

The Persistent Challenge of Hiatal Hernia Repair

High Stakes at the Hiatus: Why Good Repairs Go South

Shaun Daly, MD, FACS | March 27th, 2026

UCI Health
Digestive Health Institute

UCI Health

Objectives

The Anti-reflux Mechanism

Crural Tension

Short Esophagus

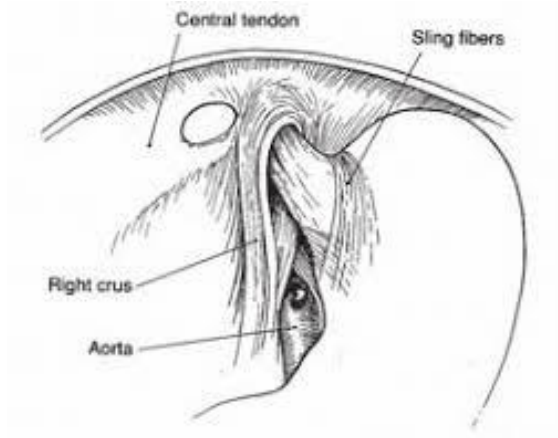
Mesh

The Vagus Nerve

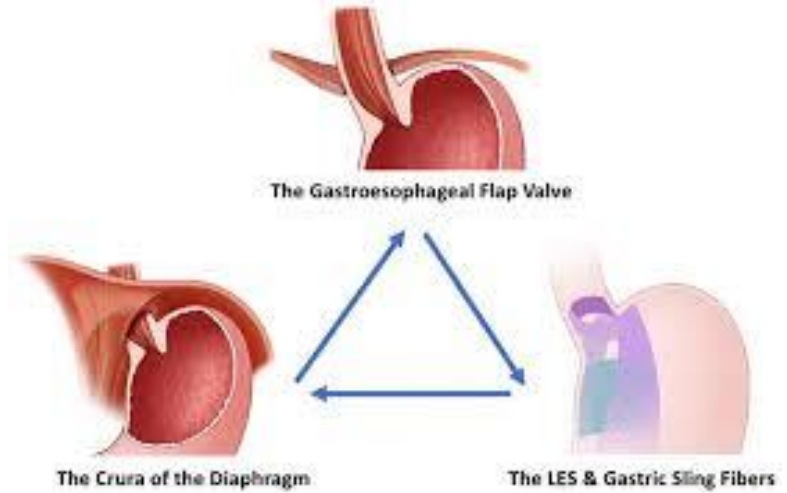
Redo Operations

No Disclosures

The Anatomy of the Problem

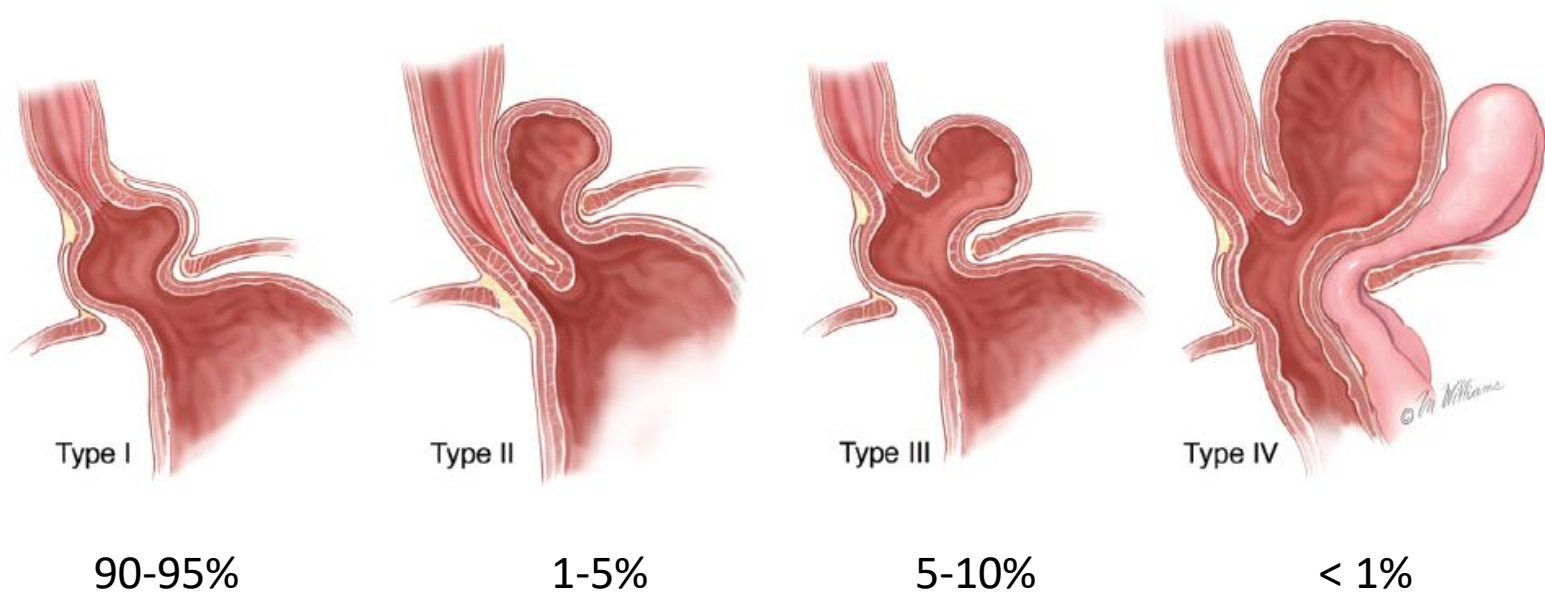


Crural Anatomy

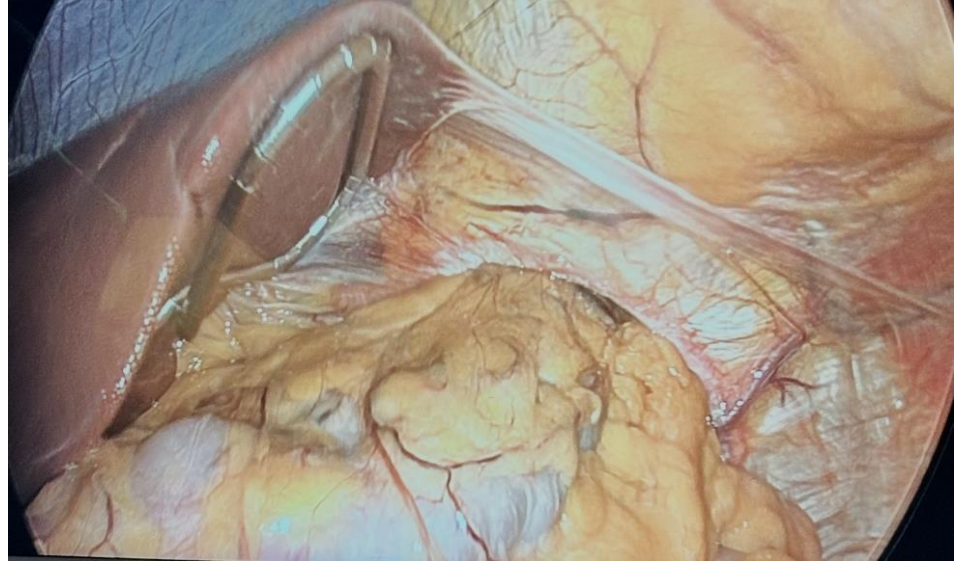
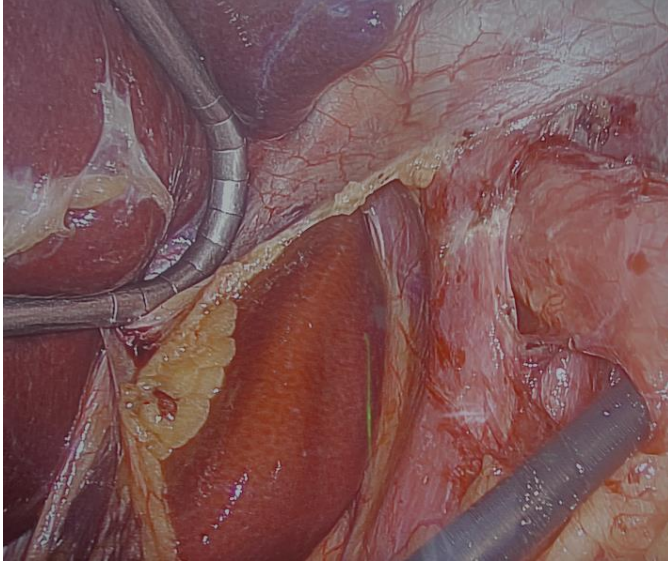


