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### First case of acute pancreatitis related to SARS-CoV-2 infection

#### Editor


We read with interest the article by Spinelli and Pellino<sup>1</sup> and the related correspondence by Mukherjee *et al*<sup>2</sup>. Indeed, we have made similar observations: abdominal pain mimicking surgical disease is frequent during the first days of COVID-19, specifically pancreatitis-like presentation. We report the first case of symptomatic acute pancreatitis associated with SARS-CoV-2 without pulmonary symptoms.

A previously healthy 26-year-old woman, without any personal or familial medical history, alcohol consumption or abdominal pain, was admitted for a 1-week history of severe vomiting, epigastric pain and fever. She reported no drug intake. Blood tests revealed leucocytes 5960/mm<sup>3</sup>, haemoglobin 13.7 g/dl, neutrophils 3650/mm<sup>3</sup>, lymphocytes 1580/mm<sup>3</sup>, eosinophils 30/mm<sup>3</sup>, platelets 242 000/mm<sup>3</sup>, lipase

at 211 U/l (3.5 N), gamma-glutamyl transferase 65 U/l, alkaline phosphatase level 83 U/l, lactate dehydrogenase 170 U/l and C-reactive protein at 13.8 mg/l. Transaminases, triglycerides, calcium and creatinine plasma levels were normal. Abdominal CT and echography performed at day 1 (day 7 from the onset) revealed an enlarged pancreas gland without any structural abnormality. The gallbladder and biliary ducts were normal. On chest CT, bilateral basal condensations and pleural effusions were observed. Echocardiogram revealed a small pericardial effusion. Gastrointestinal endoscopy revealed unspecific pangastritis. Lipase level peaked on day 4 (430 U/l = 7 N). Serological tests for human immunodeficiency virus, hepatitis B and C, Coxsackie viruses, *Chlamydia*, *Mycoplasma*, antinuclear and anti-DNA antibodies were negative. RT-PCR assay for SARS-CoV-2 was positive. Evolution was simple after 3 days of fasting. The patient was discharged on day 7.

Nausea has been described in 5 per cent of adults and transaminases are classically elevated during COVID-19<sup>3</sup>. Wang *et al*.<sup>4</sup> reported elevated lipase or amylase in 17 per cent of a Chinese cohort without mentioning abdominal pain. Pancreas may be directly targeted by SARS-CoV-2 due to high expression of its receptor angiotensin-converting

enzyme 2 in islet cells<sup>5</sup>. We thus confirm Mukherjee's hypothesis: SARS-CoV-2 can cause acute pancreatitis.

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