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TRUE RESTRICTIVE GASTRIC SLEEVE PROCEDURE AS A FIRST CHOICE IN BARIATRIC SURGERY



Gastric Sleeve as a first operation in obesity and metabolic Sy?

*Among patients with morbid obesity, **there was no significant difference** in **excess BMI loss** between laparoscopic sleeve gastrectomy and laparoscopic Roux-en-Y gastric bypass at 5 years of follow-up after surgery.*

The number of patients with reoperations or interventions was 16/101 (15.8%) after sleeve gastrectomy and 23/104 (22.1%) after Roux-en-Y gastric bypass.

Peterli R et al. Effect of Laparoscopic Sleeve Gastrectomy vs Laparoscopic Roux-en-Y Gastric Bypass on Weight Loss in Patients With Morbid Obesity. The SM-BOSS Randomized Clinical Trial. [JAMA](#). 2018 Jan 16; 319(3): 255–265.

Gastric Sleeve is good surgery for resolution of T2DM

From 1,650 titles retrieved by an initial search, we selected nine studies for this research. We found insignificant differences for T2DM resolution by LRYGB and LSG, with an odds ratio of 0.93 (95%CI: 0.64-1.35, Z statistics = 0.38, P = 0.71). Additionally, subset analyses for T2DM resolution showed insignificant differences after 24 mo ($\chi^2 = 1.24$, df = 4, P = 0.87, overall Z effect = 0.23), 36 mo ($\chi^2 = 0.41$, df = 2, P = 0.81, overall Z effect = 0.51), and 60 mo ($\chi^2 = 4.75$, df = 3, P = 0.19, overall Z effect = 1.20) by LRYGB and LSG. **This study reports a T2DM remission rate of 82.3% by LRYGB and 80.7% by LSG.**

This study reports similar T2DM resolution rates by both LRYGB and LSG during 1-5 years of follow-up. However, long-term follow-up of 10 years is needed to further substantiate these findings

Guraya SY, Strate T. Surgical outcome of laparoscopic sleeve gastrectomy and Roux-en-Y gastric bypass for resolution of type 2 diabetes mellitus: A systematic review and meta-analysis. *World J Gastroenterol.* 2020 Feb 28; 26(8): 865–876.



„Large Sleeve“ is not good surgery

„Neofundus“ ?

Preservation of antrum?

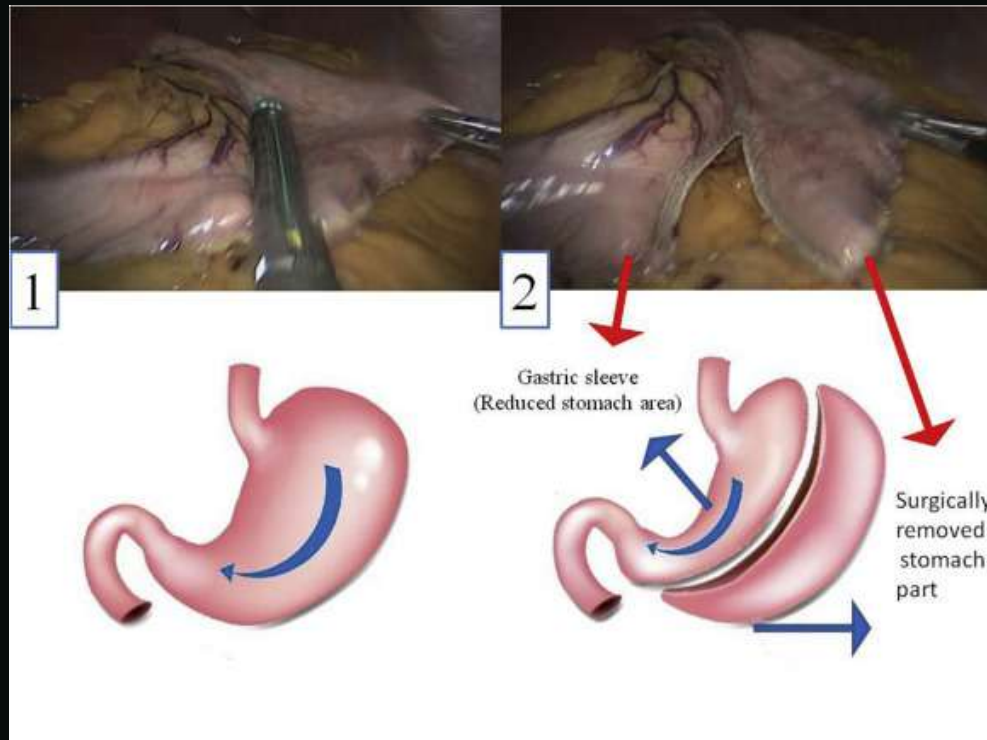


reLSG is a promising option for failed weight loss after LSG in patients who demonstrate the presence of a large gastric pouch. It carries a higher complication rate than the initial procedure. Further trials and meta-analyses are needed to prove the efficacy of this procedure.”

