

Case	(153) Emphysematous pyelonephritis. a case report:
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CASE PRESENTATION

We present the case of a 78-year-old female patient who went to the emergency department reporting a clinical picture of several days of evolution with irritative urinary symptoms associated with a progressive deterioration of the general state.

A physical examination shows marked dehydration and drowsiness with poor response to verbal stimuli. Blood analysis highlights glucose in 182, urea in 331, creatinine in 4.05, lactate in 3, pH 7.26, bicarbonate in 15, urinary sodium in 17, 14640 leukocytes, 20,000 platelets, as well as a leukocyturia and microhematuria, with moderate amount of bacterias in urine. The diagnostic judgment in the emergency department was renal failure in the context of a urinary infection.

During admission, several imaging tests were performed, showing a mild left ureterohydronephrosis with emphysematous changes within the renal parenchyma with a 10 mm lithiasis in the pelvic ureter and another one of about 5 mm. The emphysematous changes extended distally to the bladder, as well as in both psoas muscles, the vertebral bodies of L2-L3-L4 and the intervertebral discs of L2-L3, L3-L4, L4-L5, accompanied by mild pneumorrhachis.

These findings described in the referred clinical context suggest an infectious clinical picture complicated with left emphysematous pyelonephritis with secondary extension of the emphysematous process to the spine, vertebral bodies, as well as involvement of both psoas muscles.

DISCUSSION

Emphysematous pyelonephritis is an unusual clinical entity, potentially fatal, that causes an acute necrotizing infection of the renal parenchyma. The diabetic population with poor glycemic control is clearly more prone to this type of pyelonephritis, however, cases of pyelonephritis have been reported in patients with obstruction of the urinary tract in the absence of diabetes.

CONCLUSION

The presence of gas in the spinal canal causing pneumorrhachis is a very unusual finding, which can be observed after trauma to the spine, spinal surgery or, more commonly, as a consequence of a degenerative vacuum phenomenon in the intervertebral disc. Infectious pneumorrhachis is a rare neurological complication of abdominal and retroperitoneal infections, with very few cases found in the literature of emphysematous pyelonephritis after obstruction of the excretory pathway, as we see in our case.

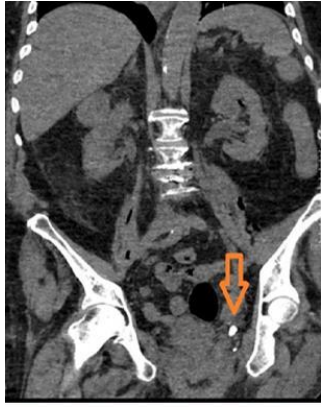


Figure 1. Left emphysematous pyelonephritis with secondary extension of the emphysematous process to the spine, vertebral bodies, as well as involvement of both psoas muscles, due to the presence of pelvic ureteral lithiasis image of approximately 10 mm and 5 mm.



Figure 2. Treatment by attachment a double J catheter in left ureteropelvic junction to bladder.



Figure 3. 3D image showing a double J catheter from the left ureteropelvic junction to bladder with an image of lithiasis in the lower ureteral third.

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