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Acute pancreatitis in SARS-CoV2 infection. Beyond respiratory distress

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Dear Editor,

We have read with high 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.

A 55-year-old male, with no past medical history nor toxic habit, was admitted to the ICU in March 2020, presenting respiratory insufficiency, confirming SARS-CoV-2 infection.

He was treated with hydroxychloroquine, lopinavir, azithromycin and methylprednisolone according to the protocol valid 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 up to 6 cm.

Laboratory testing excluded autoimmunity, hypertriglyceridaemia and hypercalcemia as etiological agents. Abdominal ultrasound and endoscopic ultrasound (EUS) showed no irregularity in the gallbladder or bile ducts, nor anatomical abnormalities of the pancreas. EUS-guided cystogastrostomy drainage was performed using lumen apposing stent. The patient was discharged asymptomatic. After having reasonably dismissed other etiologies, we consider SARS-CoV-2 infection to be related to AP.

There are only few articles about AP caused by SARS-CoV-2. In a 52 Covid-19 patient serie, 17 % developed pancreatic damage. In another cohort with 67 patients, pancreatic injury is described in 2 % of the sample (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 P, Parreira I, Dias Silva V, Mota C, Alvoeiro L. Acalculous Acute Pancreatitis in a COVID-19 Patient. European Journal of Case Reports in Internal Medicine 2020; 7(6).

4- Liu F, Long X, Zou W, Fang M, Wu W,Li W, Zhang B, Zhang W, Chen X, Zhang Z. Highly ACE2 Expression in Pancreas May Cause Pancreas Damage After SARS-CoV-2 Infection. MedRxiv 2020.