COMMENTARY



Best practice of nutritional support for pediatric acute pancreatitis

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In this issue of World Journal Pediatrics, Zhao et al. address that nutrition support by nasogastric (NG) or nasojejunal (NJ) feeding has similar results in pediatric acute pancreatitis (AP) [1]. AP in children is one of the common acute abdominal diseases in childhood, and the incidence is increasing significantly in recent decades [2]. Nutritional support is one of the key points for AP patients' treatment. Compared with fasting or parenteral nutrition, published papers from developed countries had showed that an early start of enteral nutrition through NG and NJ tube, especially within 48 hours, is beneficial to shorten the length of hospital stay for AP management, which was common sense in AP [3]. However, the current recommendations of guidelines or common sense for the treatment of AP in children are based primarily on evidence in adults, and there is a lack of children-oriented research, especially prospective randomized controlled studies. On the other hand, previous studies have reported that NG feeding is not inferior to NJ feeding [4]. A prospective randomized controlled trial was first designed by Zhao et al. to compare the effects of NG feeding and NJ feeding in treating AP in children. The authors demonstrated that the NG tube and the NJ tube had similar tolerance, and the NG tube could shorten the tube feeding time and the length of hospital stay. This study concluded that NG feeding and NJ feeding were equivalently effective and safe in the treatment for mild-to-moderate AP in children, which provided positive evidence for enteral nutrition therapy for AP in children. These new findings may change routine clinical practice in pediatric AP because NG offers easier placement and is closer physically. However, the number of cases from this study was not high enough,

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and a multi-center randomized controlled trial was needed for stronger evidence in comparing alternative methods of enteral nutrition for mild-to-moderate pediatric AP patients. Ultimately, the possibility of using early oral intake for mild AP also needs further study to provide evidence in children.

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Compliance with ethical standards

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References

- Zhao H, Han Y, Peng KR, Luo YY, Yu JD, Fang YH, et al. Nasogastric or nasojejunal feeding in pediatric pancreatitis: a randomized controlled trial. World J Pediatr. 2021. https://doi. org/10.1007/s12519-021-00441-0.
- Pant C, Deshpande A, Olyaee M, Anderson MP, Bitar A, Steele MI, et al. Epidemiology of acute pancreatitis in hospitalized children in the United States from 2000–2009. PLoS ONE. 2014:9:e95552.
- Feng P, He C, Liao G, Chen Y. Early enteral nutrition versus delayed enteral nutrition in acute pancreatitis: a PRISMA-compliant systematic review and meta-analysis. Medicine (Baltim). 2017;96:e8648.
- Zhu Y, Yin H, Zhang R, Ye X, Wei J. Nasogastric nutrition versus nasojejunal nutrition in patients with severe acute pancreatitis: a meta-analysis of randomized controlled trials. Gastroenterol Res Pract. 2016;2016:6430632.

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