Manometry Alternative May Be a Useful Backup

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FROM NEUROGASTROENTEROLOGY AND MOTILITY 2010

BOSTON – Patients who can't tolerate standard esophageal manometry may be able to undergo an alternative procedure known as endoscopically assisted water perfusion esophageal manometry, with results that are useful in guiding clinical management.

Between 2007 and 2009, 88 (2.7%) of 3,304 patients sent for assessment of a motility disorder using standard esophageal manometry failed the procedure. Many, however, were able to tolerate endoscopically assisted water perfusion esophageal manometry (EAM) with minimal sedation, reported Dr. Rita Brun and Dr. Kyle Staller of Massachusetts General Hospital, Boston.

According to the researchers, patients may be unable to tolerate standard manometry for different reasons. In the group of 88 patients who were identified via a retrospective analysis, 87.5% could not tolerate intranasal intubation and 12.5% had anatomical obstacles, such as large hiatal hernias, esophageal diverticula, or prior nasal surgery.

VITALS

Major Finding: Of 51 patients who underwent endoscopically assisted water perfusion esophageal manometry, 46 tolerated the procedure, and the results had a direct impact on clinical management for 32 of 36 (89%) who had follow-up data.

Data Source: A retrospective analysis of the records of 51 patients who underwent EAM.

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But EAM appears to offer an effective alternative. "To our knowledge, this technique has not been reported previously," said Dr. Brun. "EAM with minimal sedation is a safe, reliable, and feasible technique providing objective diagnostic information. EAM is geared toward an especially challenging patient population, in whom no other way to assess esophageal motility is feasible yet quantified manometric information for clinical management is required. EAM can provide a needed solution in cases of problematic catheter placement, where evaluation of esophageal motility is a necessity."

For EAM, patients are minimally sedated, using two puffs of lidocaine spray followed by a standard intravenous minimally conscious protocol. A standard upper endoscopy is performed. The guide wire is inserted via the working channel of the scope, and the scope is then pulled out, leaving the wire in the stomach. A water perfusion manometry catheter is introduced over the wire, and standard water perfusion manometry is carried out. The mean time from beginning of sedation until withdrawal of the manometry probe was 42 minutes, with the procedure itself lasting about 31 minutes.

To assess the clinical value of EAM, Dr. Staller performed a retrospective analysis of the medical records of all adult patients who had undergone EAM between 2007 and 2009. In all, 41 of the 88 patients who had failed transnasal standard manometry went on to EAM. An additional 10 patients, in whom standard manometry was not appropriate, were sent directly to EAM. Of these 51 patients (37 females; mean age, 60 years; age range, 24-88 years), 5 were excluded because they could not complete EAM, which yielded 46 patient records for clinical analysis.

Of the 46 patients, 10 patients were lost to follow-up. Among the 36 remaining patients, EAM had a direct influence on clinical management for 88.9% (32 patients) and had no meaningful impact for 11.1% (4 patients), Dr. Staller said.

For instance, 27.8% (10) underwent EAM as part of a preoperative work-up for antireflux surgery. Of those, three did not undergo surgery based on the study results, whereas the other seven proceeded to surgery.

Overall, 12 patients (33.3%) were diagnosed with achalasia as a result of EAM and were treated for that condition with Botox, dilatation, or myotomy (4, 3, and 5 patients, respectively). Achalasia was ruled out in one patient, which prevented an invasive intervention.

Another 12 patients had their medications changed because of the EAM findings. In some cases, a promotility agent was added or an acid-suppression regimen was modified. ■

Spastic Esophageal Dysmotility Seen in Patients Using Opioids

FROM NEUROGASTROENTEROLOGY AND MOTILITY 2010

BOSTON – A retrospective study of dysphagic patients who underwent high-resolution impedance manometry found that spastic esophageal dysmotility was significantly more common in those on long-term opioid therapy than in those not taking opioids, said Dr. Kee Wook Jung, who presented the results as a poster at the meeting.

VITALS

Major Finding: Patients referred for dysphagia related to long-term opioid therapy were significantly more likely to manifest spastic esophageal dysmotility disorders than were those not on opioids, as shown by high-resolution impedance manometry.

Data Source: Case series of 122 patients, 26 of whom were on long-term opioid therapy.

