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Abdominal tuberculosis as a cause of intestinal obstruction. A case report.

Esperanza Sánchez Castrejón M.D.
Arianne I. Lupián Angulo M.D.
José Antonio Velasco Cabrera M.D.
Ludwigvan Adriano Bustamante Silva M.D.
Lidia Mendoza Andrade M.D.
Sergio Sandoval Tapia M.D.
Cuauhtémoc Aguilar Barragan M.D.

Case Report

General Surgery

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BACKGROUND: We present a 45-year-old male patient with a history of Stage C3 AIDS that was evaluated because of abdominal pain accompanied by fever, nausea, vomiting, and obstipation. Intestinal occlusion was diagnosed and confirmed by contrast abdominal CT, an exploratory laparotomy was performed with right hemicolectomy, omentectomy and ileotransverse mechanical lateral anastomosis with the findings of intraluminal and parietal lesions in the cecum, ascending colon and ileocecal valve, which had the wall with necrotic patches, without tone and retrograde loop dilation. Histopathological report was a caseating chronic granulomatous inflammation of the intestine, peritoneum and lymph ganglia and Ziehl-Neelsen (ZN) staining positive. This patient was diagnosed with peritoneal, intestinal and lymph ganglia tuberculosis. He started antituberculous therapy with rifampicin / isoniazid / pyrazinamide / ethambutol and continued with antiretroviral therapy efavirenz / emtricitabine / tenofovir. He was discharged on the seventh postoperative day without complications. Currently, in follow-up for infectology and preventive medicine.

KEY WORDS: Abdominal tuberculosis, intestinal obstruction.

Introduction

Tuberculosis (TB) is a public health problem worldwide, with an incidence of 10 million cases per year and mortality of up to 6%. Abdominal TB occurs in four forms: visceral, peritoneal, intestinal, and lymphadenopathy, with nonspecific symptoms such as distention, pain, abdominal tumor, weight loss, and fever. [1,2]

Abdominal contrast computed tomography (CT) is the modality of choice to evaluate the extent and type of affection. Most patients respond to treatment with standard TB drugs, with a good prognosis if they are diagnosed and treated promptly.[2]

Acute complications occur in 20-40% of cases, surgical treatment is reserved in case of intestinal perforation, abscesses, massive hemorrhage and intestinal obstruction. As it is a systemic disease, surgical resection should be conservative. In case of emergency laparotomy, derivative surgeries, intestinal resections with primary anastomoses or stenosis plasties may be considered. [1-3]

Case report

A 45-year-old male patient with a history of Stage C3 AIDS (CD4 15 cells / µl, viral load 353 970 copies / ml), grade II obesity, positive alcoholism, cocaine and marijuana use.

Onset 5 days prior to hospital admission with generalized abdominal pain intensity 10/10 on the Visual Analogue Scale, associated with fever, nausea and gastrobile vomiting at a rate of 3-5 vomits per day, obstipation and absence of gas channeling, without improvement with medical management in 72 hours.

On the physical examination dehydrated mucosas, nasogastric tube with intestinal content, cardiopulmonary with tachycardia, abdomen with distention, hyperactive peristalsis with metallic noises, tympanic on percussion, on palpation soft, depressible, with generalized pain, positive Von Blumberg.

Laboratories showed: Leukocytes 8.03 x 10 3 / µl, neutrophils 6.76 x 10 3 / µl, hemoglobin 12.1 g / dl, platelets 361 x 10 3 / µl, creatinine 1.18 mg / dl, potassium 5 mEq / L, INR 1.22, blood gas: PH 7.30, pCO2 24 mmHg, pO2 85 mmHg, HCO3- 12 mmol / L, EB -8 mmol / L, lactate 3 mmol / L.

Contrast abdominal CT showed an irregular wall thickening of the ileocecal and cecum valve, retrograde dilation of the colon, and small intestine loops of up to 5 centimeters. Increased density of nodular mesenteric fat and reactive ganglia in right aortic and colic chains (Figures 1 A-B).