Saliba C, El Rayes J, Diab S et al. Weight Regain After Sleeve Gastrectomy: A Look at the Benefits of Re-sleeve. [Cureus](#). 2018 Oct; 10(10): e3450.



Gastric Sleeve with large antrum?





Gastric Sleeve and Antrectomy („subtotal“, „radical“)

LSG is a safe and effective procedure with good short-term outcome. Increasing the size of the resected antrum is associated with better weight loss without increasing the rate of complications significantly.


Abdallah E, El Nakeeb A, Yousef T et al. Impact of Extent of Antral Resection on Surgical Outcomes of Sleeve Gastrectomy for Morbid Obesity (A Prospective Randomized Study) Obesity Surgery; 24:1587–1594 (2014)

Performing the LSG with a radical antrectomy could improve weight loss at 12-month follow-up but expose to lower food tolerance and higher transitory GERD. The differences seem to be reduced to a 24-month.

Pizza, F., D'Antonio, D., Lucido, F.S. et al. Does antrum size matter in sleeve gastrectomy? A prospective randomized study. Surg Endosc (2020). <https://doi.org/10.1007/s00464-020-07811-1>

OBES SURG (2015) 25:195–196
DOI 10.1007/s11695-014-1450-4

VIDEO SUBMISSION



Laparoscopic Gastric Sleeve, Subtotal Antrectomy and Omentoplasty

Aniceto Baltasar · Rafael Bou · Marcelo Bengochea · Carlos Serra · Nieves Pérez

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© Springer Science+Business Media New York 2014

Abstract Sleeve-forming gastrectomy (SFG) is the operation to make a gastric sleeve (GS). The video presents the subtotal removal of the antrum and the use of sliding self-locking stitch and Aberdeen knots as suture reinforcement with omentoplasty of the GS staple line with the aim of decreasing bleeding and leaks.

Keywords Laparoscopic gastric sleeve · Subtotal antrectomy · Omental patch · Staple-line suture

Purpose Controversial features related to SFG are (1) sleeve size and volume, (2) prevention of esophageal gastric junction (EGJ) leaks and (3) size of the antrum. We have used subtotal antrectomy in more than 1350 isolated GS or duodenal switch and reported [1, 2] suturing the staple line to reduce leaks.

Technique Six ports lap ports are used. A silk suture is passed around the round ligament to lift the liver. Gastric devascularization reaches the EGJ proximally and 2 cm distal to the pylorus to allow its full mobility. A 12-mm boogie is placed along the lesser curvature. The stomach is divided starting 1 cm proximal to the pylorus and up to the EGJ with 6-cm long blue cartridges, and 85 % of the stomach is removed (Fig. 1). The GS diameter is smaller than the esophageal lumen (Fig. 2).

Results Mean OR time is 54 min (42–146 range). One leak occurred in 163 cases after the omental patch technique. Mean %EBMIL is 76 % (64–121 %) at 1 year.

Electronic supplementary material The online version of this article (doi:10.1007/s11695-014-1450-4) contains supplementary material, which is available to authorized users.

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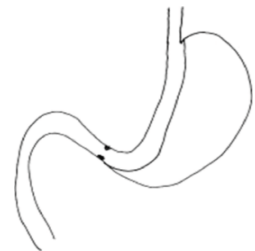


