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The Spanish Journal of Gastroenterology

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DOI: 10.17235/reed.2020.6706/2019
Link: PubMed (Epub ahead of print)

Please cite this article as:
Díaz Alcázar María del Mar, Ruiz Escolano Elena, Casado Caballero Francisco Javier, Cervilla Sáez de Tejada Eloísa. Invasive aspergillosis of gastrointestinal debut without apparent respiratory involvement in an immunocompetent host. Rev Esp Enferm Dig 2020. doi: 10.17235/reed.2020.6706/2019.

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CC 6706 inglés

Invasive aspergillosis of gastrointestinal debut without apparent respiratory involvement in an immunocompetent host

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Keywords: *Aspergillus fumigatus.* Invasive aspergillosis. Gastrointestinal aspergillosis.

Dear Editor,

A 72-year-old female with celiac disease presented with abdominal pain and constipation. Abdominal ultrasound showed intestinal dilation, which was suggestive of obstruction, with possible colorectal cancer. The colonoscopy was normal. Abdominal computed tomography (CT) showed two areas of thickening and stenosis in the proximal jejunum and preterminal ileum, which was confirmed with enteric magnetic resonance. Enteroscopy showed duodenal mucosa with few villi and an ulcerated stenosis in first jejunal loop, which did not allow the endoscope to pass through. Histology showed mucosa without villous atrophy but intraepithelial lymphocytosis, granulation tissue and aggregates of bacteria and hyphae. A biopsy of the adenopathic conglomerates comprising the jejunum showed similar histological findings. The microbiological study was negative.

Exploratory laparotomy was proposed, but the patient had a sudden and progressive decrease in consciousness. Cranial CT showed ischemic area and a midline shift. Cranial magnetic resonance was not able to characterize the lesion. A brain biopsy suggested an infection by *Aspergillus fumigatus.* Despite antifungal drugs, the patient presented

a progressive clinical deterioration and died. The autopsy concluded a systemic fungal infection by *Aspergillus fumigatus* with pulmonary, cerebral and intestinal involvement.

Discussion

Invasive aspergillosis is a serious fungal infection and usually occurs in immunocompromised patients. *Aspergillus* is ubiquitous in nature and its inhalation is common without causing disease (1). Risk factors for aspergillosis are prolonged neutropenia and immunosuppressive treatment (1), which was not present in this patient.

Aspergillosis mainly affects the lungs, followed by the gastrointestinal tract (1). The most frequent location in gastrointestinal involvement is the small bowel (2). Gastrointestinal involvement is unspecific, with abdominal pain, gastrointestinal bleeding and signs of intestinal obstruction, among others (1-3); 47% of patients who develop invasive disease have gastrointestinal manifestations (3). Gastrointestinal involvement is more frequent in invasive disease. However, there are case reports of isolated gastrointestinal aspergillosis, even in immunocompetent patients without risk factors (4). The prognosis is poor (1).

The diagnosis is a challenge due to the symptoms, the imaging findings are also nonspecific and the diagnosis is usually histological and post mortem (2-4). The gold standard for treatment is voriconazole (2,5).

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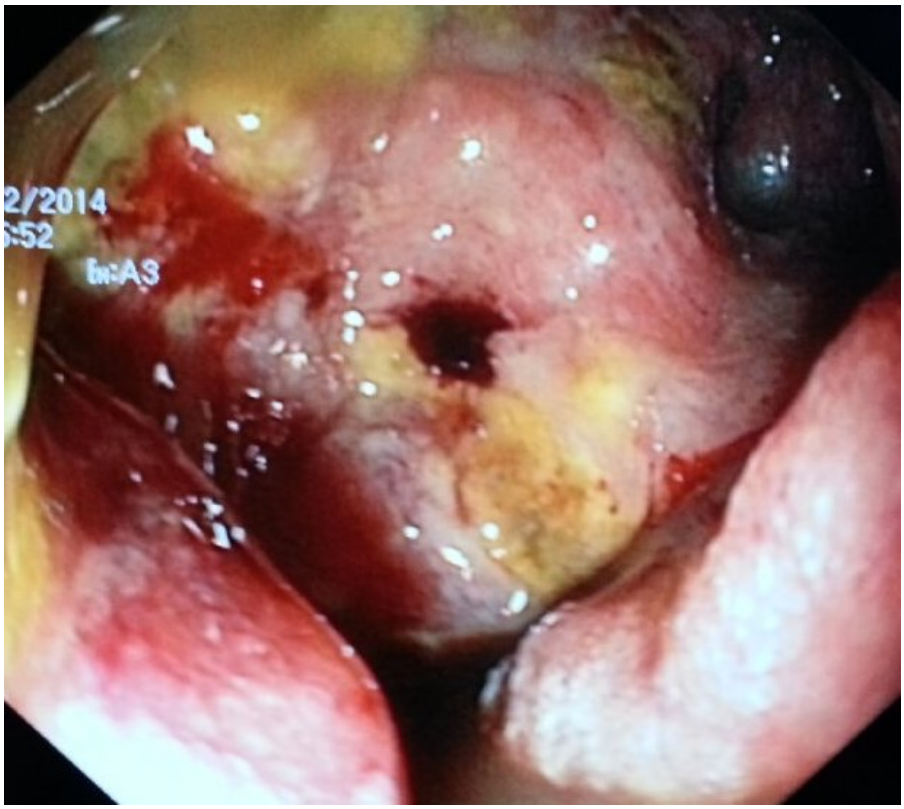

Fig. 1. Image of the first jejunal loop during enteroscopy. An ulcerated stenosis is shown that does not allow the endoscope to pass through.