

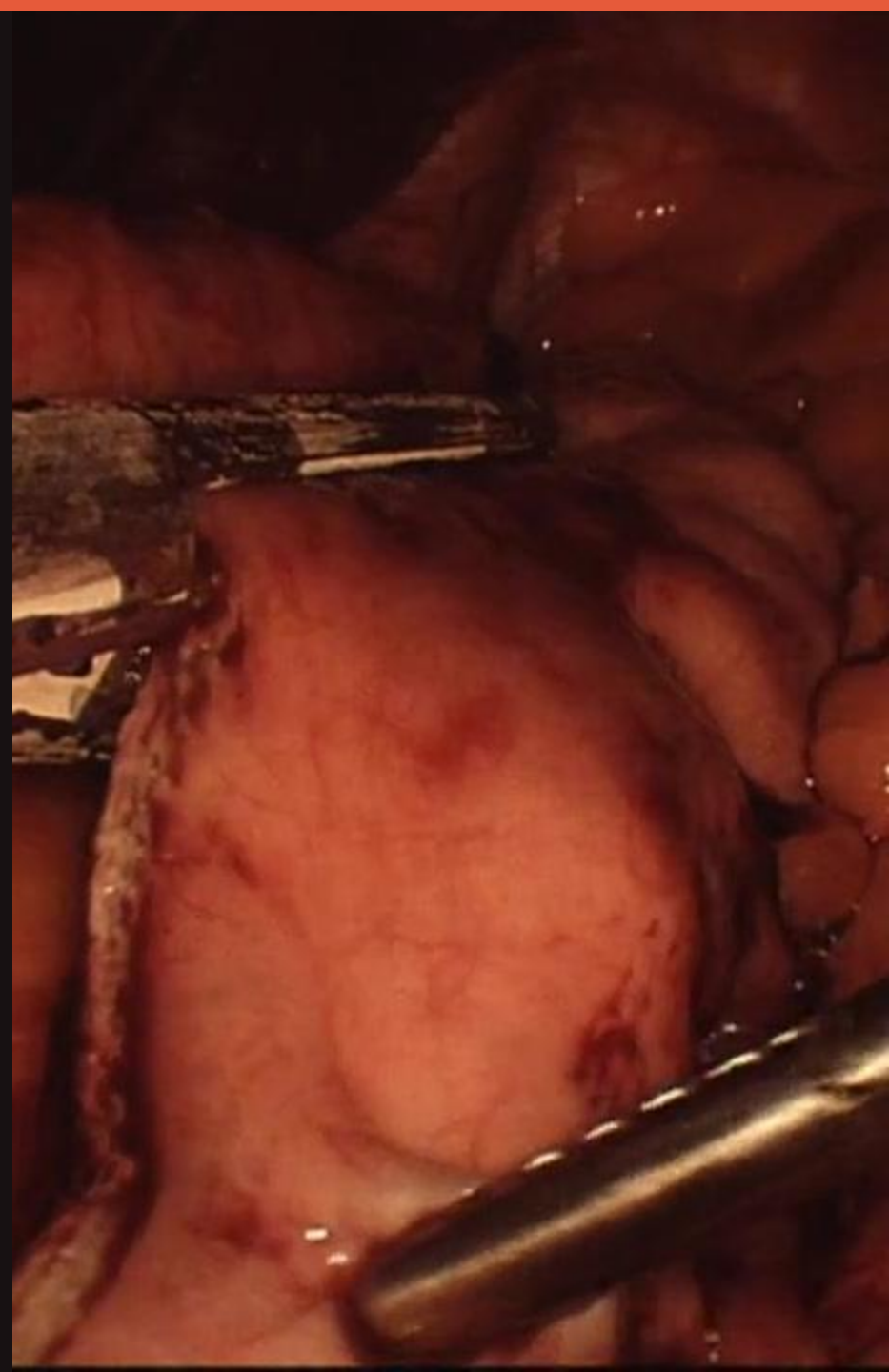
SEVEN COMPLICATIONS • ONE PATTERN • FIFTEEN MINUTES

What Has Happened Can Happen

Rare is not the same as impossible.
Seven operative moments that make you question
your life choices.

