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Editorial

Eating Behavior in Functional Dyspepsia

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Article: Association between eating behavior, frequency of meals, and functional dyspepsia in young Japanese population
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Previous questionnaire-based studies sought to describe the relationship between diet and functional dyspepsia (FD), and reported that diet and lifestyle could trigger dyspeptic symptoms. Although fatty foods, dairy products, alcohol, and smoking are thought to exacerbate symptoms, no studies have shown the eating patterns of FD patients to differ markedly from those of healthy individuals.[1,2] In this issue of the *Journal of Neurogastroenterology and Motility*, Yamamoto et al[3] investigated the dietary patterns of FD patients in a young Japanese population. Previous studies have focused primarily on food types, but Yamamoto et al[3] explored the frequency of meals consumed per day.

According to the study results, FD patients had a higher rate of skipping breakfast and/or lunch. It is unclear whether FD symptoms occur more frequently with fewer meals per day, or whether patients are skipping meals due to severe symptoms. What is evident is that proton pump inhibitors (PPIs) may provide inadequate acid suppression in these patients. In other words, patients who skip breakfast are unlikely to consume enough calories to activate PPIs before lunch or dinner, so daytime acid suppression may be insufficient.[4] Given the possible limited efficacy of PPIs in patients with FD who skip breakfast, it may be more efficient to use a split-dose of PPIs or to use potassium-competitive acid blockers. A Japanese study of 43 FD patients showed mild symptom improvement after vonoprazan treatment in PPI therapy resistant FD patients.[5] However, since it was a small retrospective study conducted at a single center, more research is needed to support these findings.

Increased acid exposure or abnormal clearance of acid in the duodenum and duodenal hypersensitivity to acid can cause chronic dyspeptic symptoms.[6,7] Gastric acid is the main stimulator that can induce visceral hypersensitivity in a subset of dyspeptic patients.[8] These aspects justify the clinical use of PPIs in patients with FD. The Rome foundation advocated subtype classification to identify the PPI-responsive subset of FD patients. Two subtypes of FD have been proposed based on the Rome III consensus: postprandial distress syndrome (PDS), in which meal ingestion causes dyspeptic symptoms, and epigastric pain syndrome (EPS), in which epigastric pain or a burning sensation is primarily present at times other than after eating; however, PDS and EPS may overlap.[9] This arbitrary subtype classification was established to serve as a guide for first-line treatment with gastric acid-suppressive agents or prokinetics. However, selecting first-line treatments according to the Rome criteria did not significantly improve treatment satisfaction.[10] Hence, a combination regimen of PPIs and prokinetics is usually adopted as the first-line treatment in both subtypes of patients with FD.[11]

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On the other hand, in the EPS subtype, the use of pain modulators such as tricyclic antidepressants is helpful.[12]

The present study made it possible to reduce bias by enrolling university students with few underlying diseases. Web-based surveys have also helped facilitate the enrollment of large-scale populations compared with face-to-face questionnaires. However, there are limitations in that no additional information was provided regarding overlap with other functional gastrointestinal disorders or the accompaniment of psychological disorders such as anxiety or depression.[13] Questions also remain regarding what kind of eating pattern subjects who usually skip breakfast or lunch will exhibit when dyspeptic symptoms are relieved. As symptoms decrease, is there a possibility that patients with FD will overeat, triggering symptom exacerbation? Further studies on these eating behavior changes are needed.

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