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Duodenojejunal invagination caused by small bowel metastasis of renal cell carcinoma

Renal hücreli karsinomun ince barsak metastazının neden olduğu duodeno-jejunal invajinasyon

To the Editor,

A 69-year-old male patient was admitted to the hospital complaining of bloody vomiting. He had been using CoumadinTM for 16 years because of mitral valve replacement. He had a history of renal cell carcinoma (RCC) in the right kidney and had undergone a right nephrectomy six years previously. The tumor was clear cell type and had invaded the renal fascia. Abdominal and thoracic computed tomography (CT) scan revealed gastric dilatation, duodenojejunal invagination (Figure 1A) and two nodules in the right lung. Endoscopic examination revealed a firm mass located at the duodenojejunal junction, which was partially obstructing the intestinal lumen. Multiple biopsies were taken from the mass, and the case was diagnosed as malignant tumor infiltration.

In exploratory laparotomy, the tumor was detected 20 cm distal of the Treitz ligament in the duodenojejunal junction. The lumen was partially obstructed by the mass and the following 30-cm intestinal segment was invaginated. The tumor was resected as segmental small bowel resection. On macroscopic examination, a single polypoid nodule protruding into the lumen was found in the wall of the small bowel (Figure 1B). Histopathologic examination revealed neoplastic cells with fine cytoplasmic membrane, clear cytoplasm and centrally localized nuclei in a nodular growth pattern (Figure 1C), showing immunohistochemical positivity for pancytokeratin, CD10 (Figure 1D) and vimentin. The case was diagnosed as "small bowel metastasis of RCC" with these findings.

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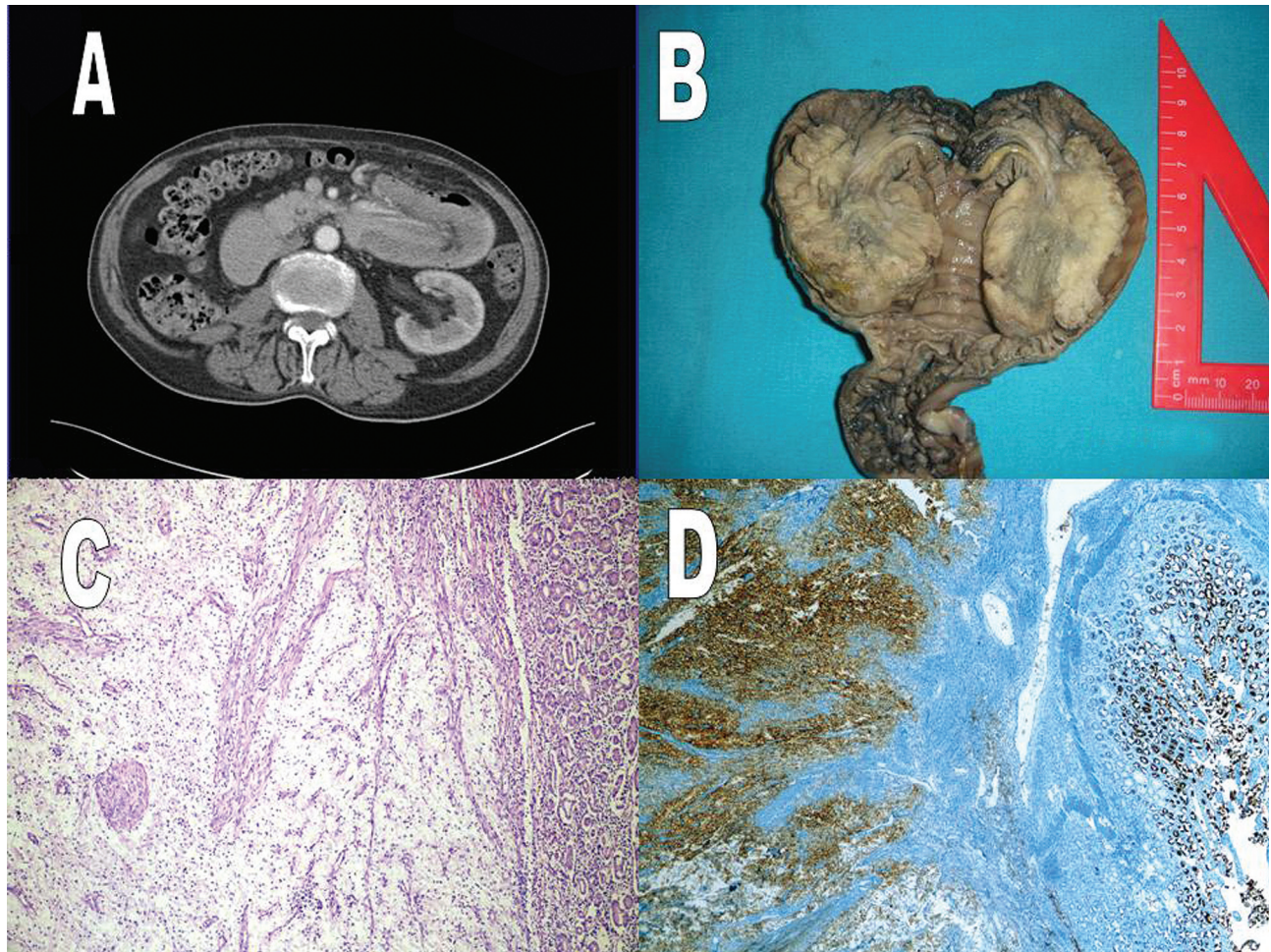


