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Letter to the Editor

DIAGNOSIS AND TREATMENT OF NON–NEUTROPENIC PATIENT WITH TYPHLITIS: CASE REPORT

Diagnóstico e tratamento de paciente não–neutropênico com tiflite: relato de caso

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INTRODUCTION

Typhlitis is a term that originally came to denote inflammation of the cecum, which initially applied to children who had complications with the use of chemotherapy in acute leukemia. Characteristic findings are transmural inflammation of the intestinal wall, mucosal damage and bacterial translocation, and proliferation of gram-negative and anaerobic bacteria[7,10,13]. Although the term suggests involvement restricted to the cecum, at the time of diagnosis there is involvement of the appendix and the ileum in most cases.

Currently, the incidence varies from 0.8 to 26%[1,3,10], estimated at 5.3% of adult patients hospitalized for treatment of hematologic or solid malignancies, and patients with bone marrow aplasia 10.Mortality is approximately 50% on average, reaching 100%[5,15] because most patients are immunosuppressed.

Although initially only occur in neutropenic patients, there is a report in the literature of a patient without any of the conditions referred that showed classic typhlitis, with fever, pain in right lower abdomen and computed tomography showed thickening of the cecum. Was treated with quinolones and metronidazole, getting good response[1].

The differential diagnosis of typhlitis is based on the causes of acute abdominal inflammation, such as acute appendicitis, acute cholecystitis, infectious colitis, liver abscess, complicated diverticulitis, pancreatitis and intestinal volvulus [13].

CASE REPORT

Man aged 47 was admitted to the emergency room due to abdominal pain for four days, starting on mesogastrium, worsening and radiating to the right iliac fossa two days ago. Had experienced episodes of nausea without vomiting. Drink alcoholic beverages sporadically, smoked about 30 cigarettes a day for 32 years and had no previous operations.

Physical examination showed a slight impairment of general condition and signs of peritoneal irritation in the right iliac fossa.

With the hypothesis of acute inflammatory abdomen was requested WBC, confirming the hypothesis, revealing an absolute leukocytosis with a total of 17,800 cells, with neutrophilia on about 84%.

The patient underwent exploratory laparotomy, with diagnosis of acute appendicitis. With a McBurney incision was found a right iliac fossa blockage with appendix attached to it, red and swollen at its apex, and suppuration with approximately 20 ml volume in retro-cecal region.

Appendectomy was performed with suture of the base of the cecum, cleaning the abdominal cavity with gauze, and counter-incision drainage with chest tube. Since this operation was infected antibiotics ciprofloxacin and metronidazole were done.

The patient improved clinically in the immediate postoperative period, receiving light diet. Remained in hospital for two days, when he had his drain removed and was discharged on the second day after surgery, with advice to maintain antimicrobial therapy for five days.

In the follow-up he returned on the 7th. postoperatively day with no significant complaints or changes in general condition. Examination of the appendix showed acute congestive edematous appendicitis.

On the 20th day after surgery, he returned complaining of abdominal pain located in right iliac fossa, with normal gas/stools and fever (38.5ºC).

Physical examination showed poor general condition and diffuse pain in abdominal examination with peritoneum and signs of peritoneal irritation. With the hypothesis of intra-abdominal abscess, hospitalized with laboratory and imaging tests being done. The absolute leukocyte count showed leukocytosis with 26,000 cells with left shift neutrophilia. Rx-rays of the abdomen revealed distention of small bowel. Abdominal ultrasonography showed the presence of free liquid in the abdominal cavity. The patient underwent computed tomography of abdomen with large wall thickening of the cecum and ascending colon and evident lymph nodes in the right iliac fossa and free liquid in the cavity (Figure 1).

FIGURE 1 - Cecum thickening on CT

With the suspicion of pericolonic postoperative abscess exploratory laparotomy was indicated. Intraoperatively it was noted: a) sero-hematic collection of approximately 100 ml free in the abdominal cavity; b) important thickening of right mesocolon; c) small collection of pus in right retro-colic region. Was done washing of the peritoneal cavity, biopsy of the right mesocolon and drainage of the entire region. Were introduced empirically metronidazole and ceftriaxone.

