TIF or concomitant TIF: the pros, the cons, & techniques

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TIF (Transoral Incisionless Fundoplication

- History: VM origins, 2006 CE certification, 2007 FDA approval
- Concept: Creating an intusseption vs a fundoplication to increase GEJ tone. Also to be done fully endoscopically
- Solution: Esophyx 1.0 (2005), Esophyx 2.0 (2010), New Device 2018. 35,000 procedures to date

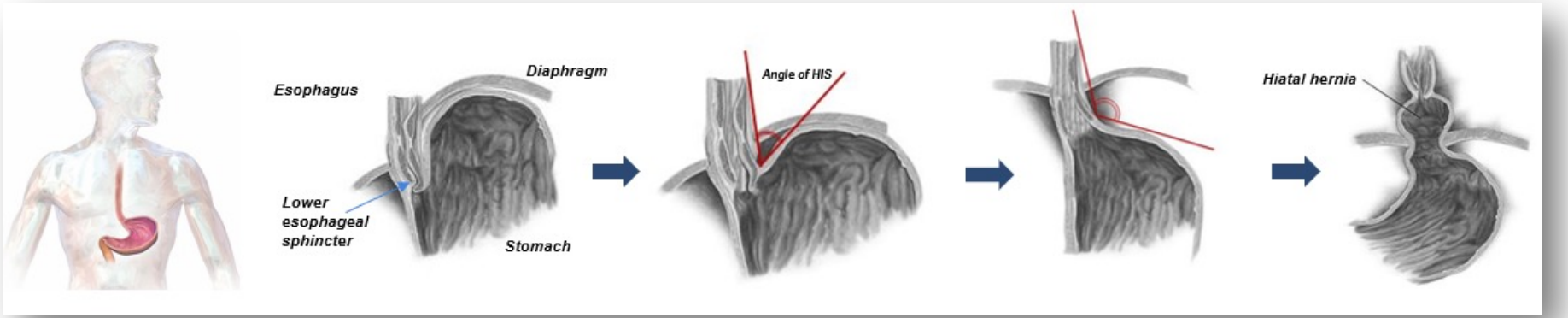
Concomitant-TIF

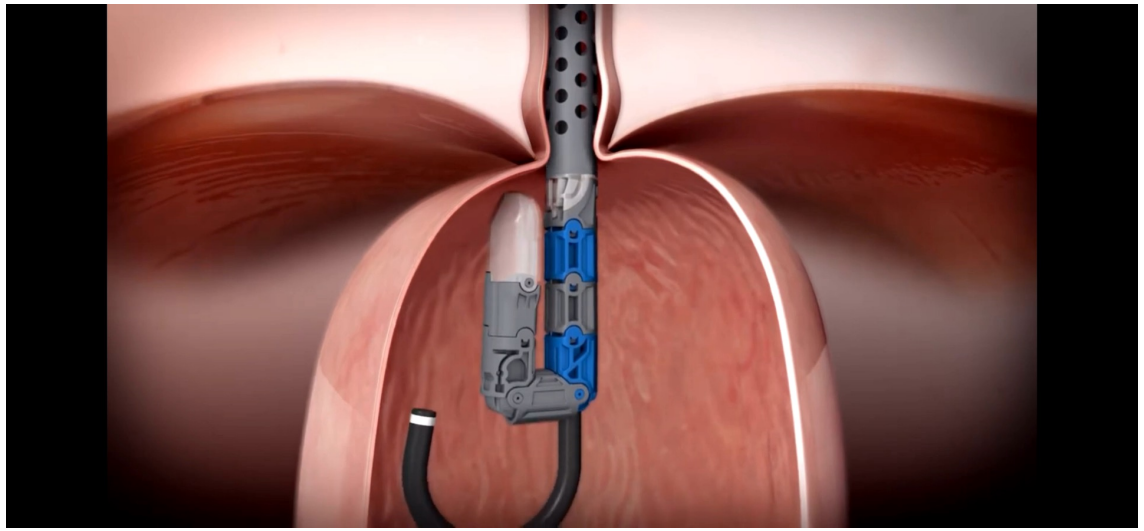
- Collaboration between specialties (GI believes in the procedure, brings the patient to a surgeon)
- Indications (the company states that a TIF can still be done with a HH<2cm)