Patient with intestinal obstruction without improvement in 72 hours with medical management. Surgical management was offered and he consented. An exploratory laparotomy was performed with right hemicolectomy, omentectomy and ileotransverse mechanical lateral anastomosis with the findings of intraluminal and parietal lesions in the cecum, ascending colon and ileocecal valve, which had the

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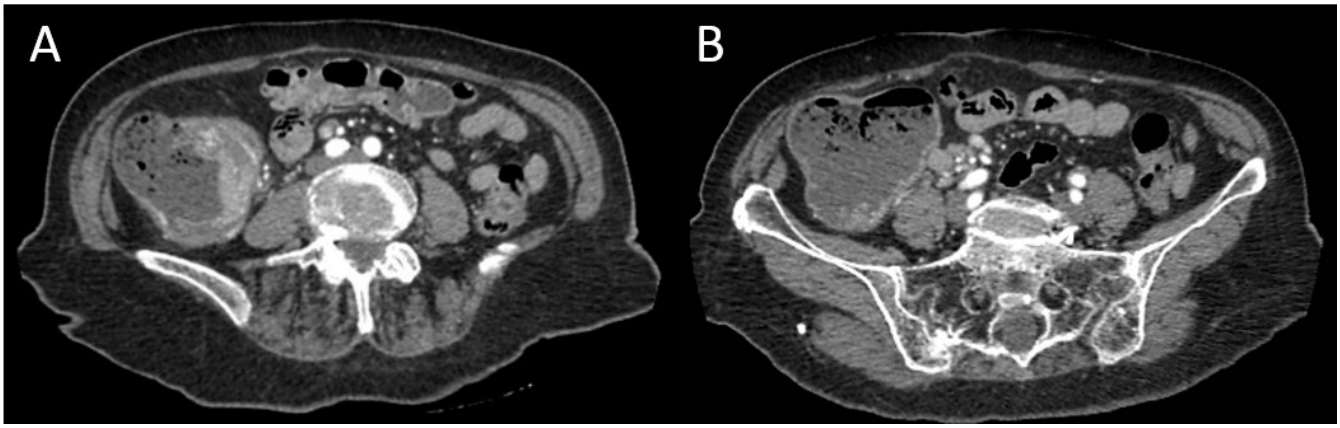

Figure 1. CT scan: (A) Irregular wall thickening of the cecum and retrograde dilation of the loops. (B) Reactive ganglia para-aortic and right colics.

wall with necrotic patches, without tone and retrograde loop dilation (Figure 2).

Histopathological examination exhibited caseating chronic granulomatous inflammation of the intestine, peritoneum, and lymph nodes and Ziehl-Neelsen (ZN) staining: Positive (Figures 3 A-D).

The patient was diagnosed with peritoneal, intestinal and lymph ganglia tuberculosis. He started antituberculous therapy with rifampicin / isoniazid / pyrazinamide / ethambutol and continued with antiretroviral therapy efavirenz / emtricitabine / tenofovir. Oral feeding was started 24 hours after the surgical event showing adequate tolerance, as well as evacuations at 48 hours, he was discharged on the seventh postoperative day without complications. Currently, in follow-up for infectology and preventive medicine.

Figure 2. Cecum wall with necrotic patches, without tone and retrograde loop dilation.

Abdominal TB is an entity with nonspecific clinical and radiological signs, which is why it is necessary to have a high index of suspicion in patients with risk factors and atypical clinical behavior. Late diagnosis and reckless treatment increase mortality by up to 12%. Currently, laparoscopy is the gold standard for taking a diagnostic biopsy, however, explored laparotomy is performed in the event of acute complications, as in the case of our patient who presented abdominal occlusion without response to medical management. Antituberculous treatment should be continued until the post-surgical treatment scheme is completed.

Conclusion

Abdominal TB is considered a challenge for the surgeon, it is the great simulator, it can imitate malignancy, bacterial infectious disease and intestinal inflammatory diseases, causing a delay in diagnosis and treatment and therefore an increase in mortality.

Patients generally respond to medical treatment, surgical management is reserved for acute complications. A consensus of international experts is necessary to recommend an algorithm for multidisciplinary diagnosis and management.

Conflicts of interests

There was no conflict of interest during the study, and it was not funded by any organization.

