Are You Missing Motility Disorders? New Study Reveals Some Patients Are Overlooked

The current iteration of the Chicago Classification of Esophageal Motility Disorders does not identify a particular subset of these conditions, researchers have found. As a result, patients with so-called “focal hypercontractility” are at risk for being misdiagnosed and receiving suboptimal treatment.

“These are patients who are currently being classified as normal,” Tarun Sharma, MD, a gastroenterologist at Advocate Aurora Health, in Milwaukee, and the leader of the study, told Gastroenterology & Endoscopy News. Sharma's group presented their findings at the 2020 virtual meeting of the American College of Gastroenterology (poster P0849).

Prior to the Chicago classification, the reference range for normal esophageal pressures was 30 to 180 mm Hg. The Chicago standards replaced that range with the concept of distal contractile integral (DCI), a cumulative computer-generated data point rather than individual sensor interpretation.

Sharma noticed he was treating many patients whose DCI fell within the current concept of normal but had individual pressure readings exceeding the previously established normal range. They exhibited motility disorders that were distinct from disorders such as esophagogastric junction outflow obstruction (EGJOO) or distal esophageal spasm (DES). He and his colleagues at Aurora Research Institute conducted a retrospective chart review to determine whether there was a pattern to these hard-to-classify cases.

The review included all patients (n=278, of whom 194 were women) who presented to the Aurora St. Luke's Medical Center for esophageal manometry from April 2018 to March 2020. Researchers used Manoview 3.0 software, with its smart mouse feature, to identify maximum contractile pressures on all individual swallows at the distal two-thirds of the esophagus. They considered any peristaltic waveforms of at least 200 mm Hg, in patients with no known disorder, to be evidence of focal hypercontractility.
Of the 278 patients, 106 (38%) remained in the normal range after the review, and 44 patients (16%) had focal hypercontractility. This share was more than patients with EGJOO (the next largest subset), achalasia or DES, respectively. Rates of dysphagia, gastroesophageal reflux disease and atypical chest pain were comparable between people with focal hypercontractility and those with other disorders—a finding Sharma said argues that segmental focal hypercontractility is a unique diagnostic signature.

Calling for an update to the Chicago classification to include focal hypercontractility, Nilay Kumar, MD, a co-author of the study, noted that “failure to address this anomaly will result in continued classification of these patients as normal.”

Co-investigator Kristin Ciezki, PhD, of Aurora Research Institute, said she hoped the new results would encourage other motility centers to look for evidence of focal hypercontractility in symptomatic patients so the generalizability of this phenomenon can be determined and specific diagnostic criteria established.

Ronnie Fass, MD, a gastroenterologist at MetroHealth Medical System in Cleveland, was struck by the reported prevalence of EGJOO in the study. At MetroHealth and many other motility clinics, he said, the most common disorder “by far” is ineffective esophageal motility. As a result, Aurora’s patient population could be unique, making it difficult to generalize from these results, Fass said.

The overall goal of identifying new motility disorders to explain a patient’s symptoms is worthwhile, Fass added. However, the association between the finding of focal hypercontractility and patient symptoms such as dysphagia is unclear. Moreover, he said, a comparison of the swallowing patterns of normal patients matched by sex and age to those with the putative focal hypercontractility also is missing. “Overall, more research is needed to substantiate the role of focal hypercontractility in patients’ symptoms,” Fass said.

—Marcus A. Banks

Fass is a member of the editorial board of Gastroenterology & Endoscopy News. Ciezki, Kumar and Sharma reported no relevant financial conflicts of interest.