Lazar Klein

September 3, 2026 • De-identified • Audio removed



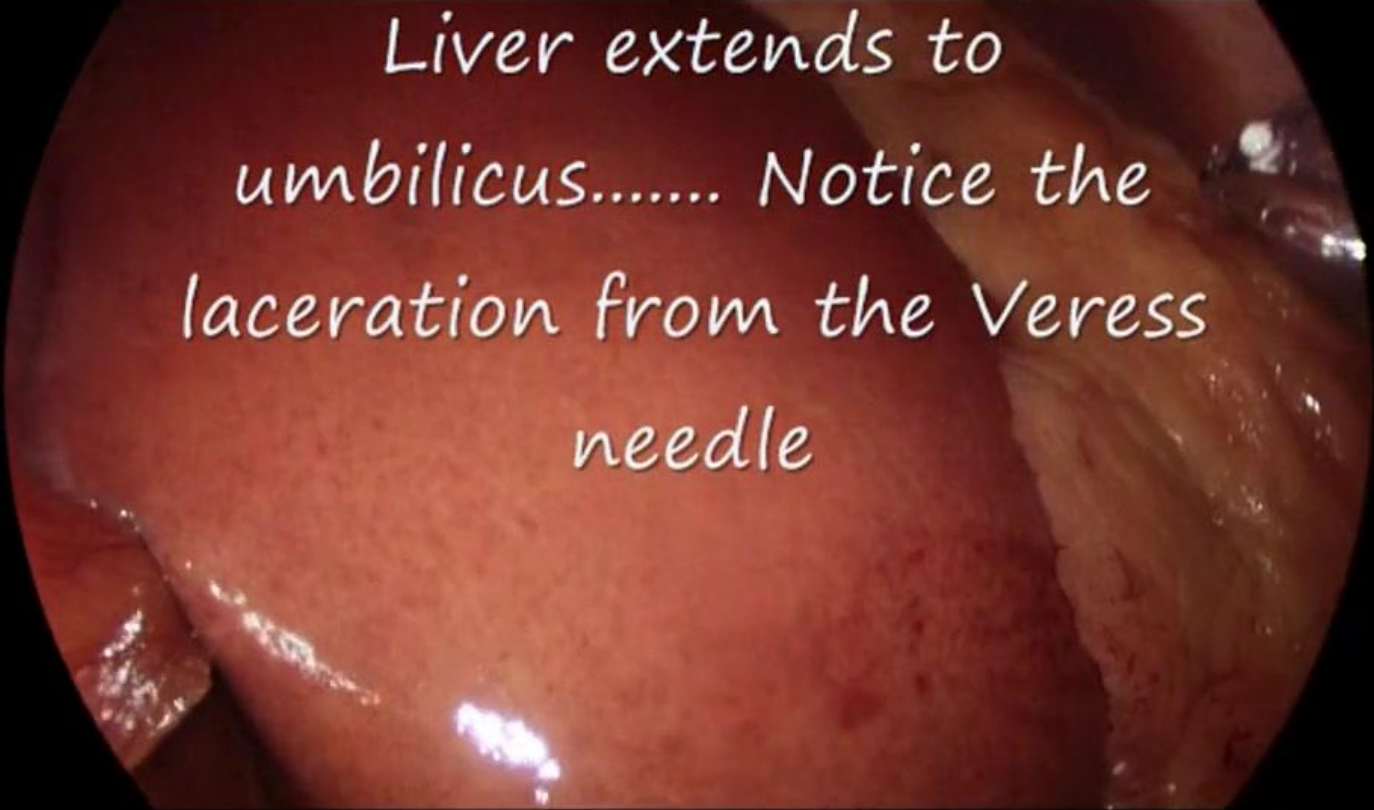
The liver that filled the field

Before the target is even visible—what changes your entry plan?

The complication began before the operative target was reached.

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Liver extends to
bilicus..... Notice the
ation from the Vere:
needle



Liver extends to
umbilicus..... Notice the
laceration from the Veress
needle

A laparoscopic view of a large, reddish-brown liver filling most of the surgical field. The liver's surface is smooth with some visible vessels. A small, dark, linear laceration is visible on the right side of the liver. The background is dark, indicating the abdominal cavity.

A large fatty liver is common. An operation-limiting liver is not.

~60%

steatosis in routine bariatric liver
biopsies

- NASH and fibrosis each appear in roughly 30% of biopsy series.
- The enlarged fatty left lobe is a leading obstacle to GE-junction exposure.
- The exposure problem clusters in high-risk anatomy: BMI >50, a bulky left lobe, and technically difficult cases.

Population-level rates of operation-limiting hepatomegaly remain poorly quantified.

Most liver shrinkage happens early.

5–20%

VLCD liver-volume reduction

12–27%

low-energy diet reduction

1–2 weeks

when most shrinkage occurs

- A six-week VLED produced 14.7% volume reduction and 43% liver-fat reduction.
- LED and VLED achieve similar short-term liver reduction; LED is often easier to tolerate.
- This early response supports typical 2–4 week protocols.

Better exposure is proven.

Fewer complications are not.

↓ **time**

shorter operations and hospital stays

- Surgeons consistently report improved exposure.
- No reliable reduction in perioperative complications has been demonstrated.
- Use aggressive programs selectively when anatomy or risk warrants it.

