

Concerns Regarding the Nationwide Trends in Acute Pancreatitis During the COVID-19

To the Editor,

The recent nationwide epidemiological survey of acute pancreatitis (AP) in Japan, by Tanaka et al. (1), provides a comprehensive overview of the changing trends in the clinical features and management of AP during the COVID-19 pandemic. The authors should be commended for conducting a large-scale, two-stage nationwide survey and for highlighting improvements in follow-up of treatment guidelines, such as reduced use of antibiotics in mild AP cases and increased enteral nutrition for patients with severe AP. We recognize the importance of the study's contribution. However, several aspects of the study that we would like to point out may help improve the understanding and interpretation of the findings. In particular, we would like to critique the low response rate from eligible hospitals, which can increase the risk of selection bias, the potential underreporting of mild AP cases due to the exclusion of outpatient data, and the need to investigate why mortality in walled-off necrosis (WON) has not improved over time.

The response rate of only 36.6% as mentioned in the study, raises concerns about the generalizability of the findings. A low participation rate can introduce selection bias, especially if certain types of hospitals, such as smaller or outpatient-based institutions, are underrepresented. As a result, the data may indicate an imbalanced severity profile and can underestimate the actual number of outpatient-managed cases (2). Excluding outpatient data limits the true estimation of mild AP incidence.

During the COVID-19 pandemic, there was a notable change in the behavior related to healthcare seeking. Patients with mild symptoms avoided being admitted to the hospital entirely and opted for outpatient care, and previous research has shown that outpatient management of mild AP increased during this period (3).

Another concern is the high mortality rate in patients with walled-off necrosis (WON), which has remained unchanged across the past three national surveys. Despite advancements in step-up approaches and minimally invasive techniques, the study does not provide detailed subgroup analyses to clarify the reason behind the failure of these strategies, and has not resulted in better outcomes (1). Different factors, such as the timing of intervention, hospital expertise, patient comorbidities, and procedural protocols, all of these may influence these results. Previous studies have demonstrated that standardized and centralized care can significantly improve outcomes in necrotizing pancreatitis (4), emphasizing the need for more detailed data analysis in the future.

In light of these observations, efforts should be made to increase participation across all hospital levels and include outpatient data to reduce selection bias and capture the full clinical picture of acute pancreatitis. Furthermore, in-depth subgroup analyses are crucial, especially in severe cases such as walled-off necrosis, for the identification of factors that contribute to the poor outcomes and for developing standardized treatment strategies. We appreciate the authors for their valuable contribution and hope these suggestions will help enhance the quality and applicability of national data on acute pancreatitis.

References

1. Tanaka Y, Masamune A, Matsumoto R, Takikawa T, Tanaka Y, Hamada S, et al. Nationwide epidemiological survey of acute pancreatitis in Japan, 2021: the impact of the COVID-19 pandemic and revised clinical guidelines. *J Gastroenterol*. 2025 Jul;
2. Masamune A, Kikuta K, Hamada S, Tsuji I, Takeyama Y, Shimosegawa T, et al. Clinical practice of acute pancreatitis in Japan: An analysis of nationwide epidemiological survey in 2016. *Pancreatol Off J Int Assoc Pancreatol* . [et al]. 2020 Jun;20(4):629–36.
3. Du ZC, Zhang J, Li XJ, Zhang ZT, Bai KS, Wang ZM, et al. Impact of COVID-19 pandemic on acute pancreatitis presentations, management, and in-hospital outcomes: a single-center, retrospective observational study from the northeast of China. *Therap Adv Gastroenterol*. 2022;15:17562848221145552.
4. van Brunschot S, van Grinsven J, van Santvoort HC, Bakker OJ, Besselink MG, Boermeester MA, et al. Endoscopic or surgical step-up approach for infected necrotising pancreatitis: a multicentre randomised trial. *Lancet (London, England)*. 2018 Jan;391(10115):51–8.