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Is It Crohn's Disease?

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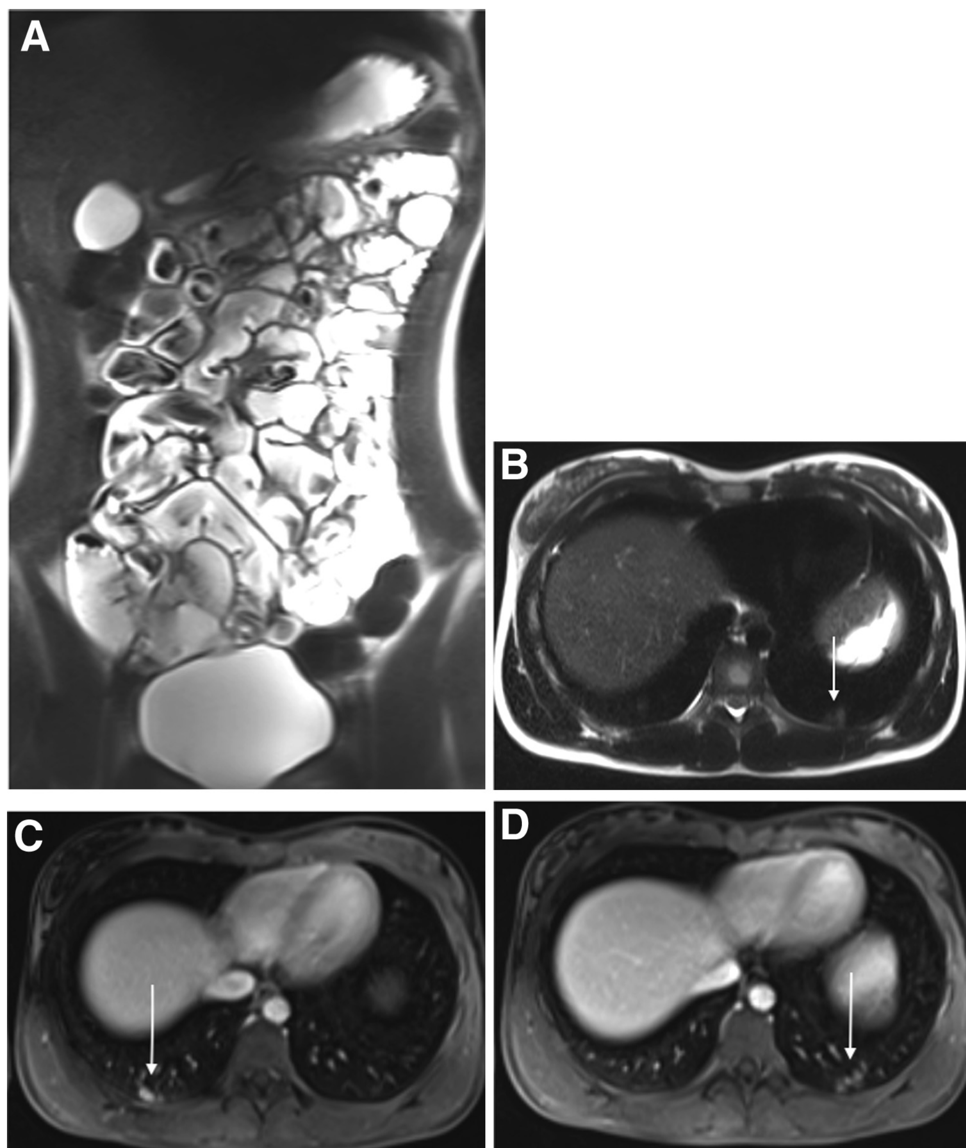

Question: An otherwise healthy 22-year-old woman was admitted to a hospital for persistent diarrhea, abdominal cramps, and weight loss over the previous weeks. Laboratory findings showed a C-reactive protein of 5.58 mg/dL (reference value, <0.80 mg/dL), white blood cell count of 7350/μL, hemoglobin of 12.5 g/dL, and calprotectin of 22 μg/g (reference value, <50 μg/g); the remaining values were unremarkable. Stool cultures excluded common bacterial and protozoal pathogens, including *Clostridium difficile*. Abdominal ultrasound examination showed concentric thickening of the last ileal loop extending 7 cm proximal to the ileocecal valve.