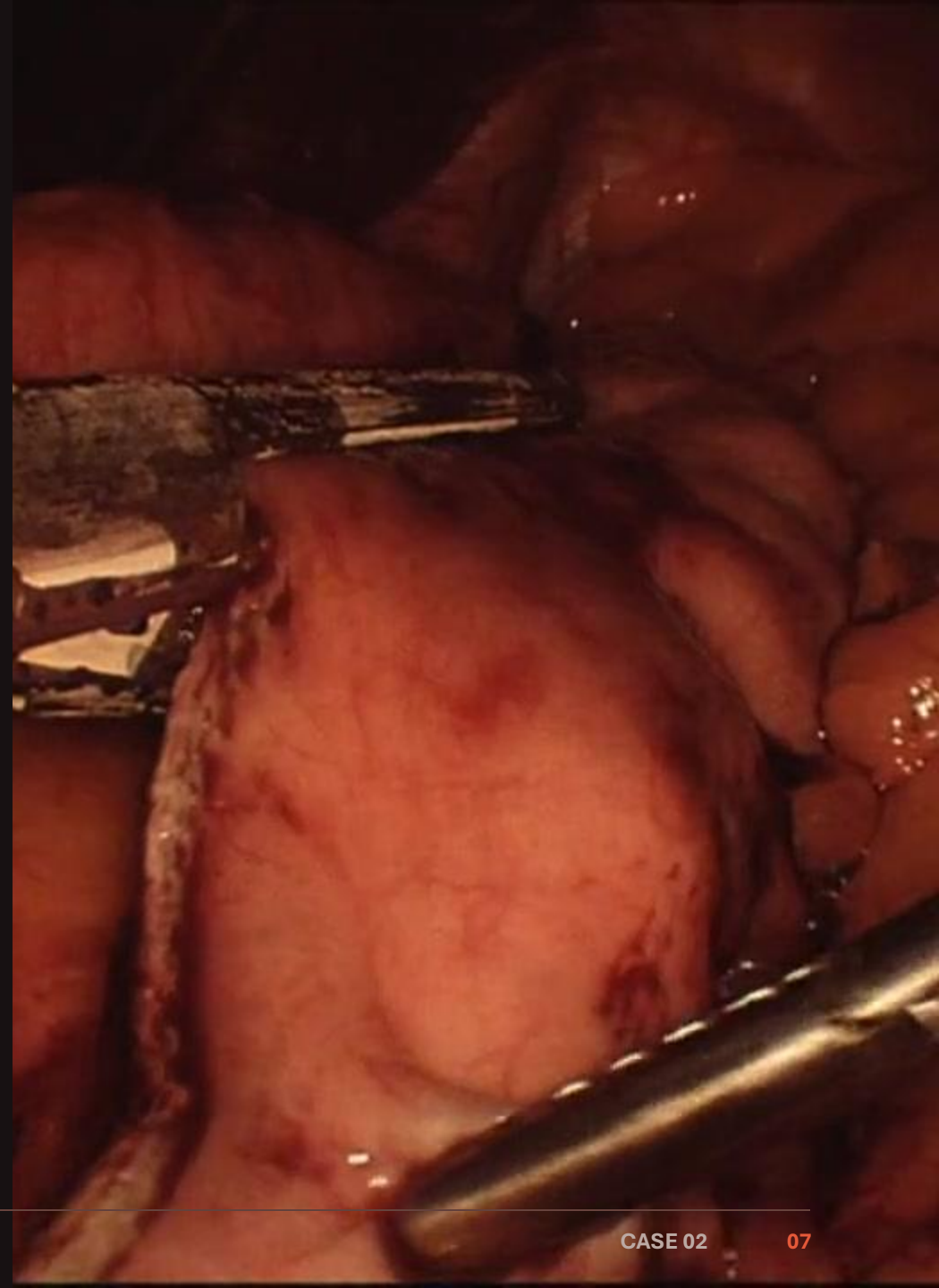
Few complications are not proven but no surgeon would stop using pre-operative liver reducing diets.

