



Case illustrated

Acute colonic pseudo-obstruction with COVID-19

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A 69-year-old woman with coronavirus disease (COVID-19) was transferred to our hospital on day 8 after symptom onset because of increased oxygen demand despite administering dexamethasone (6 mg/day). She had a medical history of Graves' disease and panic disorder. On admission, there were no signs of dyspnea and her oxygen saturation was 95 % with 5 L/min via an oxygen mask. Although she was treated with remdesivir in the intensive care unit, her oxygen demand gradually increased. On day 3 of admission, tracheal intubation was performed and piperacillin/tazobactam was started for bacterial pneumonia. She was extubated after completing 10 days of dexamethasone and remdesivir, and 7 days of piperacillin/tazobactam treatment. However, her respiratory condition worsened again, and she was reintubated 3 days later. Her respiratory condition improved after administering methylprednisolone (120 mg/day) and meropenem.

After resuming enteral feeding, she developed progressive abdominal distension. On day 20 of admission, an abdominal X-ray showed marked colonic dilatation (Fig. 1). She had diarrhea and, a *Clostridioides difficile* glutamate dehydrogenase antigen test and toxin enzyme immunoassay were negative. Abdominal computed tomography showed a colon dilated to a maximum diameter of 10 cm (Fig. 2), with no obvious point of obstruction or intestinal ischemia, suggesting acute colonic pseudo-obstruction (ACPO) or Ogilvie's syndrome. Her thyroid function was normal, and she was not receiving any drugs associated with intestinal stasis.

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Fig. 1. Abdominal X-ray shows marked colonic dilatation.



Fig. 2. a, b: Abdominal computed tomography scan in the axial plane (a) and coronal plane (b) show colon dilatation of up to 10 cm in maximum diameter, but no point of obstruction.

Patients with COVID-19 often complain of gastrointestinal symptoms. The incidence of gastrointestinal complications such as ileus and intestinal ischemia is higher in patients with acute respiratory distress syndrome [1,2]. Although ACPO is a rare complication of COVID-19, it can occur in individuals with severe disease, as in our patient. Physicians should be alert to the possibility of ACPO in patients with COVID-19 because it not only delays resumption of enteral feeding, but can also lead to fatal complications such as colonic perforation and ischemia, if not managed appropriately [3].

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Informed consent

The patient has provided informed consent for publication. She has approved the use of clinical data, images, and other clinically related material for scientific purposes and publication.

Declaration of Competing Interest

The authors report no declarations of interest.

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