Fig. 1 Subtotal antrectomy

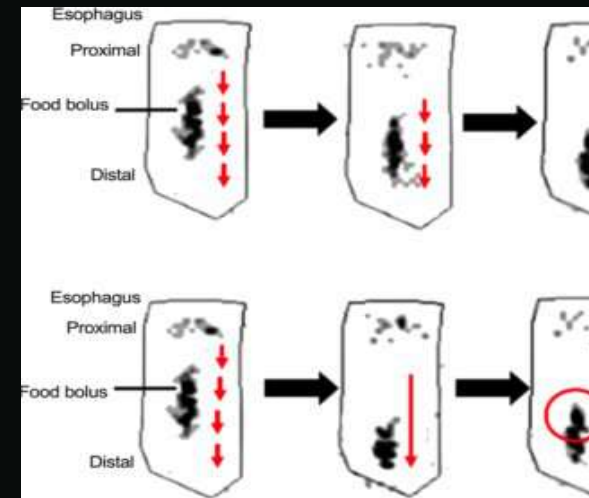
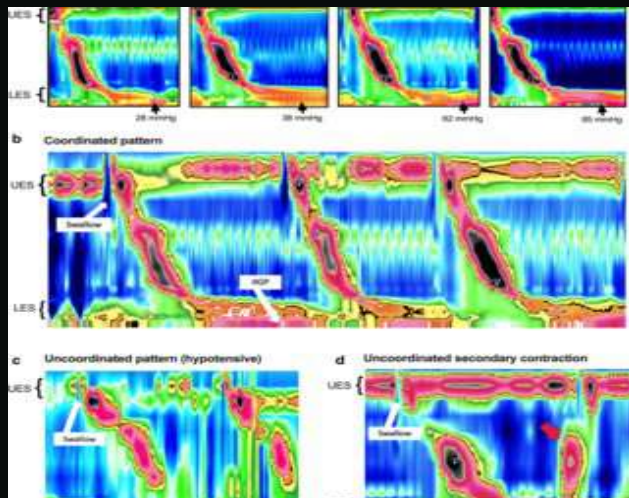
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Preservation of antrum in Gastric Sleeve does not

Change gastric emptying Contractions induced isobaric pressurization of proximal stomach, thus providing the drive to pressurize and empty the vertical compartment of the gastric sleeve. Transit following SG appeared to be esophageal-mediated and followed a distinct cycle with strong associations with reflux.

Johari Y, Wickremasinghe A, Kiswandono P et al. Mechanisms of Esophageal and Gastric Transit Following Sleeve Gastrectomy. Obesity Surgery; 31:725–737 (2021)