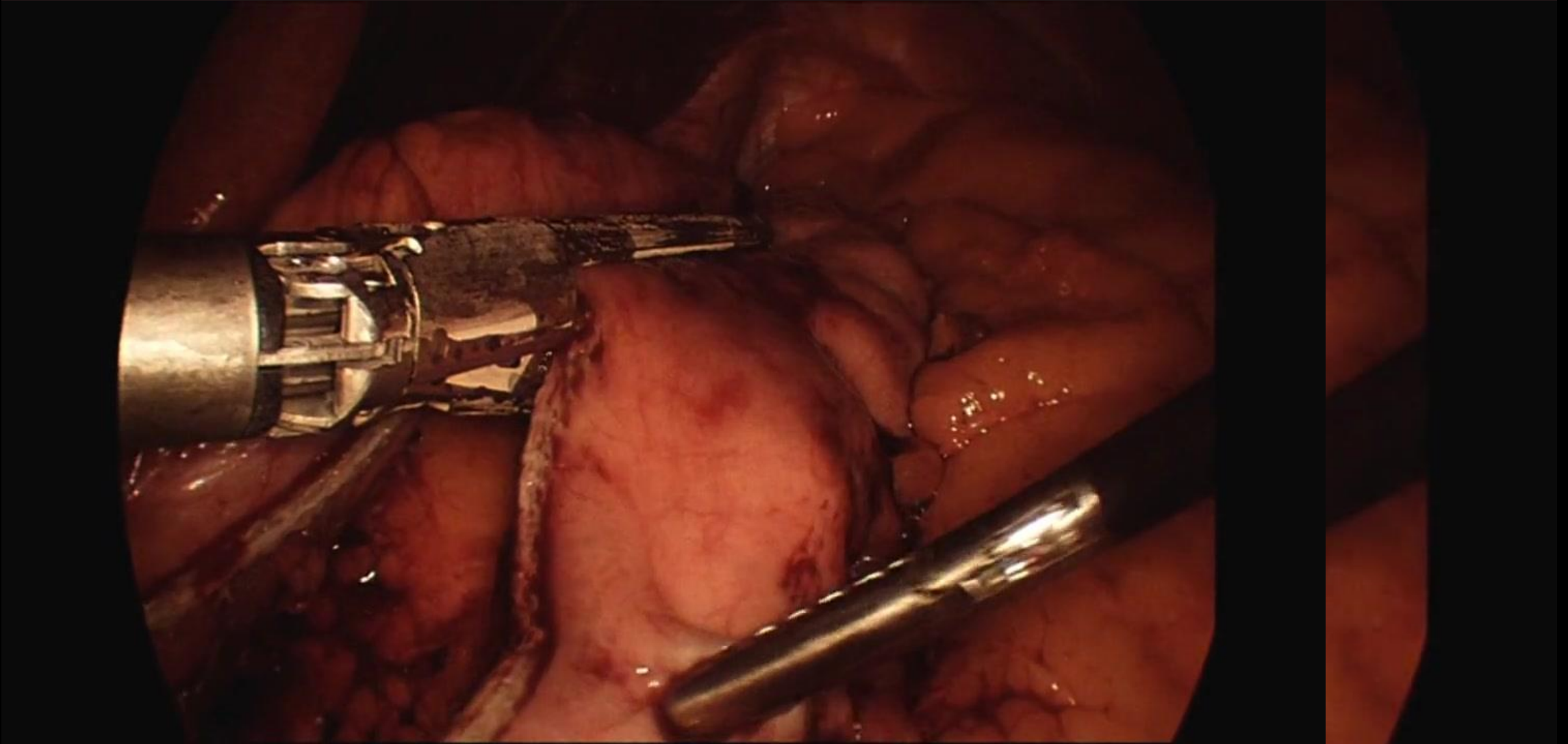
The tube that would not move

What signal tells you this is no longer a routine sleeve?

Watch the relationship between the stapler, the stomach, and the tube.

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Leak is feared.

Bleeding is more frequent.

0.9–2.4%

staple-line leak

1–6%

staple-line bleeding

89%

leaks near the proximal third

- Most leaks are diagnosed after discharge.
- Contemporary registries report lower leak rates than early series.
- Prior gastric surgery, smoking, and diabetes increase risk.

Rosenthal et al., Annals of Surgery 2012 · UK and Michigan bariatric registry reports

Tube entrapment is rare— and disproportionately dangerous.

0.32%

orogastric tube entrapment in 948
sleeve gastrectomies

- Published entrapment cases include OG/NG tubes, temperature probes, and bougies.
- Reported leak rates exceed 20% when entrapment occurs.
- Delayed recognition drives reoperation, conversion, and occasionally death.

Intraoperative recognition and immediate repair can prevent added morbidity.

Single-centre series and systematic review of intraluminal-device entrapment · Israeli multicentre survey

Prevention is choreography, not a gadget.

01	02	03	04
Communicate	Withdraw	Inspect	Stop
Anesthesia and surgeon confirm tube position.	Move every tube or probe clear of the transection line.	Confirm directly before every firing.	If trapped, stop firing and retrieve both segments before repair.

A mandatory removal-under-direct-inspection protocol reduced entrapment from 0.56% to zero in the subsequent 414 cases.

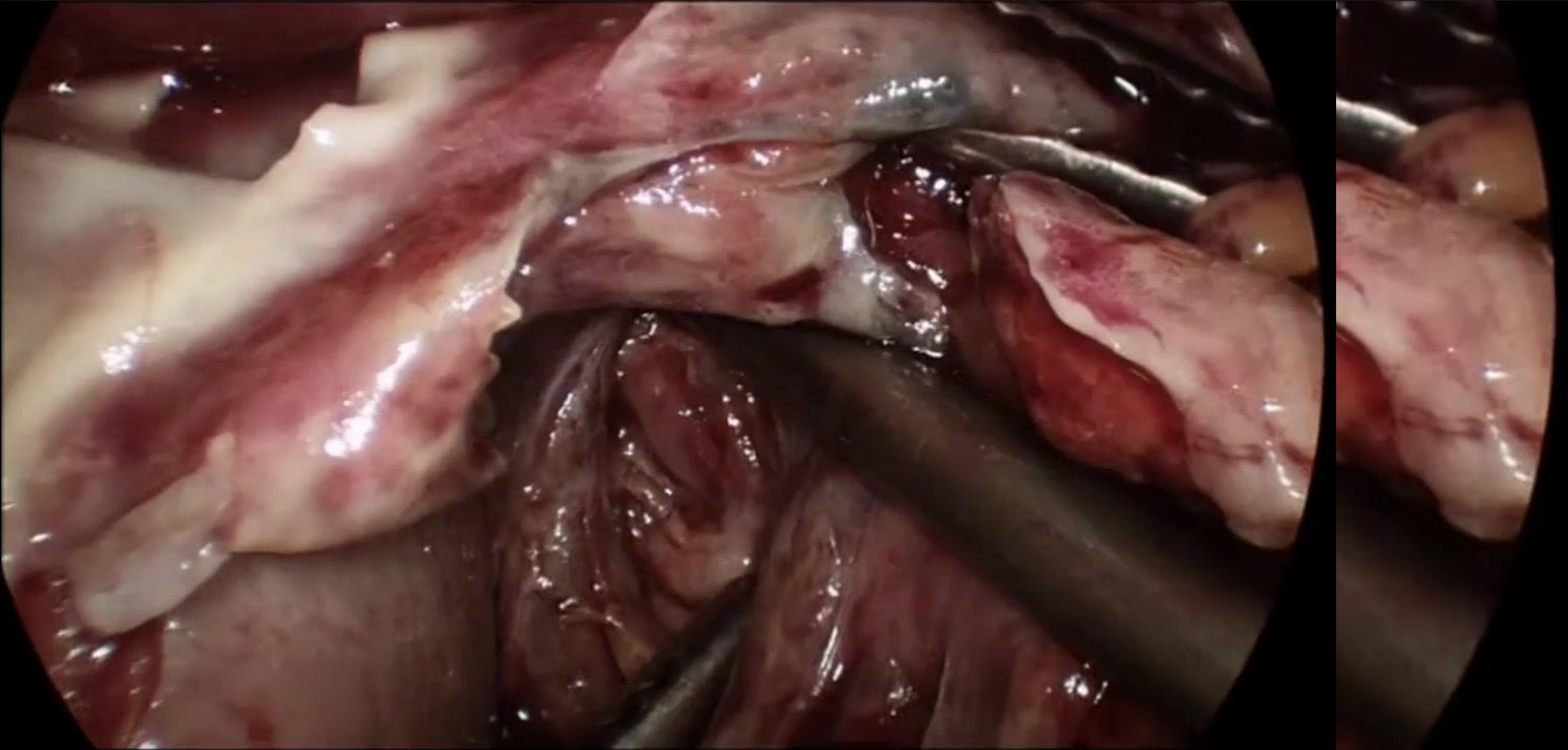
One hole—or two?

