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Acute pancreatitis in SARS-CoV-2 infection. Beyond respiratory distress

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Dear Editor,

We read with great interest the two letters published in November (1,2) regarding SARS-CoV-2 infection and acute pancreatitis (AP). We report our only case of AP related to such infection.

Case report

A 55-year-old male, with no past medical history or toxic habits was admitted to the Intensive Care Unit (ICU) in March 2020, presenting respiratory insufficiency and a confirmed SARS-CoV-2 infection. He was treated with hydroxychloroquine, lopinavir, azithromycin and methylprednisolone, according to the valid protocol at that time. After removing such drugs, laboratory test showed hyperamylasemia. A computed tomography was performed, revealing signs of acute interstitial edematous pancreatitis, with peripancreatic collections of up to 6 cm. Laboratory tests excluded autoimmunity, hypertriglyceridemia and hypercalcemia as etiological agents. Abdominal ultrasound and endoscopic ultrasound (EUS) showed no irregularity in the gallbladder or bile ducts, or anatomical abnormalities of the pancreas. EUS-guided

cystogastrostomy drainage was performed using lumen opposing stent. The patient was discharged and was asymptomatic. After having reasonably dismissed other etiologies, we considered that the SARS-CoV-2 infection was related to AP.

Discussion

There are only few articles about AP caused by SARS-CoV-2. In a 52 COVID-19 patient series, 17 % developed pancreatic damage. In another cohort with 67 patients, pancreatic injury was described in 2 % of the cohort (4). Previous studies have shown that SARS-CoV-2 binds angiotensin-converting enzyme 2 receptors to enter, replicate inside and destroy pancreatic cells (2). Pancreatic insult is also related to an incommensurate immune response to the viral antigen (3). Regarding a thrombotic origin proposed by Cienfuegos (2), our patient was previously anticoagulated. Despite being an atypical manifestation of SARS-CoV-2 infection, we believe AP must be taken into consideration in patients with abdominal symptoms. Larger series are needed to determine predisposing factors to develop pancreatic injury.

References

1. Alvarenga D, Satomi A, Ranes de Menezes H. SARS-CoV-2 and acute pancreatitis: a new etiological agent? Rev Esp Enferm Dig 2020;112(11):890.

2. Cienfuegos JA, Almeida A, Aliseda D. Pancreatic injury in COVID-19: pathogenesis and challenges. Rev Esp Enferm Dig 2020;112(11):891.

3. Antunes Meireles P, Bessa F, Gaspar Pet al. Acalculous acute pancreatitis in a COVID-19 patient. Eur J Case Rep Intern Med 2020;7(6).

4. Liu F, Long X, Zou W, et al. Highly ACE2 Expression in pancreas may cause pancreas damage after SARS-CoV-2 infection. MedRxiv 2020.