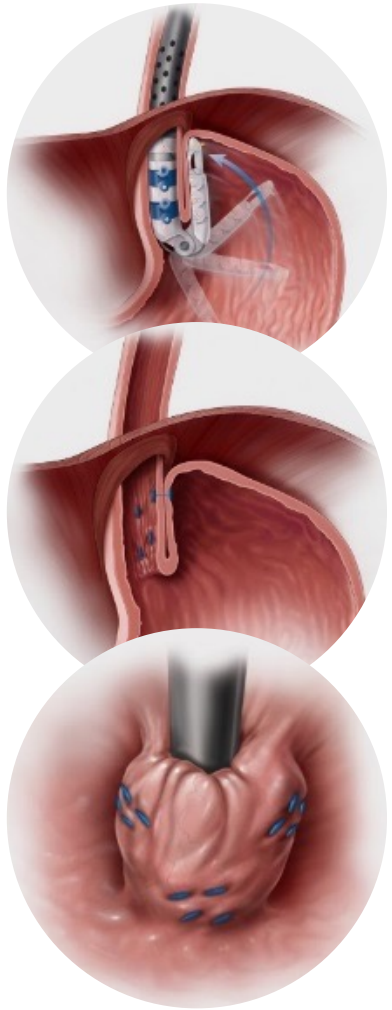
Concomitant TIF

- Criteria (manometry, UGI, EGD evidence)
- 80-90% of performed concomitantly

Technique







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Review Article

American Foregut Society White Paper on Transoral Incisionless Fundoplication

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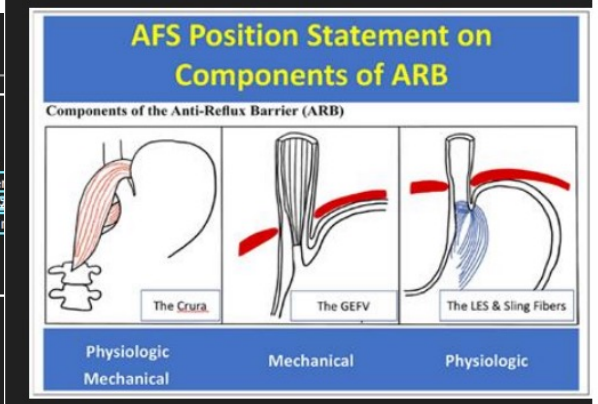
The American Foregut Society Clinical Practice Committee TIF Working Group Olaya I. Brewer Gutierrez[1*], David Choi[2*], Reza Hejazi[3*], Salih Samo[3*], Michael N. Tran[4*], Kenneth J. Chang[4], Glenn Ihde[5], Reginald Bell[6], and Ninh T. Nguyen[4]

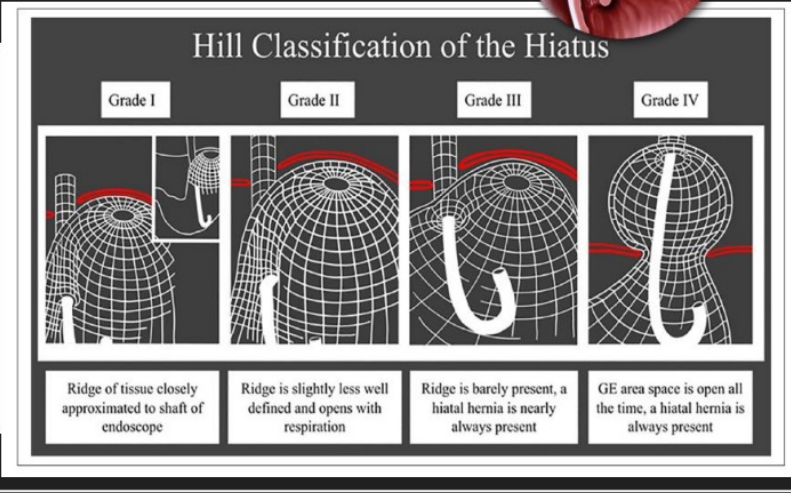
Abstract

Gastroesophageal reflux disease (GERD) is a chronic disease on a spectrum that has an array of mar options ranging from lifestyle changes, acid suppressive therapy to laparoscopic anti-reflux surgery (LARS). T incisionless fundoplication (TIF) is an endoscopic procedure in the management of GERD that re-establi augments the gastroesophageal flap valve (GEFV). TIF is appropriate for patients that do not have a hiat greater than 2 cm. Patients with a hiatal hernia greater than 2 cm have the option to have either a conventio (laparoscopic hiatal hernia repair with complete or partial fundoplication) or a concomitant laparoscopic hia repair with TIF, known as concomitant TIF (cTIF). This white paper summarizes the published outcome dat 2.0 and cTIF to date and outline the best practice approaches including patient assessment, selection, and mar for TIF and cTIF.