Anti-Reflux Barrier

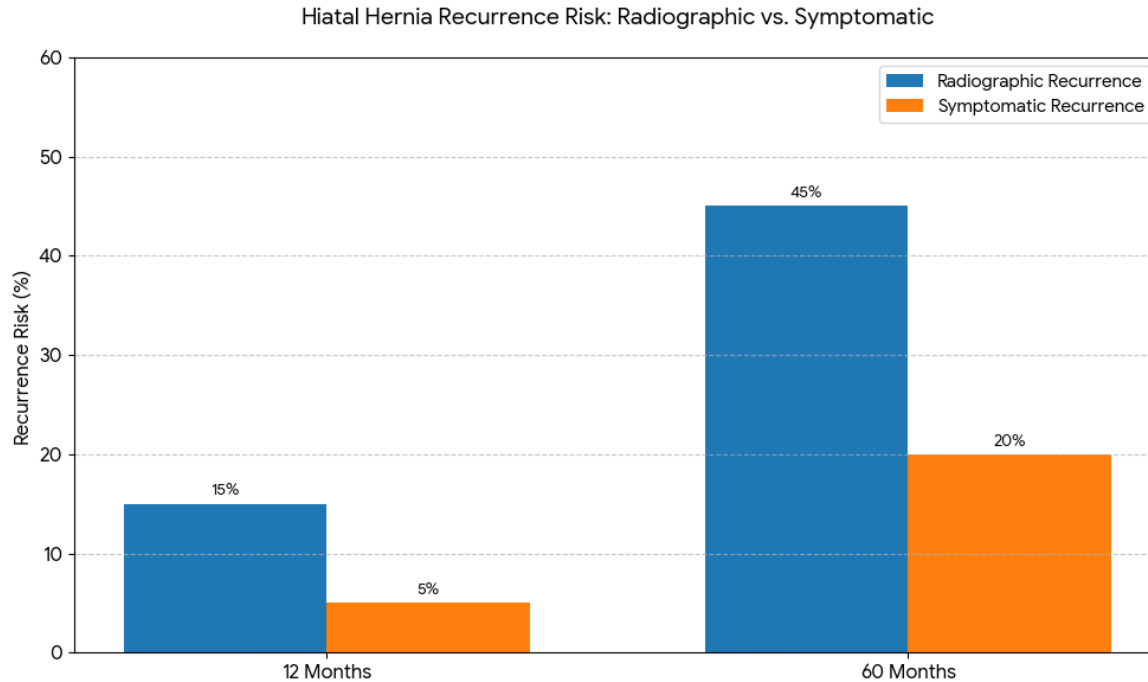
When One Hernia is Not Like the Other



When One Hernia is Not Like the Other

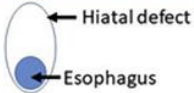
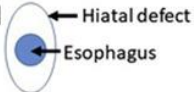
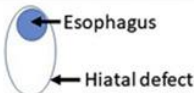


Elephant in the Room: Recurrence



Elephant in the Room: Recurrence ... or Progression

Anatomic Observations of Recurrent Hiatal Hernia: Recurrence or Disease Progression?

