Megacólon tóxico: uma complicação rara de um agente comum

Toxic megacolon: rare complication of a common agent

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Resumo

Na última década, a incidência e gravidade da colite a *Clostridium difficile* (*C. difficile*) aumentou consideravelmente. O caso clínico que se apresenta refere-se a uma manifestação rara de infeção por *C. difficile:* o megacólon tóxico. É uma complicação potencialmente fatal que requer diagnóstico precoce e tratamento imediato com metronidazol endovenoso, vancomicina oral e enemas de vancomicina. Descreve-se o caso de uma mulher de 88 anos que iniciou quadro de distensão abdominal, febre alta e diarreia aquosa profusa após antibioterapia com amoxicilina e ácido clavulânico para infeção urinária. A TC abdominal e pélvica revelou dilatação marcada do cólon, consistente com megacólon tóxico. A pesquisa nas fezes da toxina do *C. difficile* foi positiva. Apesar de instituição célere de terapêutica agressiva, verificou-se o óbito ao fim de 8 horas de admissão. Sendo a maioria dos casos de colite a *C. difficile* iatrogénicos ou nosocomiais, deve evitar-se o uso indiscriminado de antibióticos.

Palavras chave: megacólon tóxico, Clostridium difficile, antibióticos, diarreia, vancomicina, metronidazol.

Abstract

In the last decade the incidence and severity of Clostridium difficile (C. difficile) colitis has markedly increased. This case report is about a rare presentation of Clostridium difficile infection: toxic megacolon. It is a life-threatening complication which requires early recognition and prompt treatment with intravenous metronidazole, oral vancomycin and vancomycin enema. A case of an 88-year-old woman who had abdominal distension, high-grade fever and profuse watery diarrhea after treatment of a urinary tract infection with amoxicillin and clavulanic acid is presented. Abdominal and pelvic CT scan revealed an impressive colon dilation, consistent with toxic megacolon. Stool enzyme immunoassay for C. difficile was positive. Despite aggressive medical treatment, she died 8 hours after admission. Since most cases of C. difficile are both iatrogenic and nosocomial, every effort should be made to avoid indiscriminate use of antibiotics.

Key words: toxic megacolon, Clostridium difficile, antibiotics, diarrhea, vancomycin, metronidazole.

In the last decade, the incidence and severity of colitis by *Clostridium difficile* (C. *difficile*) has increased significantly.[1] The clinical manifestations spectrum can range from an asymptomatic colonization to toxic megacolon, associated to a considerable mortality.[2]

We present the case of an 88 years old patient with Alzheimer's disease and hypertension admitted to hospital with a condition evolving for 3 days, featured by pain and abdominal distension, high fever (>39ºC) and profuse watery diarrhea. In the week preceding the symptoms, she had therapy with amoxicillin and clavulanic acid for a cystitis caused by *Escherichia coli*.

The objective exam showed a prostrated patient, dehydrated mucosa, febrile and polypneic. The blood pressure was 88/54mmHg and heart rate of 122bpm. The abdomen was distended, tympanic tone, painful to deep palpation, with kept bowel sounds and without signs of peritoneal irritation. Laboratory values showed leukocytosis of 25,000 cells/mm^3, with 90% neutrophils, hemoglobin 15g/dL, hematocrit 49%, sodium 153mmol/L, potassium 5,2mmol/L, urea 78mg/dL and creatinine 2.1mg/dL. Gasometry showed metabolic acidosis: pH=7.01, $paCO_2$=29mmHg, paO_2=72mmHg, bicarbonate of 12mmol/L and lactates of 35mmol/L. Abdomen radiography in dorsal decubitus (*Fig. 1*) was complemented with abdomen and pelvis CT scan showing a parietal thickening of the entire colon and marked dilation (86mm in the transverse colon, *Fig. 2 and 3*). A research of the C.

