

Literature review

Synopsis of clinical publications involving the Endoflip™ impedance planimetry system



Study objective/ patient selection

- Known or suspected achalasia (32.9%)
- Dysphagia with connective tissue disease (13.7%)
- Eosinophilic esophagitis (12.3%)
- Dysphagia with prior fundoplication (9.6%)
- Other (31.5%)

Ahuja NK, et al. Esophageal distensibility measurement: impact on clinical management and procedure length. *Dis Esophagus*. 2017 Aug 1;30(8):1-8. doi: 10.1093/dote/dox038

Motility assessment on patients presenting with dysphagia

Carlson DA, et al. Evaluation of esophageal motility utilizing the functional lumen imaging probe. *Am J Gastroenterol*. 2016 Dec; 111(12):1726-1735. doi: 10.1038/ajg.2016.454. Epub 2016 Oct 11.

Esophageal contractility evaluation in patients with achalasia

Hirano I, et al. Functional lumen imaging probe for the management of esophageal disorders: expert review from the clinical practice updates committee of the AGA institute. *Clin Gastroenterol Hepatol*. 2017 Mar;15(3):325-334. doi: 10.1016/j.cgh.2016.10.022

How Endoflip™ impedance planimetry system was used in study

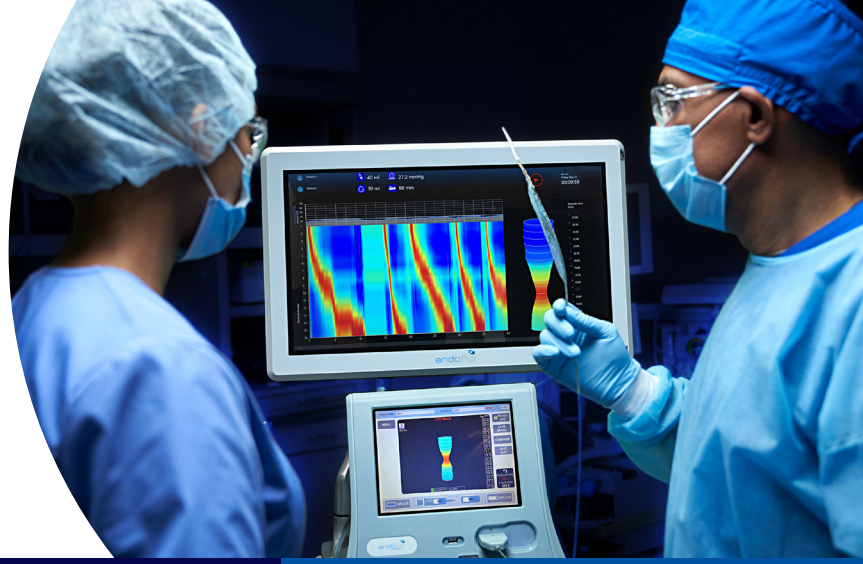
<6 min added procedural time with Endoflip™ impedance planimetry system

Endoflip™ 2.0 impedance planimetry system procedure with Flip™ topography

Endoflip™ 2.0 impedance planimetry system procedure with Flip™ topography

Clinical impact

- Test results independently led to a change in management in 39.7% of cases, and supported a change in management in an additional 20.5% of cases
- Most common change in management was a new or amended therapeutic procedure (79.5%)
- 95% correlation between Flip™ topography and high resolution manometry findings for major motility disorders
- Flip™ topography provides a well-tolerated method for esophageal motility assessment during upper endoscopy
- Flip™ topography provides an alternative and complementary method to HRM for evaluation of non-obstructive dysphagia
- Flip™ topography provides a visual representation of esophageal motor activity and identifies three distinct subtype patterns in achalasia patients



Literature review

Synopsis of clinical publications involving the Endoflip™ impedance planimetry system

Study objective/ patient selection

Assessment of the severity of symptoms of patients with eosinophilic esophagitis (EoE), calculating the distensibility plateau based on the narrowest diameter measurement

Hirano I, et al. Functional lumen imaging probe for the management of esophageal disorders: expert review from the clinical practice updates committee of the AGA institute. Clin Gastroenterol Hepatol. 2017 Mar;15(3):325-334. doi: 10.1016/j.cgh.2016.10.022

Esophagogastric junction (EGJ) distensibility measurements during pneumatic dilatation for idiopathic achalasia

Wu PJ, et al. Novel intra-procedural distensibility measurement accurately predicts immediate outcome of pneumatic dilatation for idiopathic achalasia. Am J Gastroenterol. 2018 Feb;113(2):205-212. doi: 10.1038/agj.2017.411 Epub 2017 Dec 5.

EGJ distensibility assessment in patients undergoing Heller myotomy and anti-reflux surgery

Perretta S, Dallemagne B, McMahon B, et al. Video. Improving functional esophageal surgery with a "smart" bougie: Endoflip. Surg Endosc 2011;25:3109.

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How Endoflip™ impedance planimetry system was used in study

Esophageal distensibility measurements with Endoflip™ impedance planimetry system

EGJ distensibility measurements with Endoflip™ impedance planimetry system

EGJ distensibility measurements with Endoflip™ impedance planimetry system

Clinical impact

- Endoflip™ provides an objective and accurate measurement of esophageal narrowing, and mechanical properties of the esophageal body in patients with EoE
- Endoflip™ appears to be uniquely suited to assess the mechanical properties of the esophageal wall in EoE
- Change in EGJ distensibility index measured with the Endoflip™ impedance planimetry system, accurately predicts immediate clinical response to pneumatic dilatation in achalasia
- This technique may help defining dilator size during endoscopy
- The Endoflip™ impedance planimetry system provides a system in which physiology and anatomy are represented dynamically realtime in the same image.
- "This smart bougie could be integrated into the surgical routine to improve outcomes of esophageal functional surgery"