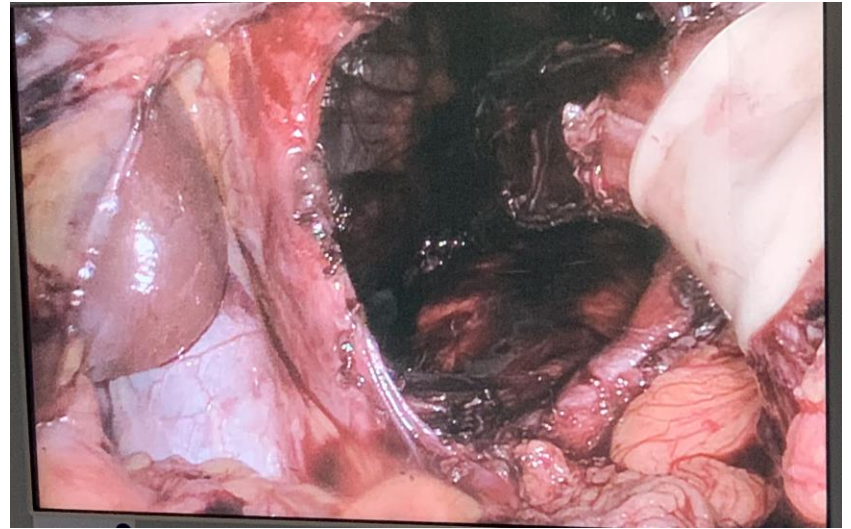
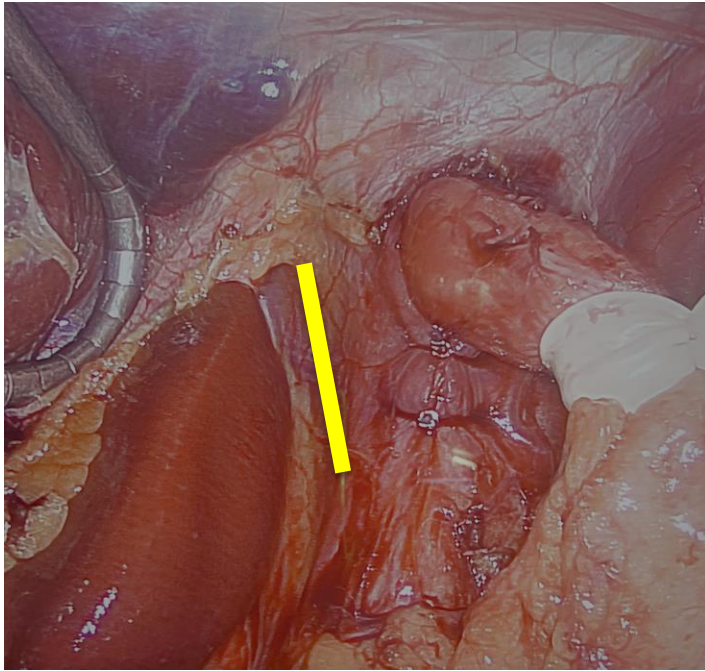
Recurrence location (relative to esophagus)	Percentage	Median time to recurrence from index repair	Mechanism of recurrence
Anterior 	67%	3.25 years	Progression of hiatal widening
Circumferential 	21%	2.75 years	Combination of both progression & suture failure
Posterior 	12%	1.5 years	Suture failure of posterior crural approximation

N=108 patients operated on for recurrence of hiatal hernia

Saad et al. J Am Coll Surg, June 2020



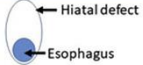
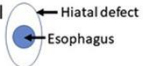
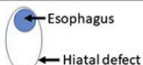
Crural Tension: The Enemy of Healing



