A Rare Case of Reno-Colic Fistula Revealed by Pneumaturia

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Reno-colic fistula is very rare, representing 5.1% of uro-digestive fistulas[1]. Causes can include infection, stone disease, malignancy, or trauma to the kidney or the colon. Pyelo-colic fistulas are in most cases of renal origin (lithiasis)[2]. Traumatic causes are other major groups reported mainly related to renal interventional techniques (cryoablation, radiofrequency, percutaneous nephrolithotomy). Infectious causes are rarer (tuberculosis, refractory infection of renal cysts)[3,4].

The general, digestive, or urinary clinical manifestations are often variable and non-specific, making the diagnosis difficult[5]. The research of fecaluria and/or pneumaturia helps to direct toward the diagnosis of uro-digestive fistula.

Abdominal-pelvic CT scan with contrast, upper and lower digestive radiography, or ureteropyelography retrograde and/or percutaneous descending pyelography often confirms the diagnosis by showing the passage of urinary contrast medium to the digestive tract or vice versa, thus providing information on the cause, nature, and location of the uro-digestive fistula.

FIGURE 1.

Cross section of the left kidney
Pyelocalycial dilation

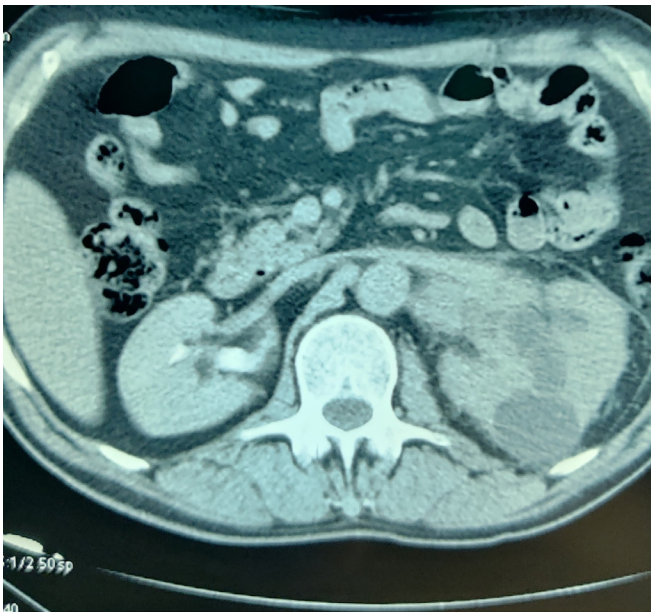
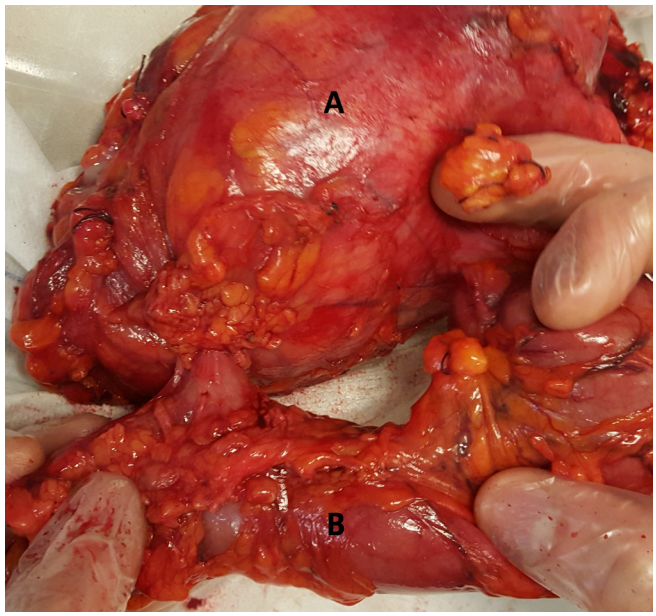


FIGURE 2.

One-piece resection: native left kidney (A) with fistula tract facing the left colon (B)



Key Words

Reno-colic fistula, pneumaturia, chronic pyelonephretic kidney

Competing Interests

None declared.

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The choice of conservative or radical treatment essentially depends on the etiology and renal clearance. The radical treatment is nephrectomy with the closure of the privileged digestive fistula if the kidney is destroyed or a tumor etiology makes radical treatment unavoidable. Conservative treatment, if the fistula is post-traumatic with functional kidney, includes urinary drainage, antibiotic therapy, and rest of the digestive tract.

Our 65-year-old patient reported repeated renal colic, with air emission during urination, and presented with a pyelo-colic fistula (**Figures 1 and 2**). Radical treatment was carried out. The anatomo-pathological analysis showed a chronic pyelonephretic kidney abscessed. with a destroyed kidney.

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