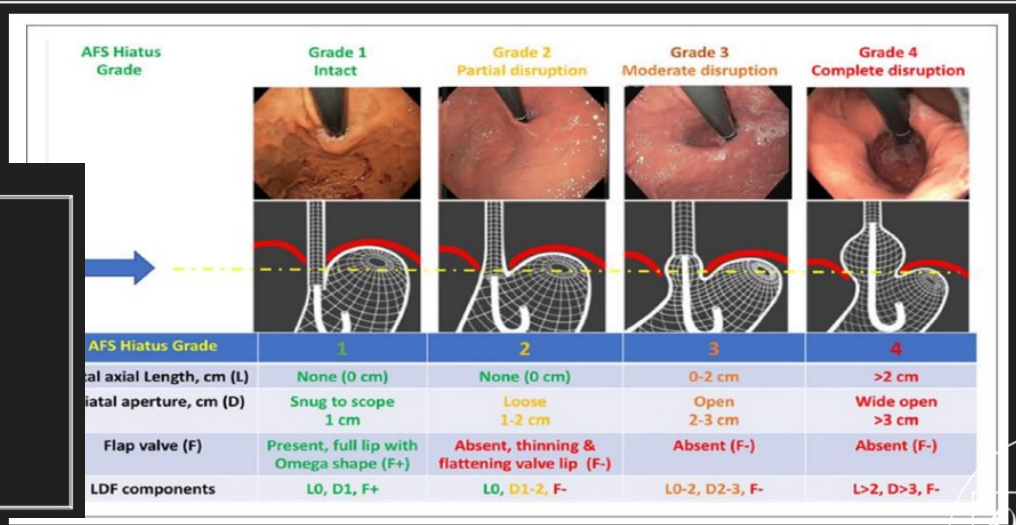
Keywords

gastroesophageal flap valve, gastroesophageal reflux disease, transoral incisionless fundoplication

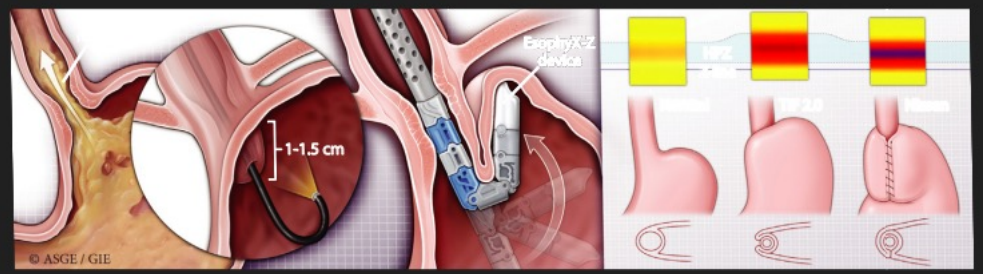




	Hill Classification	AFS Classification
Emphasis	The flap valve	The flap valve and degree of hiatal disruption
Endoscopic methodology	N/A	Maximal insufflation for 30-45 s Retroflex provocative maneuvers
Nomenclature	N/A	Basic endoscopic nomenclature of the EGJ provided
Grade	Grade 1, 2, 3, and 4	Grade 1, 2, 3 and 4
Flap valve	Normal (grade 1 & 2) Abnormal (grade 3 & 4)	Presence (F+) in grade 1 Absence (F–) in grades 2, 3, and 4
Hiatal disruption	Cursory: Occasionally (grade 1 & 2) Nearly always (grade 3) Always present (grade 4)	Objective criteria based on: Axial length (L) Crural defect in scope diameter (D)



GRAPHICAL ABSTRACT



The ideal patient

- Age (patient self selection)
- Size of Hernia (axial displacement vs tension post repair)
- Prior surgery
- Tissue quality

Step 1-Hiatal Dissection

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Step 2-Cruroplasty

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Step 3-Setting up for the TIF

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Step 4-Posterior (endoscopic) Fundoplication

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Step 5-Anterior (endoscopic) Fundoplication

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Step 6-Middle anchors and Review of wrap

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Step 7-Additional Buttressing Sutures

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- Offer All ARS (TIF, LINX, All Fundos Toupet, Hill, Dor,)
- Customized to patient
- Post Bariatric Reflux Disease
- Benign & Malignant Foregut disease

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