Relaxing Incisions

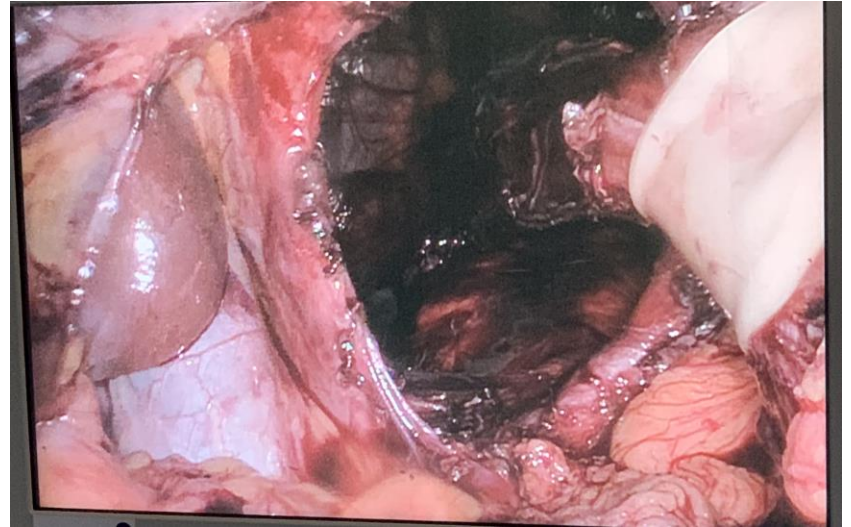
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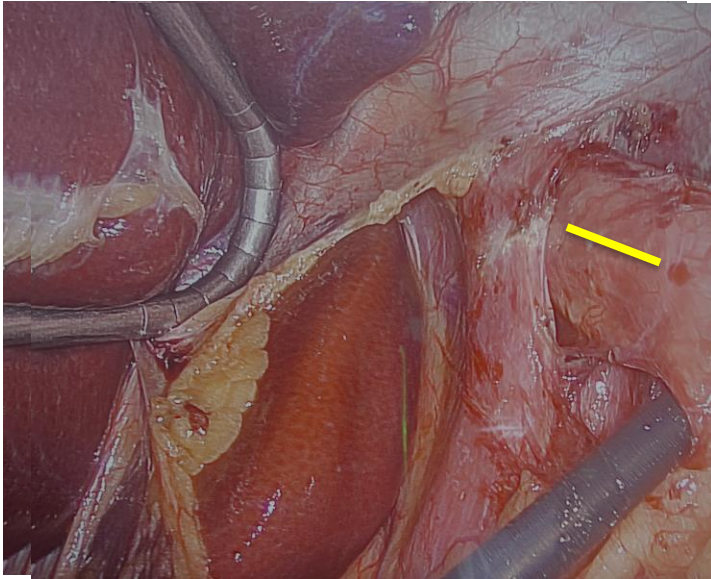
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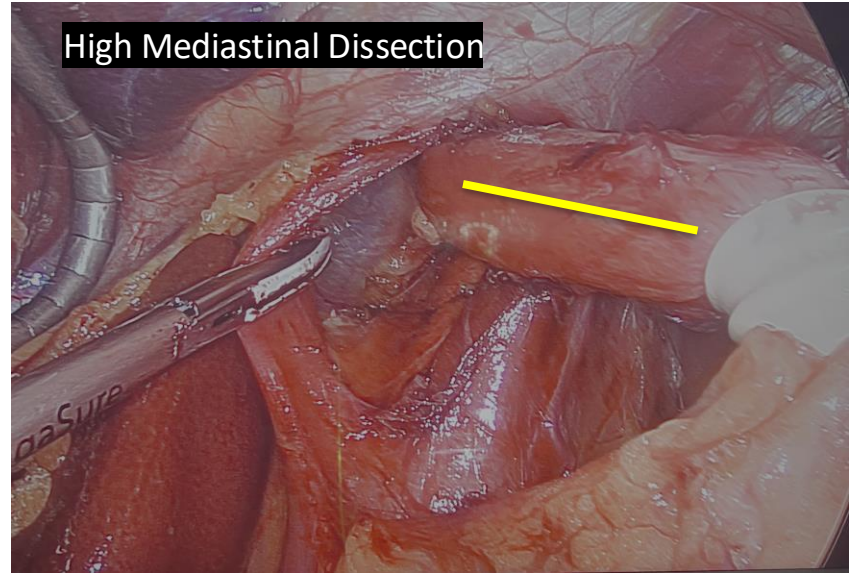


Tension = True Recurrences (Early)

Short Esophagus: Find Length When it Matters Most

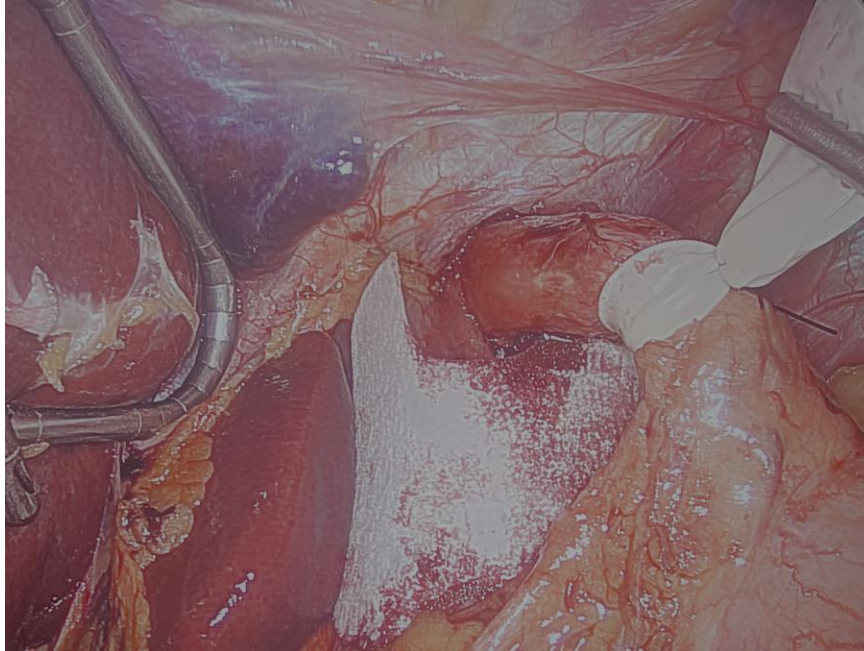


2 cm Intra-Abd Length







4 cm Intra-Abd Length

Mesh: The Great Debate



SAGES Guideline for the Surgical Treatment of Hiatal Hernia (Types II, III, and IV)

