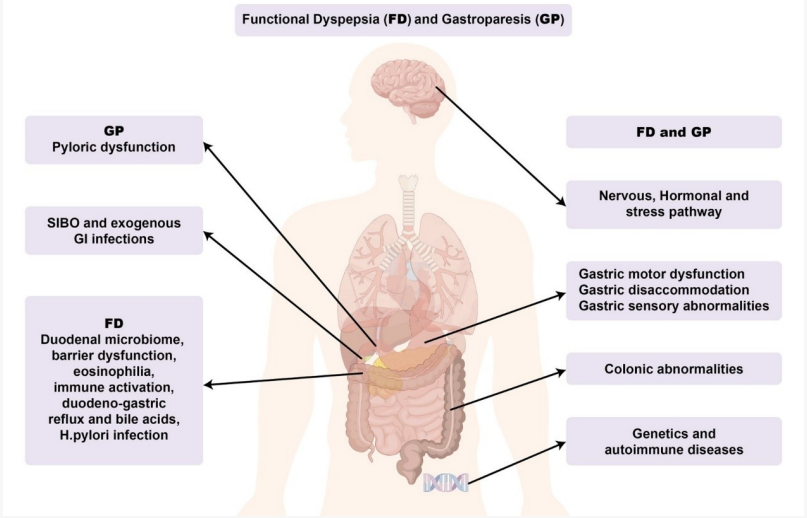
eGastroenterology Review Redefines Functional Dyspepsia, Gastroparesis Treatment

New review in eGastroenterology reveals functional dyspepsia and gastroparesis may be a spectrum disease, challenging current diagnostic & treatment approaches



New review in eGastroenterology reveals functional dyspepsia and gastroparesis may be a spectrum disease, challenging current diagnostic and treatment approaches.

CHANGCHUN, JILIN, CHINA, July 31, 2025 /EINPresswire.com/ -- Functional dyspepsia (FD) and gastroparesis (GP) are gastrointestinal disorders often managed as separate conditions. FD is classified as a disorder of gut-brain interaction, characterized by symptoms such as early satiety, postprandial fullness, and epigastric pain without structural abnormalities. In contrast, GP is a neuromuscular disorder diagnosed based on delayed gastric emptying (GE), typically presenting with nausea, vomiting, bloating, and abdominal pain. However, a recent review in eGastroenterology challenges the traditional distinction between these conditions, suggesting that they may represent a continuum of the same disease rather than two distinct entities.

A major finding in this review is the significant symptom overlap between FD and GP. While nausea and vomiting are more commonly associated with GP, they could present in FD, although with less frequency. Conversely, epigastric pain and burning, postprandial fullness, and bloating are the predominant symptoms associated with FD but are also frequently reported in GP. Diagnostic tools such as GE scintigraphy, the gold standard for the diagnosis of GP, reveals that up to 37% of FD patients exhibit some degree of gastric retention, blurring the line between the two disorders.

This review explores the overlap in underlying pathophysiological mechanisms of FD and GP, including visceral hypersensitivity, impaired gastric accommodation, low-grade inflammation, gut

microbiota alterations, and potential autoimmune components. It further highlights the loss of interstitial cells of Cajal (ICCs), which regulate gastric motility in subgroups of FD and GP patients, suggesting a shared dysfunction in gastric neuromuscular control.
Another key finding is the potential role of the gut microbiome. Emerging data suggest that gastric and duodenal microbiota alterations may be linked to FD, while the role of microbiota in GP remains underexplored. The study emphasizes the need for further research into microbial signatures that could serve as biomarkers or therapeutic targets for both disorders.

The therapeutic implications of this research are profound. Current treatments for FD and GP are often ineffective due to the heterogeneous nature of these conditions. Deciphering the underlying pathophysiological mechanisms may lead to more individualized treatment strategies. Neuromodulators, prokinetics, and dietary interventions commonly used for FD may hold promises for GP patients and vice versa. Additionally, novel therapies targeting duodenal inflammation and gut microbiota modulation could offer new avenues for treatment of FD.

One of the study's most compelling aspects is its potential to influence future diagnostic criteria. The current approach relies mainly on symptoms and GE tests, which fail to capture the full complexity of these disorders. The authors advocate for a refined classification system that accounts for shared pathophysiology, enabling more precise diagnosis and treatment.

The study also highlights the economic burden of FD and GP. Patients with these conditions often experience significant reductions in quality of life, leading to increased healthcare utilization and lost productivity. For example, the average annual healthcare cost for a diabetic GP patient in the United States exceeds $50,000, while for idiopathic cases, it is approximately $30,000. A clearer understanding of disease mechanisms and improved therapeutic strategies could help reduce this burden by enabling more effective management.

Overall, this review challenges the long-standing dichotomy between FD and GP. By framing these disorders as part of the same spectrum, researchers hope to drive innovations in diagnosis and treatment, ultimately improving outcomes for patients affected by these chronic gastrointestinal disorders.
Future research is required to identify biomarkers that may distinguish FD from GP and confirm their position on a disease spectrum. Large-scale studies examining the role of gut-brain interactions, immune responses, and genetic predisposition are needed to refine diagnostic and therapeutic approaches.

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See the article:
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