After identifying one esophageal injury, where does the search end?

The second injury changes the problem—and the repair.

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Acute esophageal perforation during banding is vanishingly rare.

No rate

reliable incidence has not been established

- A series of 1,000 LAGB patients reported gastric perforation in ~0.4% and no esophageal perforations.
- The usual mechanism is blind retroesophageal dissection behind the GE junction.
- The pars flaccida approach reduces risk compared with the perigastric approach.

Do not confuse acute perforation with delayed dysmotility, dilation, or erosion.

Stability and source control determine the next move.

01	02	03	04
Recognize	Control	Seal	Operate
High suspicion, CT or contrast study.	NPO, antibiotics, pleural and mediastinal drainage.	Covered stent in selected stable, contained leaks.	Do not delay repair if leak persists or the patient deteriorates.

Band removal is generally warranted: a foreign body beside a perforation compromises healing.

WSES guidelines for esophageal perforation · published LAGB perforation case reports

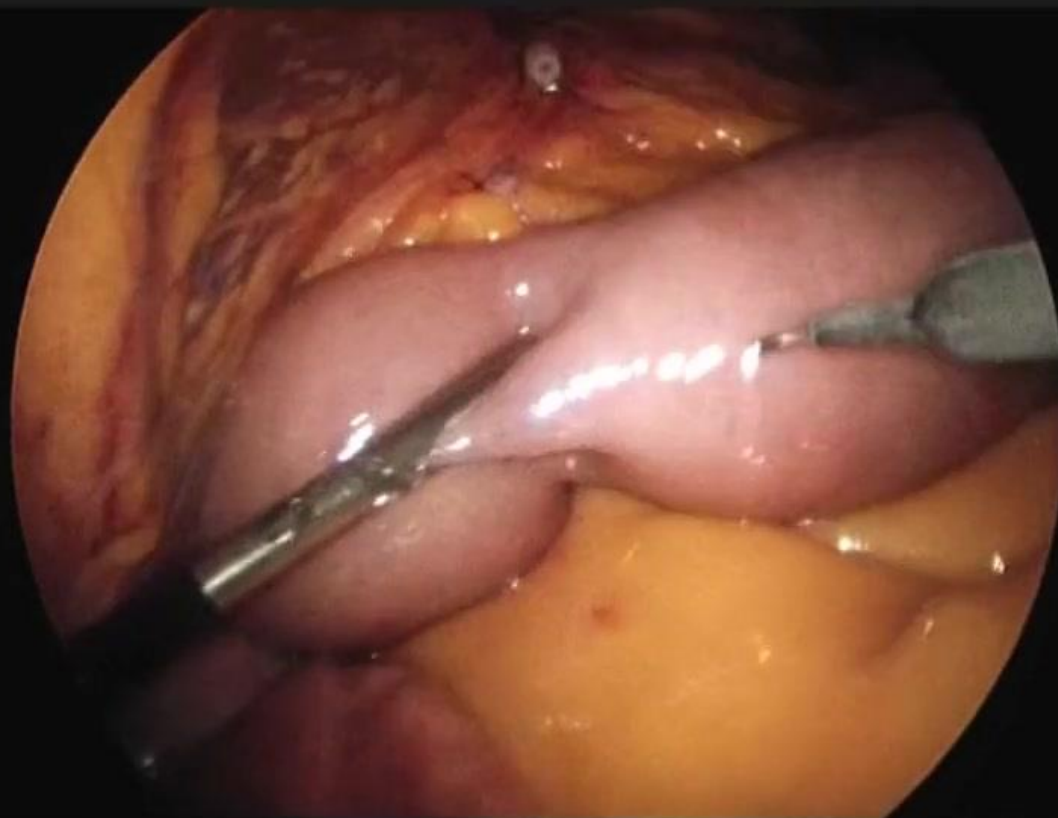
The band in the jejunum

Before repair, can you reconstruct how it arrived here?

The location is the finding. The mechanism is the lesson.

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Band erosion is uncommon, but risk accumulates with time.

1.46%

largest pooled estimate

1–4%

typical guideline range

18.5%

selected 15-year cohort

- Erosion and intragastric migration describe the same process.
- Rates fall with surgeon experience and the pars flaccida approach.
- Long follow-up detects events that short series miss.

Erosion is usually indolent. Jejunal migration is not.

