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High-Fat Diet, Hypertriglyceridemia, Hyperlipidemic Acute Pancreatitis: Don't Forget Novel Coronavirus–Induced Acute Pancreatitis

Dear editor:

Recently, we read with great interest an article in your journal about gastrointestinal characteristics and evidence for nutrition support in patients with coronavirus disease 2019 (COVID-19).[1] As the largest acute pancreatitis treatment center in China, hypertriglyceridemia-induced hyperlipidemic acute pancreatitis occupies an important part in our clinical diagnosis and treatment. However, because of its overlapping gastrointestinal symptoms with COVID-19, the pandemic situation poses great challenges and difficulties for clinicians.

COVID-19 is an acute infectious disease characterized by respiratory symptoms; yet over time, it has been demonstrated that multiple organs are involved, including the digestive system. To the best of our knowledge, hyperlipidemic acute pancreatitis is a gastrointestinal disease mainly induced by high-fat diet, which is obviously easily confused with the abdominal symptoms of COVID-19. So, it is important to be clear about 3 concepts: (1) hyperlipidemic acute pancreatitis, (2) the presence of gastrointestinal symptoms caused by COVID-19, and (3) novel coronavirus infection of the pancreas induces acute pancreatitis. It is easy to distinguish the meanings of the 3 concepts. In particular, in the context of the pandemic, it is important to accurately distinguish their definitions in order to guide clinical practice.

Although no novel coronavirus has been reported to induce acute appendicitis, coronavirus has been isolated from pancreatic tissue.[2] In addition, viral infection is a cause of acute pancreatitis.[3] This means that novel coronavirus has a potential risk of triggering acute pancreatitis. Therefore, more studies are needed to confirm whether novel coronavirus infection of the pancreas can induce acute pancreatitis.

The COVID-19 pandemic is continuing to spread and engulf every corner of the world. It is important to understand the effect of novel coronavirus on the pancreas and acute pancreatitis caused by overnutrition. After all, the pandemic has dramatically changed people's diet and lifestyle, and people tend to travel less and eat more food, thus increasing the risk of metabolic diseases. In this particular context, it is clear that we need to focus on and differentiate the etiology of these metabolic and pancreatic diseases so as to make more accurate medical plans. It also tested our knowledge of novel coronavirus in pathogeny and pathology and the judgment and decision of clinicians.

Xianqiang Yu, PhD
Surgery, Department of Medical School, Southeast University, Nanjing, China

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Corresponding Author:
Xianqiang Yu, PhD, Southeast University, 87 Dingjiaqiao, Gulou District, Nanjing, China.
Email: yuxianqiang302@126.com