock.

**Conclusion:** The combination of bilateral emphysematous pyelonephritis and emphysematous cystitis is a rare entity. There are few recorded cases in the international literature, so there is a lack of data on how to deal with such cases.

## References:

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