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Toxic megacolon in *Clostridium difficile* colitis

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Case Illustration

An 82-year-old man who received six courses of (rituximab)–CHOP (cyclophosphamide, doxorubicin hydrochloride, vincristine, and prednisone) regimen for diffuse large B-cell malignant lymphoma of the supraclavicular fossa lymph node was hospitalized for a relapse of malignant lymphoma. He had no relevant medical history except for malignant lymphoma. After admission, a gemcitabine, dexamethasone, and cisplatin (GDP) regimen was initiated.

On the 13th day after the start of the second course, he developed fever from the nadir and started cefepime dihydrochloride hydrate (CFPM). However, 6 days after the start of CFPM, the patient began to have frequent soluble diarrhea and tested positive for CD toxin. Metronidazole (1000 mg/day) was initiated. However, the diarrhea did not improve, and the abdomen gradually began to bloat. Imaging revealed marked intestinal dilatation (Figs. 1, 2–1, 2–2). Because the patient was undergoing chemotherapy and cytomegalovirus enteritis was also mentioned in the differential diagnosis, colonoscopy was performed. Colonoscopy results showed insensitivity and hemorrhage with wall thickening, particularly in the rectum and adherent pseudomembranes (Fig. 3–1, 3–2). No irregularly shaped, unannulated ulcers or other lesions that could support cytomegalovirus enteritis were noted. Thus, the diagnosis was toxic megacolonosis associated with CD colitis.

The patient was selected for treatment based on the American Gastroenterological Association's CDI (*Clostridium difficile infections*) severity classification [1]. Based on the severity classification, the patient was classified as having a severe and complicated disease. The treatment consisted of vancomycin 500 mg orally four times a day, metronidazole 500 mg intravenously every 8 h, and vancomycin per rectum (vancomycin 500 mg in 500-ml saline as enema) four times a day. After 21 days of treatment, the diarrhea improved.

Surgical treatment is also recommended for severe cases, as in this case, when the severity classification is severe and complicated [1]. Surgical treatment was not selected in this case because the patient was undergoing chemotherapy and was in poor general condition. Other literature suggests that surgical therapy should be considered if one of the following applies due to CDI: hypotension requiring vasopressor drugs, sepsis and organ failure, disturbance of consciousness, laboratory data (white blood cell≧50,000/μL, lactate≧5 mmol/L), and complicated CDI that does not improve after 5 days of medical therapy [1]. In addition, the mortality rate of patients who have severe and complicated disease is high even after colectomy (35–80%) [2].

Ethical approval

No ethical approval was required for this publication.

Consent

Informed consent was obtained from the patient.

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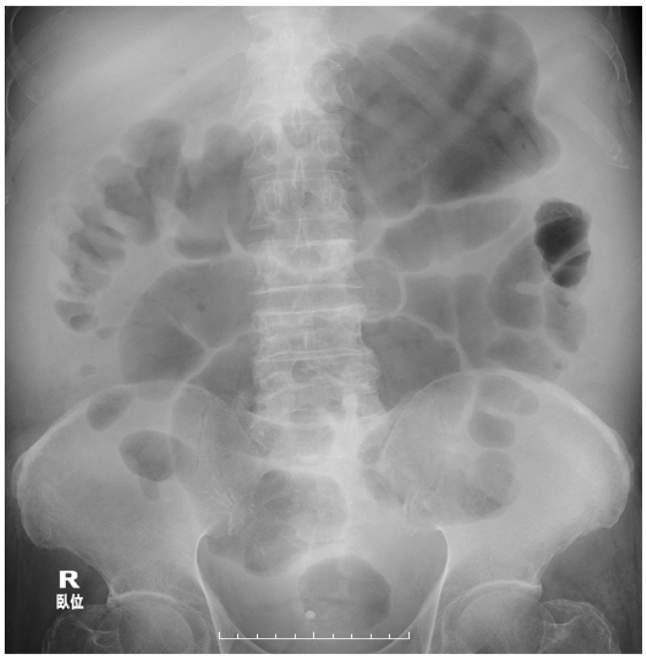

Fig. 1. Plain abdominal photograph: Marked gas images throughout the colon.

