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OESOPHAGUS

Predicting treatment efficacy in patients with achalasia

When assessing treatment efficacy in patients with achalasia, measuring distensibility of the oesophagogastric junction (EGJ) could be a more useful parameter than lower oesophageal sphincter (LES) pressure, according to researchers from Belgium and The Netherlands.

Typical symptoms of achalasia include dysphagia, regurgitation of undigested food, respiratory complications and chest pain. Managing this condition can be difficult, particularly as treatment success declines in the long term. Currently, LES pressure is used to predict which patients would benefit from additional therapy (reducing the LES pressure to <10 mmHg has been reported to be a good predictor of long-term treatment success). However, Guy Boeckxstaens and colleagues have observed that some patients with achalasia have incomplete oesophageal emptying but low LES pressure. "We hypothesized that not LES pressure but rather EGJ distensibility determines oesophageal emptying in these patients," they explain.

To test their hypothesis, the researchers used a functional luminal imaging probe (EndoFLIP® Crospon, Carlsbad, CA) to measure the diameter of the oesophagus during distension in 15 healthy volunteers and 30 patients with achalasia. In patients with achalasia, LES pressure was also assessed by manometry, and oesophageal stasis was determined using a timed barium esophagogram—enabling a comparison between patients with treatment success and treatment failure. Furthermore, 7 of the 30 patients with achalasia were newly diagnosed, and measurements were taken before and after the initiation of treatment in these patients.

EGJ distensibility was reduced in untreated (newly diagnosed) patients and patients with treatment failure compared with healthy controls and patients with treatment success. Reduced EGJ distensibility was associated with impaired oesophageal emptying and recurrent symptoms, even when LES pressure was low.

"The most important finding is that LES pressure is not a good biomarker to predict clinical efficacy of treatment," says Boeckxstaens. "By contrast, oesophageal emptying and oesophageal distensibility are much more capable of predicting which patients will present with recurrent symptoms." A timed barium esophagogram is probably most practical in daily clinical practice, as measuring EGJ distensibility with functional luminal imaging is invasive and requires a high level of expertise.

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