MESH ?	ASYMPTOMATIC HH — REPAIR VS SURVEILLANCE	FUNDOPLICATION ?	RECURRENCE — REDO VS. RYGB
			
Cannot make an evidence-based recommendation	Expert opinion:	Recommend fundoplication:	Expert opinion:
✓ Equivocal benefits and risks ✓ Shared decision-making	✓ Shared decision-making ✓ Objective reflux in asymptomatic patient may warrant repair ✓ No data on asymptomatic patients	✓ Large benefit > small harm ✓ Low certainty of evidence	✓ Consider convert to RYGB if: - multiple failed attempts - severe dysmotility - short esophagus - type 2 diabetes

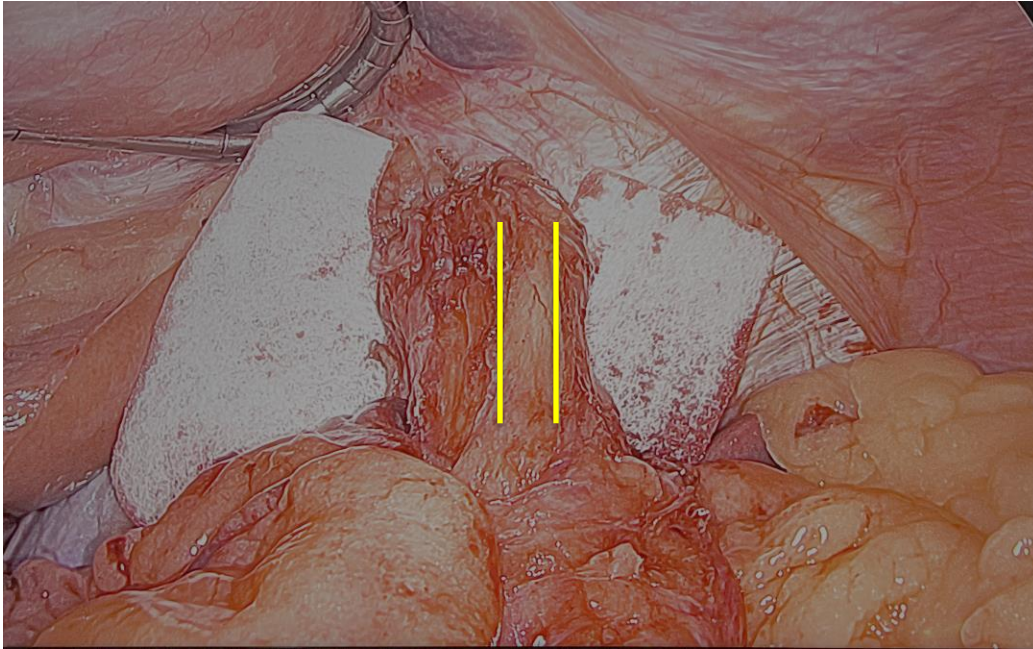


SAGES Guidelines Committee

Daly S, et al.
Surgical Endoscopy 2024
Visual Abstract by Hanna NM

Patient Risk Factors
Redo for Recurrences
Crural Integrity

Protect the Vagus: Precision Dissection Crucial



Gastroparesis (Varies Widely)