Disclosures: No disclosures were reported.

"Opioid esophageal dysmotility disorder represents a newly recognized disorder, and all patients undergoing esophageal manometry should be carefully questioned about the use of narcotics," commented Dr. Jung, who is affiliated with the division of gastroenterology and hepatology at the Mayo Clinic in Rochester, Minn.

In this chart review of 122 patients who underwent high-resolution impedance manometry (HRIM) between July 2008 and February 2010, 26 patients were identified who underwent HRIM while on long-term opioid therapy. Of the 26 patients on opioids, 17 met diagnostic criteria for spastic esophageal dysmotility, compared with 35 of the 96 patients not taking opioids. The criteria included achalasia, diffuse esophageal spasm, nutcracker esophagus, and hypertensive lower esophageal sphincter (LES) pressure, Dr. Jung noted at the meeting, which was hosted by the American Neurogastroenterology and Motility Society.

Overall, the specific changes noted suggest that chronic opioid use impairs esophageal inhibitory innervation, according to Dr. Jung. For instance, compared with those not using opioids, those taking opioids had significantly higher resting LES pressure, higher amplitude of esophageal body at 10 cm above LES, longer duration of esophageal body contraction at 5 cm above LES, higher distal esophageal amplitude, and longer duration of distal esophageal contraction. Contraction velocity at 10 cm above LES was also faster in the opioid group.

Although the effects of opiates on the stomach, small intestine, and colon have been well studied, their effect on the esophagus is less well known. In a previously reported study using low-resolution conventional manometry (Aliment. Pharmacol. Ther. 2010;31:601-6), researchers from this group reported simultaneous and nonperistaltic contractions, as well as increased esophageal contraction velocity in those who used opioids. They also showed that for some patients, improvements could be documented after opioids were discontinued. The investigators concluded that esophageal manometric abnormalities seen in patients on long-term opiates were secondary to the medication, and not to a primary esophageal motility disorder. ■

Chronic Globus Sensation Appears To Have No Impact on Survival

FROM NEUROGASTROENTEROLOGY AND MOTILITY 2010

BOSTON – In 1993, approximately 7% of a randomly selected cohort of people living in Olmsted County, Minn., who completed a GI symptom survey reported that they felt a "lump in the throat," known as globus sensation, at least a quarter of the time. Analysis of records over the next 15 years indicated that globus was a benign disorder with no significant effect on survival, Dr. Joseph Y. Chang said at the meeting.

"In this population-based cohort study with over 20,000 person-years of follow-up, no significant association was observed between survival and globus sensation. These findings are reassuring and may help in the management and counseling of patients," said Dr. Chang of the enteric neuroscience program at the Mayo Clinic in Rochester, Minn.

In 1993, 74% of 2,073 eligible subjects responded to the survey, and 1,434 had a complete data set. At the time of the survey, the mean age was 50 years and 52% were female. Those with serious medical illnesses were excluded.

In the survey, globus was defined as sensation of a "lump in the throat" when not swallowing, at least 25% of the time, in the past year. In all, 104 people reported globus symptoms, yielding an age- and sex-adjusted prevalence of globus in the past year of 7.1 per 100.

VITALS

Major Finding: No association was seen between globus and survival 15 years later, based on both univariate analysis (hazard ratio 1.20) and multivariate analysis (HR 1.33).

Data Source: Analysis of 1,468 randomly selected people in Olmstead County, Minn., who completed a GI symptom survey in 1993.

Disclosures: Dr. Chang had nothing to disclose.

Minnesota administrative death records were analyzed to determine which survey respondents had died through April 2008. No association was found between globus and survival 15 years later, based on both univariate analysis (hazard ratio, 1.20) and multivariate analysis (HR, 1.33). Characteristics such as age, sex, marital status, education level, employment status, smoking history, and alcohol use were also not linked to globus.

Somatization was common in people with globus (odds ratio, 5.4). Also, globus was associated with other reflux-type gastrointestinal complaints, such as infrequent GERD, frequent GERD, dysphagia, dyspepsia, infrequent and frequent heartburn, and infrequent and frequent acid regurgitation. Those with globus were also likely to report hoarseness and noncardiac chest pain. ■