Case reports

distal small-bowel migration has no
quantified rate

- Typical erosion presents with loss of satiety, weight regain, port infection—or no symptoms.
- A completely eroded band can travel distally and obstruct or perforate the jejunum or ileum.
- Band slippage is more common and can acutely cause strangulation and necrosis.

The location is the finding. Reconstructing the mechanism determines the repair.

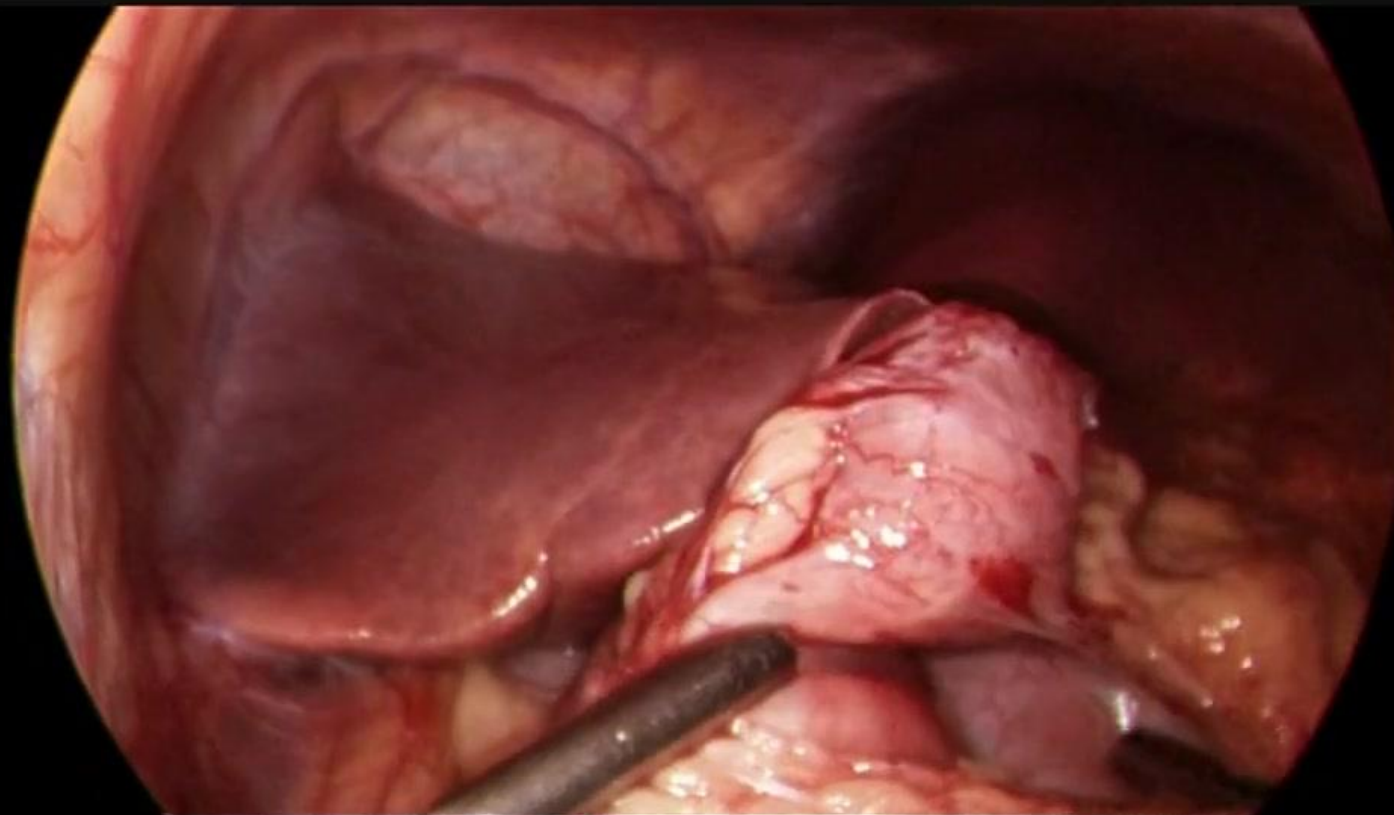
Petersen's space—with a twist

**If orientation is misleading, which
landmarks can you still trust?**

Malrotation turns familiar relationships into dangerous
assumptions.

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Malrotation is rare and usually a surprise.

~0.4%

encountered in bariatric series

23

patients in a 2019 review

17%

known preoperatively in a later review

- Asymptomatic patients rarely provide a preoperative clue.
- Discovery typically occurs at initial laparoscopic exploration.
- Pause before committing to bowel division.

Malrotation changes the map— not necessarily the operation.

- RYGB is feasible after systematic identification of the DJ junction and true proximal jejunum.
- An antecolic–antegastric Roux limb is generally favored.
- Sleeve avoids new mesenteric defects, but GERD remains a trade-off.
- Consider a Ladd procedure when bands, volvulus history, or a narrow pedicle warrant it.

Appendectomy is optional—not automatic. Consent and trocar position still matter.

The concern is plausible; the excess risk is unquantified.

RR 0.32

internal hernia with obstruction after
defect closure in normal-anatomy
RYGB trials

- Malrotation combines a narrow pedicle with incomplete fixation.
- RYGB adds Petersen and jejunojejunostomy defects.
- No study directly compares malrotated with normal anatomy.

Close every defect meticulously. Later obstruction deserves a low threshold for CT and exploration.