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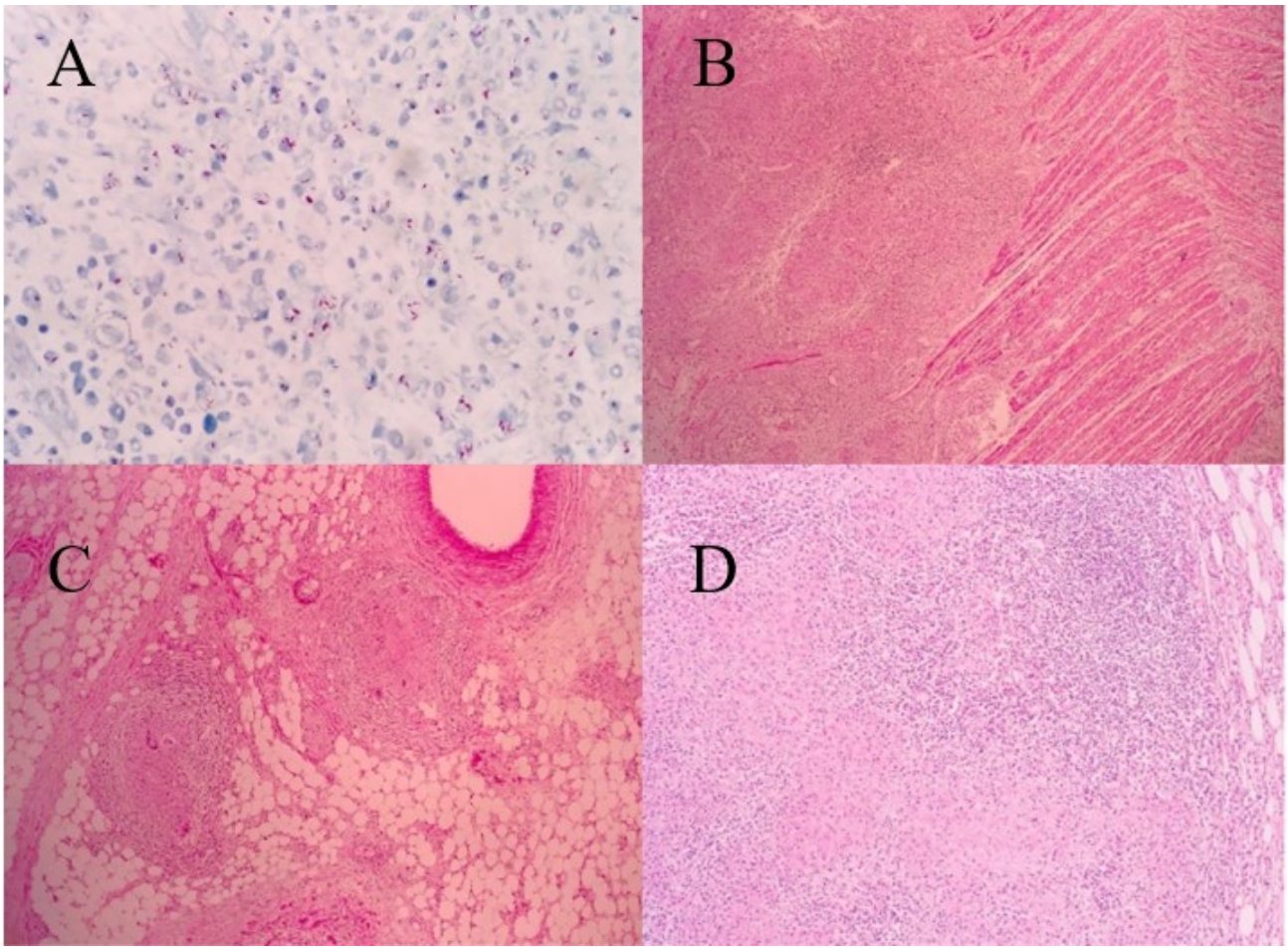

Figure 3. Ziehl-Neelsen (ZN) staining: Positive (A). Histopathology: caseating chronic granulomatous inflammation of the intestine (B), peritoneum (C), and lymph ganglia (D).

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Esperanza Sánchez Castrejón
Department of General Surgery
North Central Hospital PEMEX
Mexico City, Mexico
e.scastrejon14@gmail.com

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