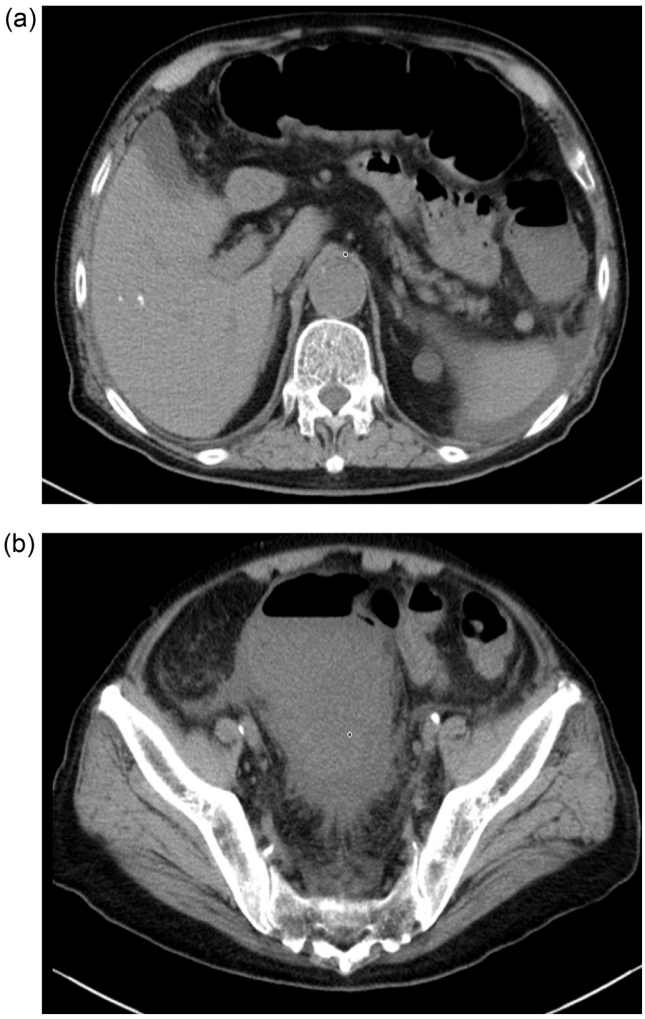

Fig. 2. –1, 2–2 Computed tomography revealed prominent dilatation of the entire colon and soluble intestinal diarrhea.

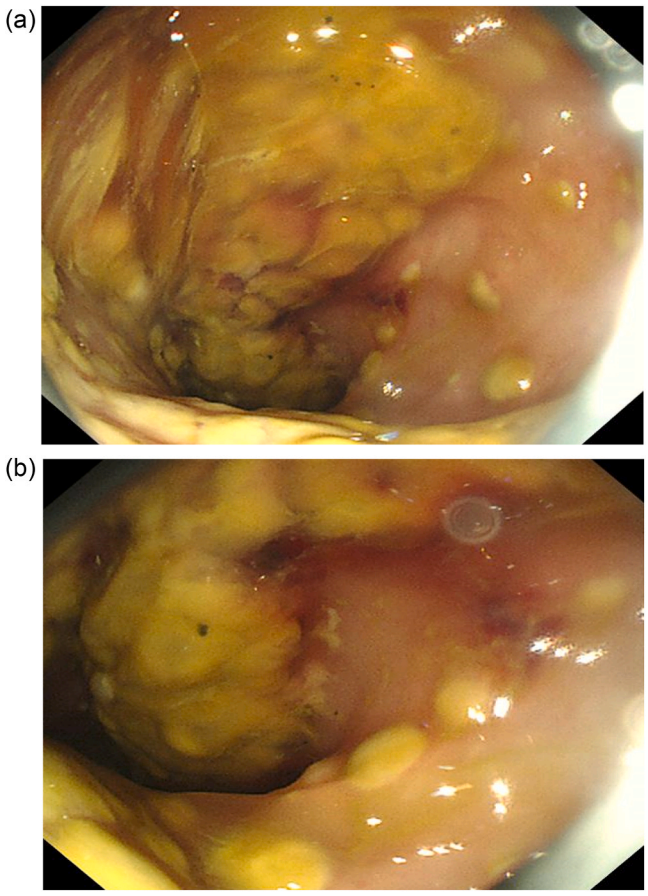

Fig. 3. –1,3–2 Colonoscopy showed insensitivity and hemorrhage with wall thickening, particularly in the rectum, and adherent pseudomembranes.

Authors contributions

The authors treated the patient, drafted and critically reviewed the manuscript, and approved the final version.

Declaration of Competing Interest

None declared.

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