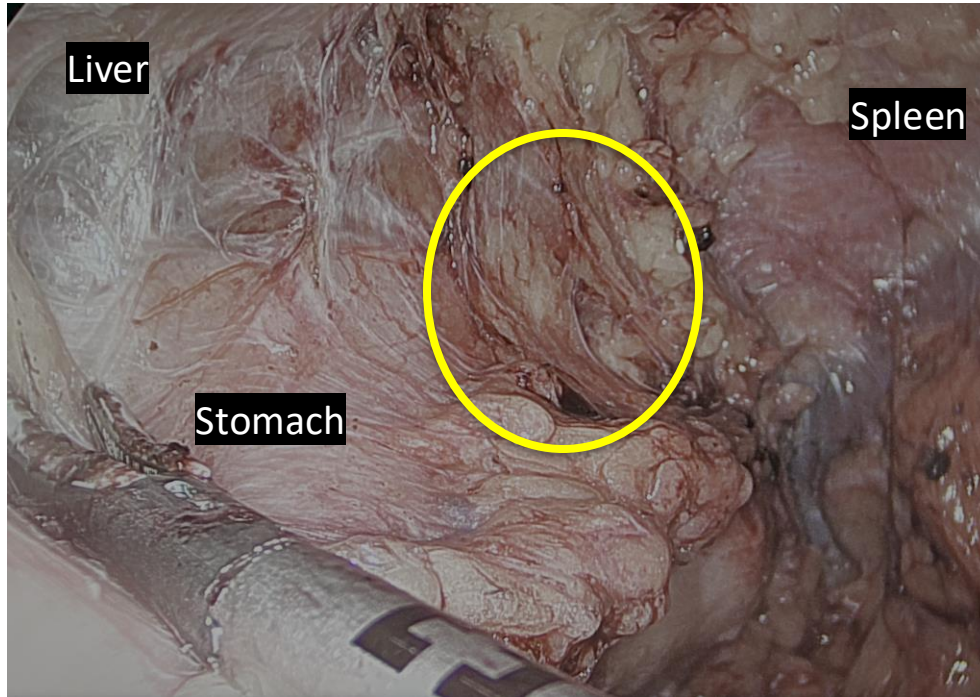
Post-Vagotomy Diarrhea (5-10%)

Gas-Bloat Syndrome (5-10%)

Anemia (0.5-2%)

B-12 and Iron





Revision Surgery: The “Redo” Minefield



Planes Lost

Injury Rate Increases (up 10%)

SAGES Guideline for the Surgical Treatment of Hiatal Hernia (Types II, III, and IV)

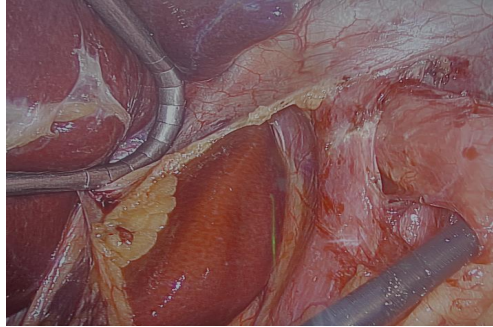
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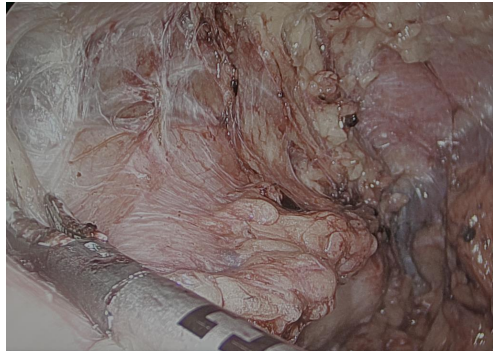
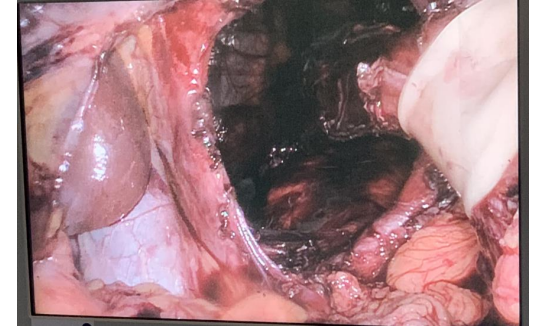
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Hiatal Hernia Repair is Like a Box a Chocolates...



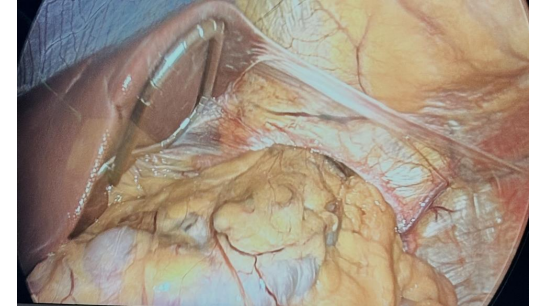
Tension Free
Relaxing Incision

Short Esophagus
High Dissection



Mesh
Risk Factors, Integrity

Save the Vagus!



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