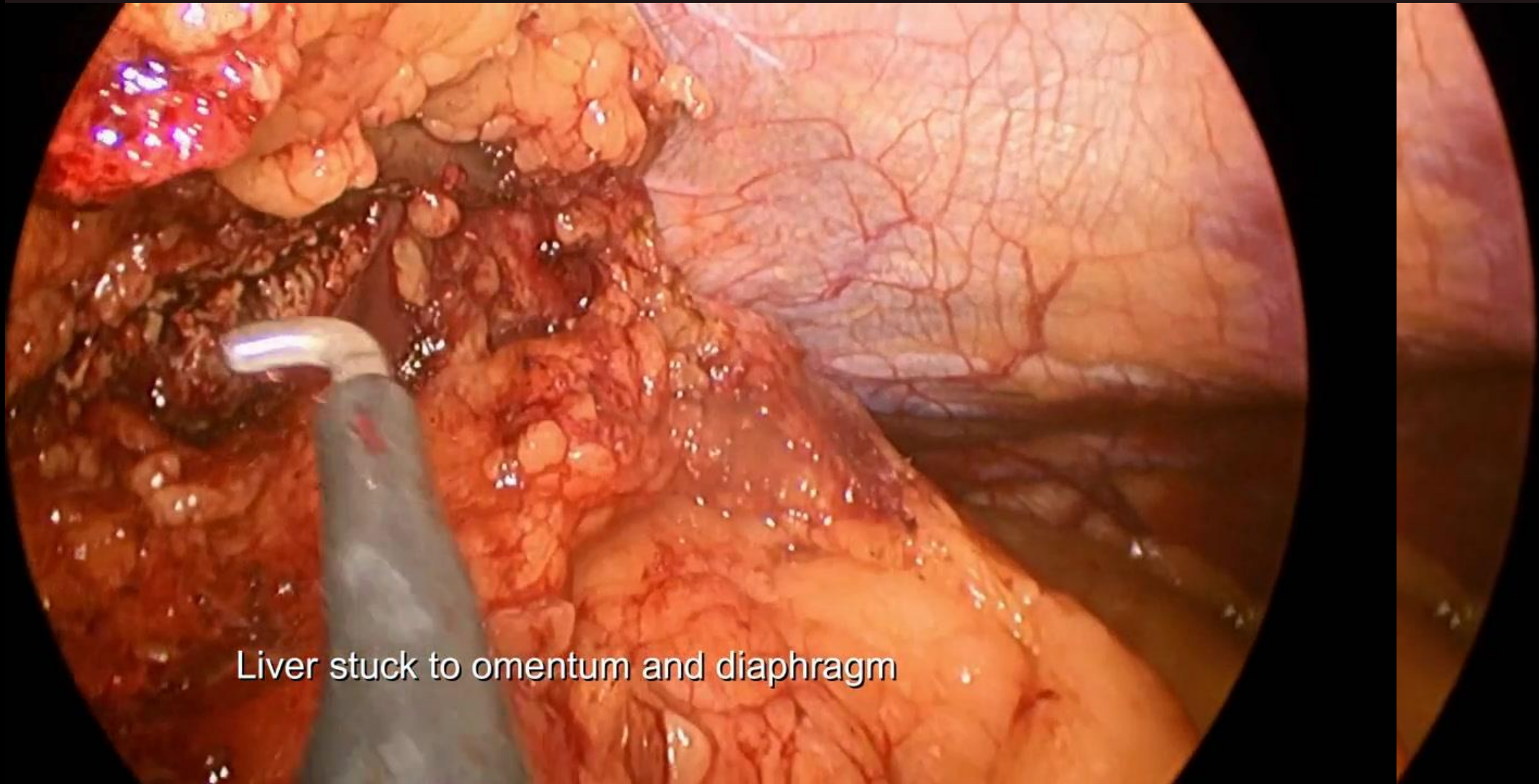
The pericardium is suddenly open

At what moment does a difficult dissection become the wrong plane?

The anatomy announces the error before the complication declares itself.

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omentum and diaphragm



Liver stuck to omentum and diaphragm

Too rare to measure. Too lethal to dismiss.

No rate

direct mechanical cardiac injury

5%

any LABS intraoperative event

30 → 10

published peri-hiatal tamponades → deaths

- Direct pericardial and myocardial injuries are almost entirely case reports.
- An intraoperative event nearly doubled 30-day major-complication risk in LABS.
- Case-report mortality signals severity and publication bias—not population risk.

At the ante-hiatal dome, millimetres matter.

23 / 30

graft-fixation related

13

helical-tack injuries

Higher

complexity in revisional surgery

- The pericardium may lie immediately across the diaphragm.
- Avoid fixation devices at the diaphragmatic dome anterior to the hiatus.
- If mesh is essential, use meticulous suturing.

Revisional fields add adhesions, distorted planes, and longer dissection.

Unexplained hypotension after hiatal work— think tamponade.

92%

persistent hypotension in reported tamponade cases

01

Suspect

Persistent hypotension or collapse.

02

Confirm

Immediate echo—TEE intraoperatively when available.

03

Decompress

Drain tamponade physiology.

04

Control

Remove the device and repair active myocardial injury.

Drainage relieves pressure. It does not neutralize an embedded tack, staple, or suture.

