Laparoscopic Repair of Hiatal Hernias
Benny Weksler, MD

Chief, Division of Thoracic Surgery
Eastridge-Cole Professor of Thoracic Oncology
University of Tennessee Health Science Center
Memphis TN

bweksler@uthsc.edu
+1-901-448-2918
I have no financial relationships to disclose
Not all hiatal hernias are the same!
Patulous Cardia  Type I  Type II/III  Type IV

Adapted from Landreneau RD, lecture on Hiatal Hernia, 2008
Symptoms

- GERD/Regurgitation - 66%
- Chest or abdominal pain - 54%
- Dysphagia 43%
- Dyspnea - 42%
- Anemia - 41%
- Bloating - 31%
Indications for Surgery

- Symptomatic patients
- Role for prophylactic repair?
  - Older studies suggested 24%-30% incidence of complications (Skinner 1967, Hill 1968)
  - More recent studies suggest complication rate of 1%/year
Operative Steps

Figure: copyright University of Pittsburgh Medical Center
Reduction of the Hernia Sac

• Video
Dissection of the sac and esophageal mobilization

- Video
Short gastric vessels and Left Crux

- Video
To Wrap or not to Wrap?

- Recognizing short esophagus
- Symptoms
- Older patients requiring Collis gastropalsty
I Do Not Wrap:

• Patients without GERD or regurgitation

• Older patients with short esophagus
Gastropexy:
Requires full esophageal mobilization!
Gastropexy

- Video
Traditional Wrap

- Dissection of the gastroesophageal fat pad
- Nissen or Tupet fundoplication
Wrap

- Video
Cruroplasty:
Mesh or no Mesh?
Hernia recurrence with mesh - 9%

Hernia recurrence with primary repair - 24%

Oelschlager et al, Annal of Surg 2006, 244:481-490
Biologic Prosthesis to Prevent Recurrence after Laparoscopic Paraesophageal Hernia Repair: Long-term Follow-up from a Multicenter, Prospective, Randomized Trial

Hernia recurrence with mesh - 54%

Hernia recurrence with primary repair - 59%

Oelschlager, J Am Coll Surg 2011, 214:461-468
Use of Mesh

- Cruroplasty under tension
- No crural integrity ("beaten up crux")
Crural Closure

- Video
Results
• Gold standard

• Median follow-up 72 months

• 2.1% (2/94) patients required re-operation for recurrence

• 92.5% (87/94) patients with good or excellent results

Outcomes after a decade of laparoscopic giant paraesophageal hernia repair

- Median follow-up 30 months
- 3.2% of patients required re-operation for recurrence
- 89% of patients with symptomatic relief
- 15.7% of radiologic recurrence

Luketich et al, JTCVS 2010, 139:395-404
Conclusions

- Laparoscopic repair of paraesophageal hernia can be performed safely and with good results.

- Operative experience and attention to dissection of the sac, esophageal mobilization, and maintenance of crural integrity are determinants of good surgical outcomes.
Thank You!