

# Chronic Diarrhea as the Only Symptom in a Patient With Duodenal-Colo-Renal Primary Fistula

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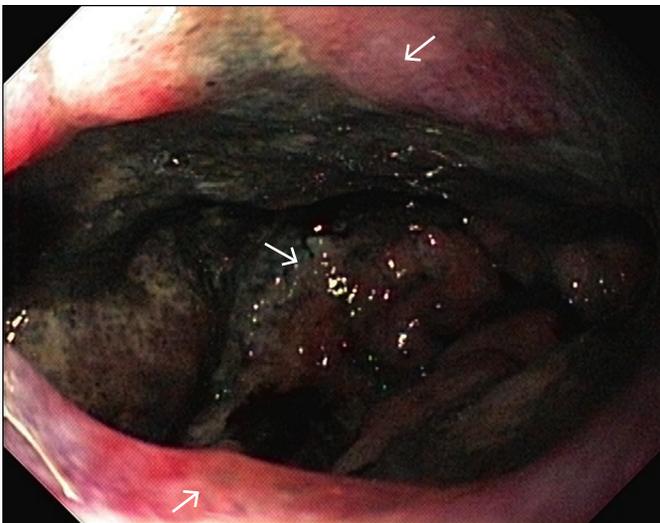
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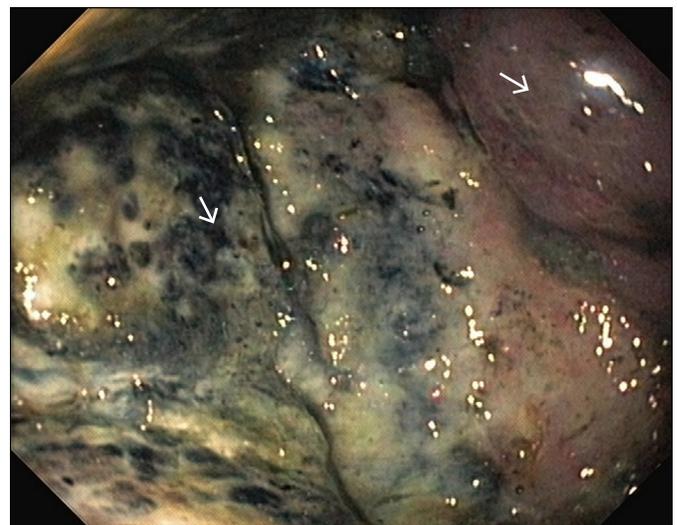
## CASE REPORT

A 91-year-old woman presented to our center complaining of nonbloody diarrhea for 6 months and an associated 10-kg weight loss. Her initial lab results suggested hypochromic microcytic anemia. Upper endoscopy showed a fistula between the second portion of duodenum and the right colon (Figure 1). Through the fistula tract, a solid viscera with a nodular mucosa was visible in the lumen of the right colon (Figure 2). Abdominal computed tomography revealed a mass between the right colon, the second portion of duodenum, and the right kidney; this allowed the passage of oral contrast between these structures, confirming that the solid viscera seen on endoscopy was in fact the right kidney (Figure 3). Histology of the biopsied viscera confirmed a poorly differentiated renal carcinoma. Given the stage of her disease, age, and comorbidities, the patient was referred for palliative management; 2 months later, the patient died.

Duodenocolic fistulas are classified into primary and secondary groups; primary fistulas can be due to infectious etiology, Crohn's disease, peptic ulcer disease, or active malignancies without any prior surgeries.<sup>1,2</sup> Secondary fistulas can develop as a complication after a major gastrointestinal surgery. Colorenal and duodenal-renal fistulas, however, are uncommon. These occur primarily in patients who have undergone procedures such as percutaneous nephrolithotomy or cryoablation for renal



**Figure 1.** Upper endoscopy showing the duodenocolonic fistulae.



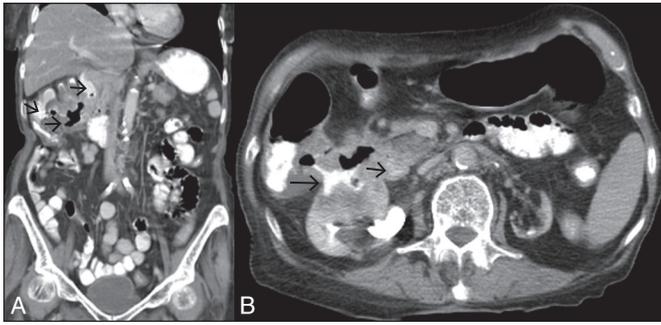
**Figure 2.** Upper endoscopy suggestive of solid endoluminal viscera in the lumen of the right colon.

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**Figure 3.** (A) Coronal and (B) axial computed tomography of the duodeno-colo-renal fistulae.

cell carcinoma; less frequently, they occur with chronic kidney infection or tuberculosis.<sup>3</sup>

The only previously reported case of a secondary duodeno-colo-renal fistula was described in Taiwan, in a patient with renal squamous cell carcinoma in association with nephrolithiasis who underwent nephrolithotomy.<sup>3</sup> Ours is the first case of a primary duodeno-colo-renal fistula originating from an advanced renal tumor.

Fistula management is guided by the patient's disease stage, nutritional status, and comorbidities. In a localized disease, management options range from nephrectomy, right hemicolectomy with a pancreaticoduodenectomy, or segmental duodenectomy. In more advanced cases, an extensive bowel

resection or palliative options like tube jejunostomy/loop ileostomy can be offered.<sup>1-5</sup> Palliative management was offered for our patient due to her age, comorbidities, and the advanced state of her disease.

## DISCLOSURES

Author contributions: V. Parra and JP Aponte wrote the manuscript. MH Quintero, S. Garcia, and LC Sabbagh provided the images. JP Aponte is the article guarantor.

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Informed consent was obtained for this case report.

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