The patient had drainage around 100 ml per day, but was febrile, with increased leukocytosis. Anaysis for acquired immunodeficiency syndrome, hepatitis and tuberculosis were requested, and all negative.

At 5th postoperatively day appeared enteric drainage; abdominal CT was performedof (Figure 2), showing large heterogeneous formation in the right iliac fossa, compatible with abscess of the right colon. On 8th. day after surgery abdominal distension and signs of peritoneal irritation indicated another laparotomy. Intraoperative perforation was observed in the right colon near the cecum and ischemia signs on ileal loops, cecum, right colon up to hepatic flexure points with necrosis and thickening of the walls. A resection of the right colon, transverse colon and proximal 180 cm of terminal ileum with ileo-transverse was the procedure done.

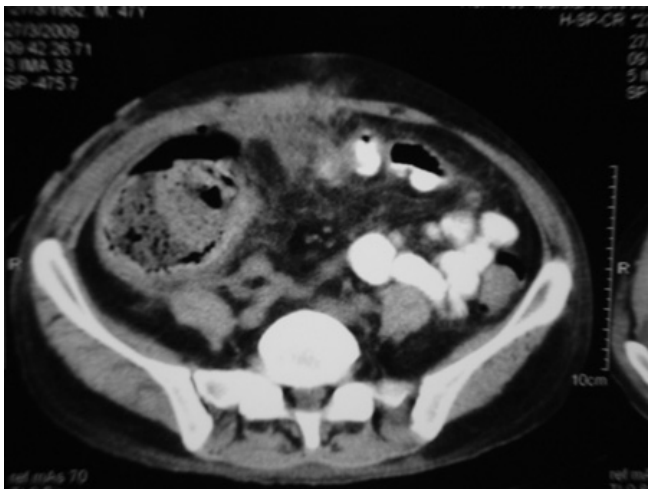

FIGURE 2 - Cecum heterogeneous mass on CT

The patient improved slightly, but presented dehiscence of the abdominal wall on the 7th day with evisceration and submitted to re-suture. The patient was discharged on 21th day of postoperative abdominal of last operation, totaling 49 days in hospital. The results of anatomopathology examination were right mesocolon with chronic and acute inflammatory process and steatonecrosis. The pathology of small bowel and right hemicolectomy revealed purulent areas, micro-bleeding, swollen and congested mucous membranes, compatible with acute ulcerative typhlitis.

DISCUSSION

Typhlitis is described exclusively in neutropenic patients undergoing chemotherapy for hematological malignancies or solid tumors, multiple causes of immunosuppressed or transplant. Few articles that present[1] in non-neutropenic patients, in order to install pathophysiology condition, which involves fecal stasis in the region of the cecum and bacterial proliferation. The bacterial growth leads to impairment of organ irrigation, progressing to transmural ischemia and necrosis, causing more bacterial translocation.

Literature estimates incidence from 0.8 to 26%. This variation is explained by the discrepancy in the selection of patients involved in studies that include patients undergoing chemotherapy, immunosuppressed transplant recipients and HIV. This patient had no risk factors related to illness, with leukocytosis present throughout the course, instead of neutropenia in immunocompromised

patients. The doubt persisted between appendicitis in its evolution that evolves with typhlitis or missed diagnosis of appendicitis instead of typhlitis. The second hypothesis seems more reasonable, due the fact that there is no literature reports of appendicitis progressing to typhlitis.

The evolution of the suggested diagnosis of typhlitis treated initially with antibiotics for a short period was inadequate, which favored the worsening and the second intervention. Expansion of antibiotic therapy was correct[3,7,10,12], because in cases of suspected typhlitis, resection of the colon should be postponed. Confirmed the diagnosis of typhlitis, after the second surgery, conservative medical treatment was instituted according to the literature[3,7,12]. However the patient developed a second complication of typhlitis, requiring re-operation and currently colon resection.

Despite all the complications and prolonged hospitalization, the patient presented favorable recovery. This is due to the fact that he was previously healthy with no changes in immunity[8].

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