Common, serious gut disorder is under- and often misdiagnosed

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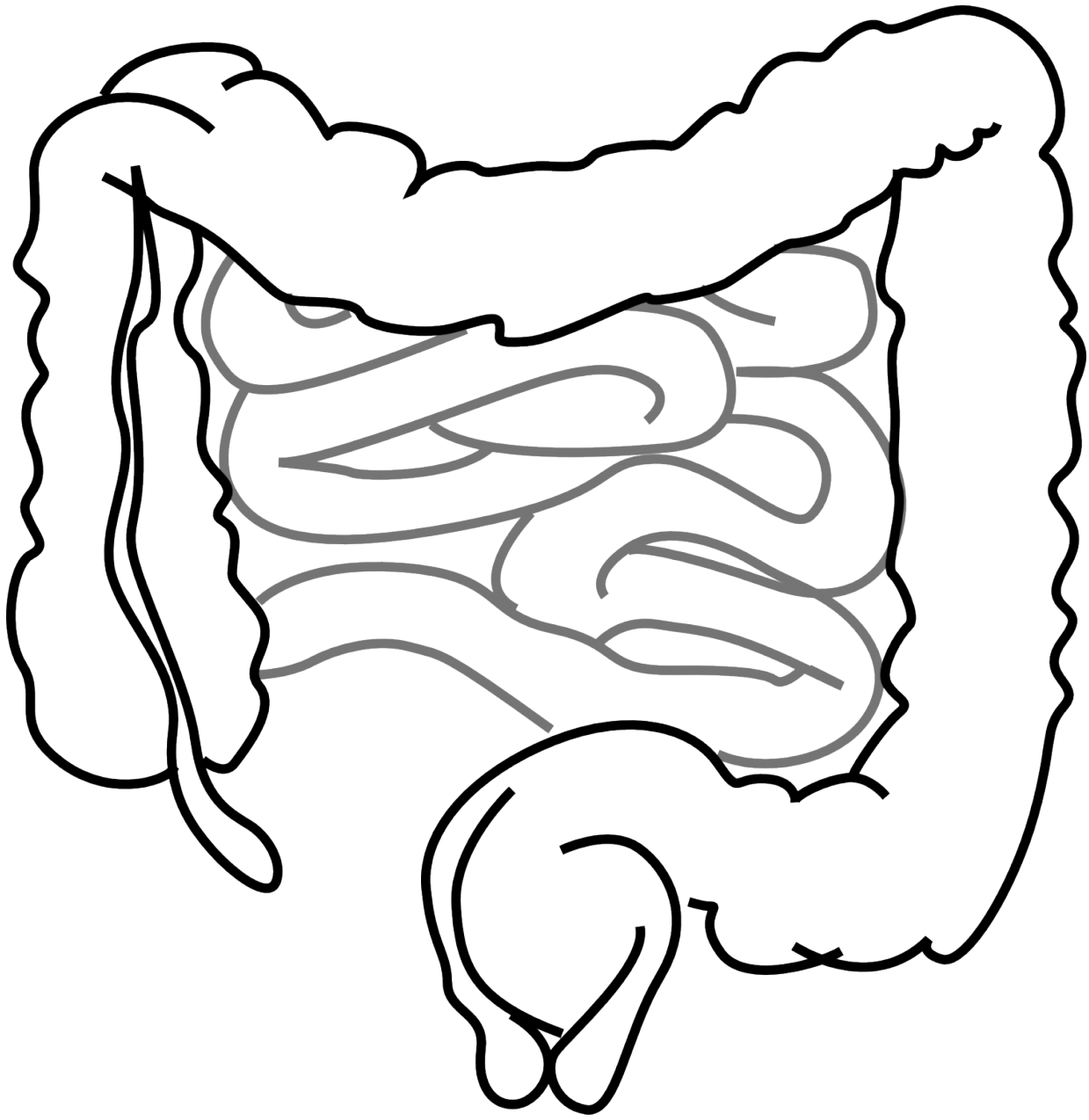

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Patients who regurgitate regularly but without any known cause may have a condition called rumination. Unfortunately, rumination is often confused with other gastrointestinal conditions, which means many patients may not be getting prompt treatment. But a new study by investigators at Massachusetts General Hospital (MGH) in *Neurogastroenterology and Motility* clearly describes this syndrome, how to distinguish it from other conditions, and how to treat it.

Rumination syndrome is a behavioral problem, in which patients effortlessly and repeatedly regurgitate food into their mouths while eating and sitting upright. It is a learned behavior that is classified as a disorder of the gut-brain interaction (DGBI). Many experts think that regurgitations develop as a habit involving an uncomfortable, mounting sensation or inner tension (similar to patients with tics) that results in contraction of the abdominal walls after eating. This pattern gets reinforced with positive associations (such as relief of anxiety and stress after regurgitation) as well as negative associations (such as the discomfort of trying to suppress the inner tension without regurgitating).

"This condition causes a lot of embarrassment and may stop people from eating with others," explains Trisha Satya Pasricha, MD, co-lead author with Helen Burton Murray, Ph.D., both of MGH's Division of Gastroenterology. "It is not well understood, and is often mistaken for other disorders."

One reason rumination symptoms are missed is because they overlap with other DGBIs, such as functional dyspepsia (stomach pain or indigestion) or gastroparesis, which is when patients feel nauseous and

full after eating just a small amount. Patients may incorrectly describe their symptoms as reflux or vomiting. As a result, the condition may go undiagnosed or misdiagnosed for a long period. That can lead to significant social constraint and possibly weight loss.

Pasricha and her colleagues screened 242 patients who were referred to specialists for gastric symptoms that could indicate they were experiencing rumination. The symptoms that brought these patients to a gastroenterologist included dyspepsia and gastroparesis.

Thirty-one of the 242 (12.8%) patients met criteria for rumination syndrome, which is determined using a gastric symptom scoring system. Almost half of those patients (48%) reported associated psychosocial impairment, meaning that they experienced difficulty in social situations because of their condition.

Comparing those patients with rumination and those without, there were no differences in race, gender, frequency of diabetes, or frequency of gastroparesis. "There is little demographically that distinguishes these patients other than their tendency to regurgitate when eating," says Pasricha. "They are not more likely to have a history of an eating disorder or weight problems."

However, the patients with rumination were more likely to also experience heartburn, particularly daytime symptoms. The researchers suggest that screening for heartburn and regurgitation could help identify more patients with this condition.

The treatment for rumination is behavioral and involves the practice of diaphragmatic, or deep, breathing. Two pilot trials have shown that this significantly improves gastroesophageal reflux. Comprehensive cognitive behavioral therapy for rumination syndrome (CBT-RS) is also recommended. CBT is an increasingly popular type of behavior therapy

that helps people re-orient their thinking, teaching them new thought processes to replace old patterns that lead to self-harm and other poor outcomes.

More information: Helen Burton Murray et al, Detection and characteristics of rumination syndrome in patients presenting for gastric symptom evaluation, *Neurogastroenterology & Motility* (2021). DOI: 10.1111/nmo.14103

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