Çalikoğlu et al., Heliyon 2019 · Vidrio Duarte et al., Cureus 2020

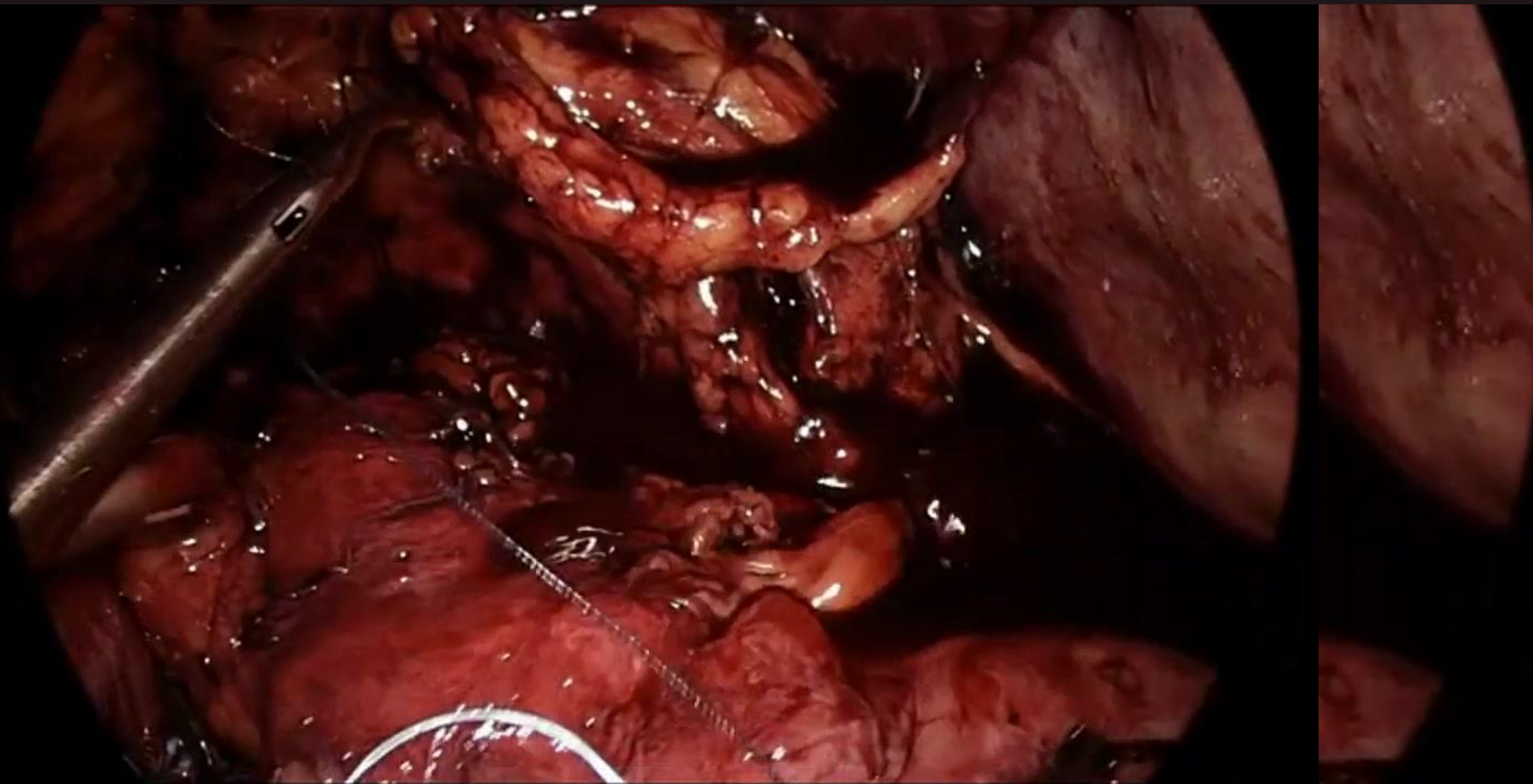
The gastro-colonic fistula

What must be understood—and controlled—before definitive repair?

Dissection, division, and reconstruction depend on defining the problem first.

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A gastro-colic fistula is usually the endpoint of a chronic leak.

No rate

established incidence after sleeve
gastrectomy

01

Sleeve leak

Persistent staple-line
defect.

02

Collection

Inflammation adheres to
adjacent colon.

03

Communication

Erosion creates a mature
fistula.

The broader reported range for post-sleeve leaks is 1–7%; gastro-colic fistula is only a small subset.

Control the collection. Then close the problem.

74%

healing after endoscopic treatment in
a 110-patient multicentre study

- Sepsis control, drainage, and nutrition come first.
- Early or selected fistulas may respond to internal drainage, stents, clips, suturing, sealants, or vacuum therapy.
- Mature colonic communication, failed endoscopy, or uncontrolled sepsis usually requires surgery.

Endoscopic intervention within 21 days improves healing; success falls as chronicity increases.

Rare fistula.

Common long-term sleeve consequences.

3 / 4

bleeding fistulas linked to pseudoaneurysm
in one series

19%

postoperative GERD

23%

de novo reflux

- Stable bleeding patient: prioritize CT angiography and selective embolization.
- Long-term burden includes reflux, weight recurrence, micronutrient deficiency, stenosis, obstruction, and gallstones.
- Symptoms underestimate pathology; metabolic, nutritional, and endoscopic surveillance still matter.

What has happened can happen again.

- 01 | Slow down when reality diverges from the model.
- 02 | Finding one injury does not end the search.
- 03 | Preserve the option to change the plan.

Which case changes what you will notice next time?