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SURGICAL IMAGES

Pyelo-colic fistula: CT-scan



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KEYWORDS

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Pyelo-digestive fistulas (PDF) are rare occurrences representing only 5% of urodigestive fistulas [1]. PDFs are in most cases of renal origin (lithiasis). The causes of traumatic PDFs have mainly to do with renal interventional techniques (cryoablation, radiofrequency, percutaneous nephrolithotomy). They are located primarily in the left colon and the duodenum. Diagnosis is difficult and delayed due to varied and non-specific clinical presentations [2]. Lower back pain, fever, asthenia and digestive symptomatology are the most frequent symptoms. Abdominopelvic scan with contrast dye, single contrast upper and lower digestive radiography and late images are the tools of choice for positive and etiological diagnosis, providing information on the cause, nature and location of the PDFs. Indirect signs of PDF appear when air in the urinary tract (Fig. 1), is associated with dilatation of the pyelocalyceal cavities (Fig. 2). Pyonephrosis is classically found on standard imagery (Fig. 3). Choice of conservative or radical treatment will be dictated by clinical context, etiology and renal function [3]. A tumor, a destroyed kidney or immunosuppression will render radical treatment unavoidable. On the contrary, a traumatic cause with a functioning kidney will render conservative treatment advisable. Radical treatment associates nephrectomy and suture and/or bowel resection. Conservative treatment includes urinary drainage, antibiotherapy and rest of the digestive tract. In the case of the 57-year-old patient undergoing immunosuppressive treatment (renal transplantation) whose iconography and resection specimen are presented here, anatomo-pathological analysis showed chronic ascending pyelonephritis with evolved abscess, and it was destroying close to the entire kidney (Fig. 4).

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Figure 1. Coronal slice of the left ureter with thickening of the urethral wall and presence of air in the urethral lumen.



Figure 3. Sagittal slice of the left kidney. Pyelocalyceal dilatation. Thickened bladder wall lining. Air-liquid interface.



Figure 2. Coronal slice of the left kidney with pyelocalyceal dilatation and presence of air in the urinary cavities. Calcified atrophic right kidney. Kidney graft in right iliac fossa.

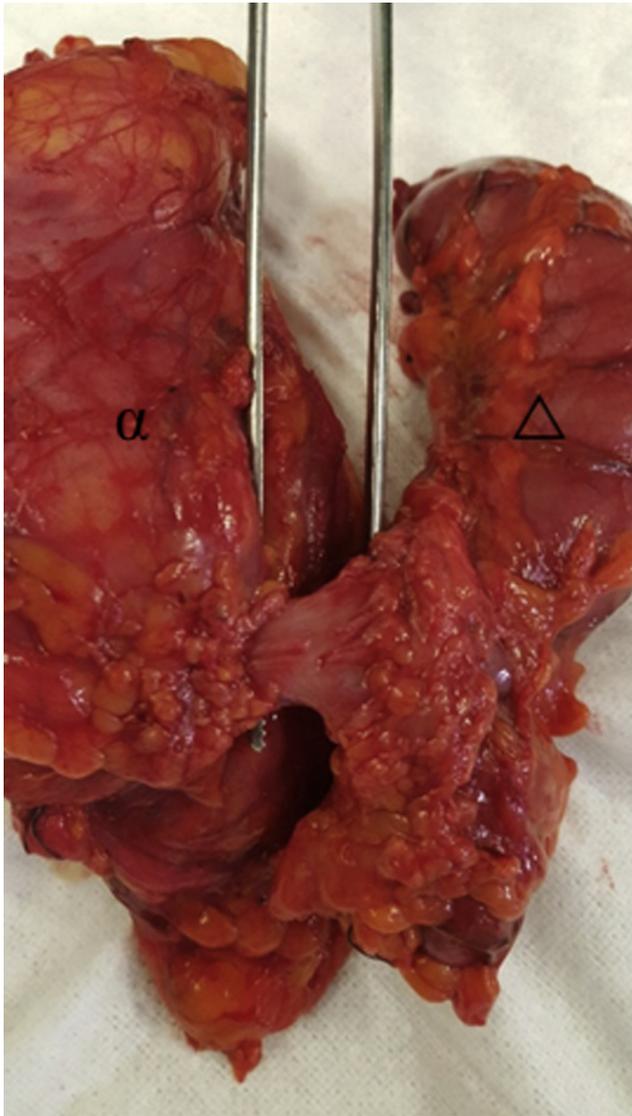


Figure 4. Monoblock surgical resection: native left kidney (α) with fistula tract facing the left colon (Δ).

Disclosure of interest

The authors declare that they have no competing interest.

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