Figure 1. Abdominal CT scan showing duodenojejunal invagination (**A**). Operative specimen showing the presence of intraluminal polypoid mass (**B**). Histopathologic examination showing the presence of metastatic cells in the intestinal wall (**C**, hematoxylin & eosin [H&E] x40). Immunohistochemical CD10 expression in metastatic RCC cells (**D**, x40).

Renal cell carcinoma (RCC) is a neoplasm that frequently metastasizes to distant organs such as lungs, bones, liver, and lymph nodes (1). Approximately one-third of patients with RCC have metastases at the time of the initial diagnosis (2), and 30-50% of patients develop metastases during the course of the disease (3). However, small bowel metastasis is very rare, with only a few reported cases in the literature (2). The most common clinical presentation of intestinal metastases of RCC is intestinal bleeding and intestinal obstruction, as occurred in our case (2). The other symptoms of metastatic small bowel tumors are abdominal pain, nausea, weight loss and melena (1,4).

The hematogenous pathway through the pulmonary circulation is considered to play a critical role in the cascade of multistep metastases from the kidney to the small bowel (5), and most patients with small bowel metastasis from RCC had lung

metastasis (1). In our case, thoracic CT scan revealed two nodular lesions in the right lung but they were not verified as RCC metastases by biopsy. Metastatic lesions in the small bowel usually tend to be multiple at the time of diagnosis and polypoid masses are unusual (6). Our patient presented as a single polypoid mass in the intestinal wall.

Diagnosis in most of the reported cases has been made by barium studies of the small bowel (7). However, in our case, the metastatic lesion was first demonstrated on endoscopy. In addition, abdominal CT scan demonstrated duodenojejunal invagination, which is a very rare condition. Biological behavior of RCC is characteristically variable, and the clinical course of the disease can range from months to decades. Duodenojejunal invagination from metastatic RCC is a rare condition, but should be considered in a patient with a history of

RCC who presents with intestinal bleeding and obstruction. Endoscopy and abdominal CT scan

can add useful information about the diagnosis in such cases.

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An unusual localization of trichobezoar in the appendix

Alışılmadık bir yerleşim; appendikste trikobezoar

To the Editor,

A 50-year-old female presented to the emergency department with an acute abdominal pain that had initially started 12 hours earlier from the periumbilical region and localized to the right lower quadrant 4 hours later. She had accompanying symptoms of low-grade fever, nausea, vomiting, dysuria, and frequency. Physical examination revealed appendicitis regarding rebound tenderness in the right lower quadrant; a rectal exam was also performed and was normal. Routine laboratory studies disclosed leukocytosis with shifting to the left. According to the clinical and laboratory findings, an open appendectomy was performed 2 hours later. The appendix was clearly congested, and a mass of hair found in the appendix was determined to be the cause of the obstruction (Figure 1).



Figure 1. Gross appearance of the appendix with intraluminal hair shafts.

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