

## Response to "High-Fat Diet, Hypertriglyceridemia, Hyperlipidemic Acute Pancreatitis: Don't Forget Novel Coronavirus—Induced Acute Pancreatitis"

Nutrition in Clinical Practice Volume 36 Number 2 April 2021 498–499 © 2021 American Society for Parenteral and Enteral Nutrition DOI: 10.1002/ncp.10630 wileyonlinelibrary.com

WILEY

We wish to thank Dr Yu for his interest in our article.<sup>1</sup> We highly appreciate his input regarding different etiologies of acute pancreatitis and their implications for nutrition therapy.<sup>2</sup> In the early months of the pandemic, there was hardly any information published regarding coronavirus disease 2019 (COVID-19)-related pancreatitis. Since then, case reports and retrospective cohort studies have been published describing this association. With the angiotensinconverting enzyme 2 receptors expressed in the pancreas, entry of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) through these receptors, causing pancreatic inflammation, could indeed be plausible. Among the larger studies is a US-based retrospective cohort that revealed a point prevalence of 0.27% among 11,883 COVID-19 patients, with 69% considered as idiopathic.<sup>3</sup> Other literature reports have shown heterogeneous results because of the lack of standard diagnostic criteria. To date, there is still insufficient evidence to establish causality. More populationbased epidemiological studies addressing potential biases are needed.<sup>4</sup> However, although we recognize the potential of SARS-CoV-2 to cause acute pancreatitis, we would want to emphasize that it is important to rule out its more common etiologies first, such as gallstones, alcohol, and hypertriglyceridemia. Obtaining good history is crucial. Diagnostic workups should be done to further investigate and narrow down these etiologies.

On a similar note, we agree with the authors that the association of COVID-19 with acute pancreatitis is important in the context of nutrition therapy. It has been proven that nutrition therapy for patients with acute pancreatitis is beneficial because of its immunologic effect, prevention of bacterial overgrowth, and decreased bacterial translocation and intestinal permeability.<sup>5</sup> As both COVID-19 infection and acute pancreatitis are considered highly catabolic disease processes, diagnosed patients are classified to have moderate to high nutrition risk, and hence, should be closely managed. The European Society for Clinical Nutrition and Metabolism (ESPEN) has crafted a guideline on the nutrition management of patients with acute pancreatitis.<sup>6</sup> Oral feeding should be offered as soon as clinically tolerated. Enteral feeding can be started for those with gastrointestinal intolerance and if nutrition targets are not met by oral diet alone. Parenteral nutrition should be reserved for patients who do not tolerate enteral nutrition or are unable to tolerate targeted nutrition requirements. In general, these practices have been proven to reduce overall disease severity and faster resolution of disease process, leading to shorter hospital length of stay and better clinical outcomes.<sup>7</sup> Although no study exists on the nutrition management of patients diagnosed with both acute pancreatitis and COVID-19, we recommend following prepandemic guidelines tempered by clinical judgment.

Enrik John T. Aguila, MD-MBA

Ian Homer Y. Cua, MD

Institute of Digestive and Liver Diseases, St Luke's Medical

Center Global City, Manila, Philippines

Joy Arabelle C. Fontanilla, MD

Center for Weight Intervention and Nutrition Services, St

Luke's Medical Center Global City, Manila, Philippines

Vince Leenard M. Yabut, MD

Clinical Nutrition Service, St Luke's Medical Center

Quezon City, Manila, Philippines

Marion Frances P. Causing, MD-MBA

Department of Pediatrics, The Medical City, Manila,

Philippines

## References

- Aguila EJT, Cua IHY, Fontanilla JAC, et al. Gastrointestinal manifestations of COVID-19: impact on nutrition practices. *Nutr Clin Pract*. 2020;35(5):800-805.
- Yu H. High fat diet, hypertriglyceridemia, hyperlipidemic acute pancreatitis: don't forget novel coronavirus induced acute pancreatitis. *Nutr Clin Pract*. 2020.
- Inamdar S, Benias PC, Liu Y, et al. Prevalence, risk factors, and outcomes of hospitalized patients with coronavirus disease 2019 presenting as acute pancreatitis. *Gastroenterology*. 2020;159(6):2226–2228.e2.
- 4. De-Madaria E, Capurso G. COVID-19 and acute pancreatitis: examining the causality. *Nat Rev Gastroenterol Hepatol*. 2021;18(1):3-4.

Conflicts of interest: The authors declare no conflict of interest.

Funding: None.

This article originally appeared online on February 12, 2021.

## Corresponding Author:

Enrik John T. Aguila, MD-MBA, Institute of Digestive and Liver Diseases, St Luke's Medical Center Global City, Rizal Drive cor. 32nd St. and 5th Ave., Taguig City, Metro Manila 1634, Philippines Email: enrikaguila@gmail.com

Aguila et al 499

- Van-Dijk SM, Hellensleben NDL, Van Santvoort HC, et al. Acute pancreatitis: recent advances through randomised trials. Gut. 2017;66(11):2024-2032.
- 6. Arvanitakis M, Ockenga J, Bezmarevic M, et al. ESPEN guideline
- on clinical nutrition in acute and chronic pancreatitis.  $Clin\ Nutr.\ 2020;39(3):612-631.$

7. Hegazi RA, DeWitt T. Enteral and immune modulation of acute pancreatitis. *World J Gastroenterol*. 2014;20(43):16101-16105.