A colonoscopy revealed an inflamed mucosa in the distal 15 cm of the ileum with edema and aphthous erosions; colonic examination was normal. Biopsies were taken in all tracts from distal ileum to the rectum and the histopathological examination was suggestive of active ileal Crohn's disease.

During hospitalization, the patient was treated with a single course of oral steroids and received a 5-day course of levofloxacin 500 mg once daily. She had a rapid clinical response and oral steroids were tapered within 8 weeks, after which she maintained clinical remission for 3 more months.

In March 2020, the patient was referred to the outpatient clinic of our center, complaining of worsening fatigue and recent onset of diarrhea, with 3–4 nonbloody bowel movements per day. Suspecting a Crohn's disease exacerbation, a contrast-enhanced intestinal magnetic resonance imaging was performed. Radiologic examination showed regular distention of the intestine, no significant thickening of bowel walls, and no enhancement in the distal ileum (Figure *A*). Other abdominal findings were normal, thus making a Crohn's flare improbable. Incidentally, on the cranial scans bilateral

consolidations in peripheral pulmonary parenchyma were noticed in T2 sequences (*white arrow* in Figure *B*) and T1 sequences after gadolinium infusion (*white arrow* in Figure *C* and Figure *D*).

On the basis of the history, the clinical presentation and the radiologic findings, what is your diagnostic suspicion?

Look on page 1246 for the answer and see the *Gastroenterology* web site (www.gastrojournal.org) for more information on submitting your favorite image to Clinical Challenges and Images in GI.

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Conflicts of interest
The authors have made the following disclosures: TLP and CB have no interest to disclose. SD has served as a speaker, consultant and advisory board member for Schering-Plough, Abbott (AbbVie) Laboratories, Merck and Co, UCB Pharma, Ferring, Cellerix, Millenium Takeda, Nycomed, Pharmacosmos, Actelion, Alfa Wasserman, Genentech, Grunenthal, Pfizer, Astra Zeneca, Novo Nordisk, Vifor, and Johnson and Johnson.

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Answer to: Image 3 (Page 1244):

Finally, a nasopharyngeal swab tested positive for severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). The patient did not meet the criteria for hospitalization or treatment. She was therefore discharged at home, with instructions to self-isolate, report to the hospital any change in symptoms or oxygen saturation, and wait 2 weeks before repeating virus testing.

At 2 weeks follow-up she repeated 2nasopharyngeal SARS-CoV-2 swabs that were both negative and she was thus declared virus free. Diarrhea resolved spontaneously few days after the first virus test, along with an improvement of fatigue. At a follow-up visit, she reported feeling well and was not experiencing gastrointestinal or respiratory symptoms.

Gastrointestinal symptoms are common among patients with coronavirus disease-19 (COVID-19), although their timing in the history of infection is yet to be clarified. In particular, diarrhea has been reported in $\leq$50.5% of patients alongside nausea and vomiting, which have been found in 1.0%–17.3% of patients.[1] Like in the case described, these symptoms can be the main clinical manifestation of COVID-19 and, owing to their nonspecific nature, can mimic several gastrointestinal conditions. In a recent case series from Spain, COVID-19 presented in patients with inflammatory bowel disease (IBD) with pneumonia and fever as most common symptoms, as well as diarrhea in 21%.[2] Hence, in the midst of COVID-19 outbreak, SARS-CoV-2 infection should be ruled out in the assessment of any IBD exacerbation.

In conclusion, we recommend considering COVID-19 in the differential diagnosis of any gastrointestinal condition presenting with diarrhea among its main manifestation. Generally, treatment for IBD, including biologics and JAK inhibitors, should not be suspended during COVID-19 pandemic as recently recommended by the International Organization for the Study of IBD (www.ioibd.org/ioibd-update-on-covid19-for-patients-with-crohns-disease-and-ulcerative-colitis/).[3]

Our described case was reported on SECURE IBD (Surveillance Epidemiology of Coronavirus Under Research Exclusion – IBD, https://covidibd.org/), an international registry aimed at monitor and report outcomes of confirmed COVID-19 occurring in IBD patients. We encourage all physicians caring for patients with IBD to contribute to it.

Keywords: COVID-19; SARS-CoV-2; Crohn's Disease; Diarrhea; Gastrointestinal Symptoms.

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