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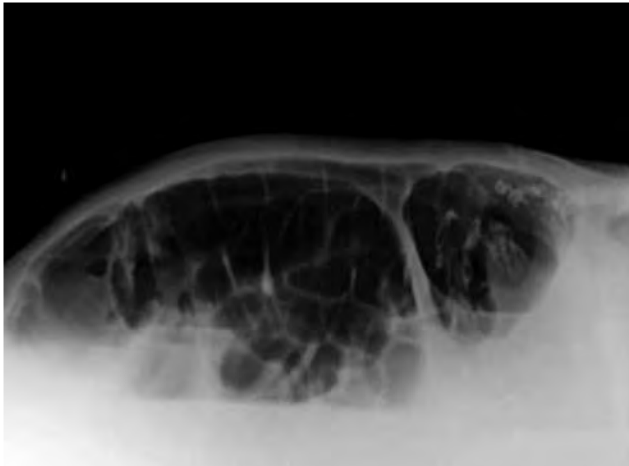
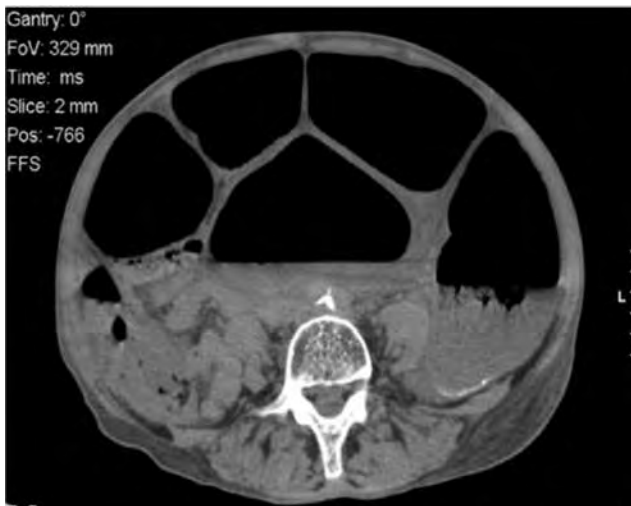


Abdominal radiography in dorsal decubitus (tangential rays)

FIG. 1

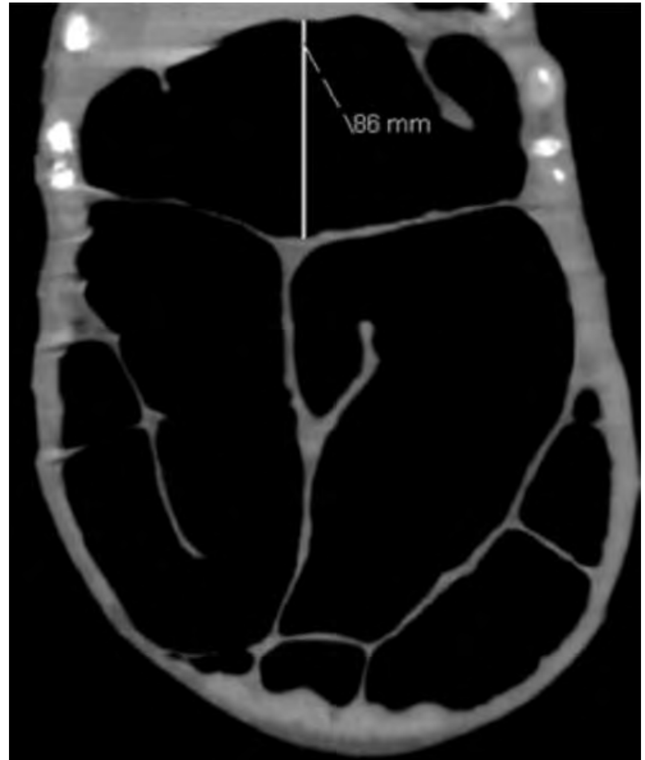


Abdomen and pelvis CT scan – axial section: colon marked dilation.

FIG. 2

difficile toxin in the stool was positive. Therapy of vascular resuscitation and hemodynamics was started (with strong iv hydration and dopamine) and antibiotherapy was started with metronidazole iv 500mg every 6 hours, vancomycin oral route 250mg every 6 hours and vancomycin enema 500 mg. The patient died 8 hours after admission.

Toxic megacolon is a rare complication, which might become more prevalent before the increase of cases infected by *C. difficile*. It is characterized by a



Abdomen and pelvis CT scan – sagittal section: transverse colon with a maximum diameter of 86mm.

FIG. 3

colon marked dilation (> 6cm) associated with systemic toxicity signs.[3] It is important to start an early therapy including intravenous metronidazole and oral vancomycin (even in cases of ileum and megacolon) and in enema.[4] The best strategy before C. difficile infection is on first hand its prevention, namely through the careful use of antibiotics. ■

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