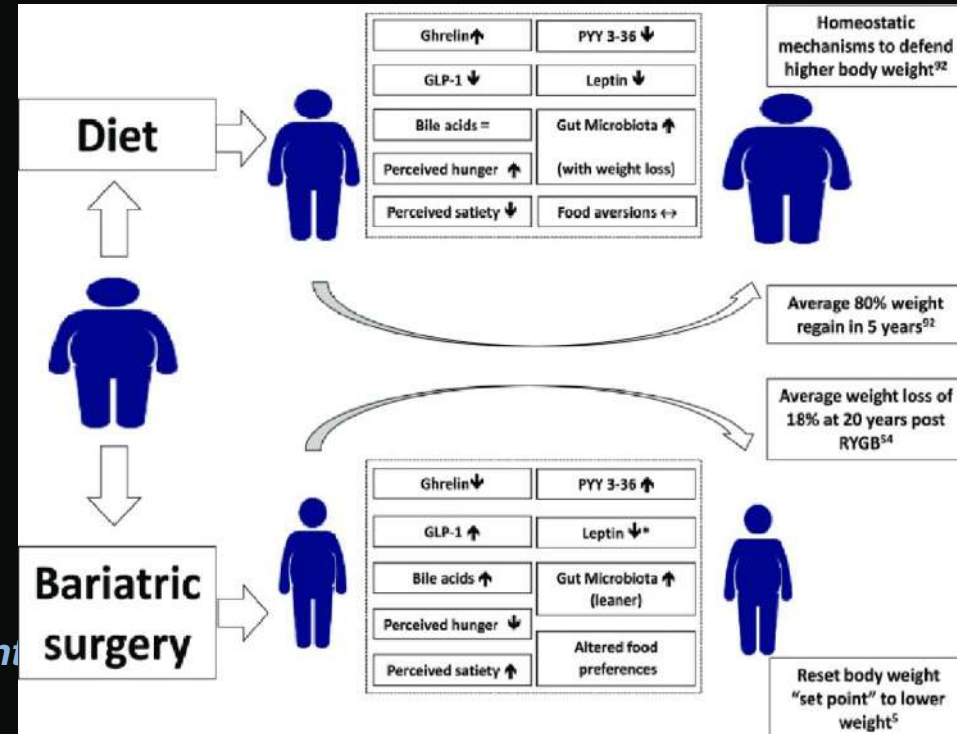


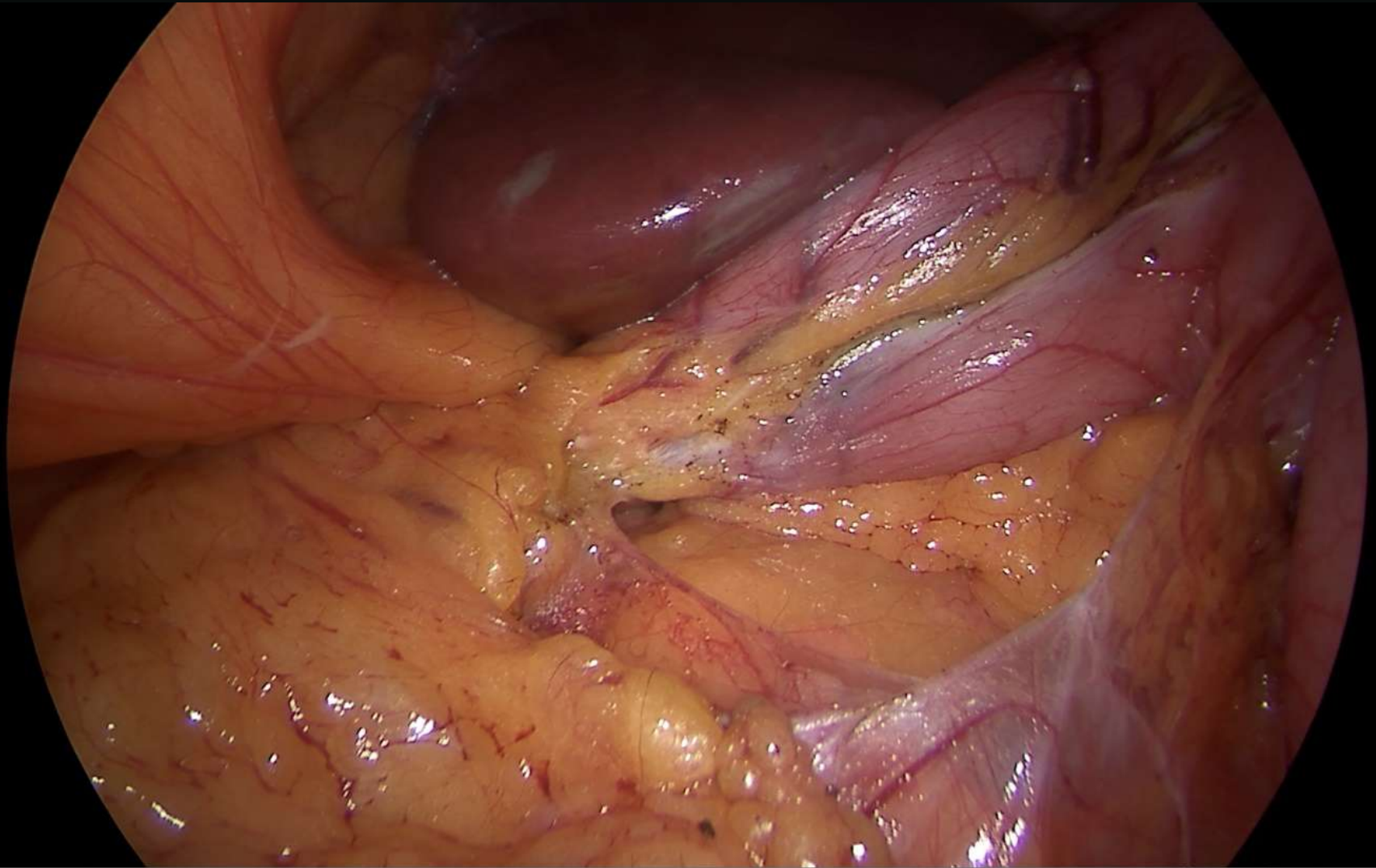


One bariatric procedure can not solve lifelong obesity

However, whilst highly effective overall, at individual level, post-operative outcomes are highly variable, with a proportion of patients experiencing poor long-term weight loss outcome and gaining little health benefit. ... A greater understanding of these procedure-related mechanisms will allow surgical procedure choice to be tailored to the individual to maximize post-surgery health outcomes and will facilitate the discovery of non-surgical treatments for people with obesity.

[Pucci A, Batterham RL. Mechanisms underlying the weight loss effects of RYGB and SG: similar, yet different. J Endocrinol Invest. 2019; 42\(2\): 117–128.](#)





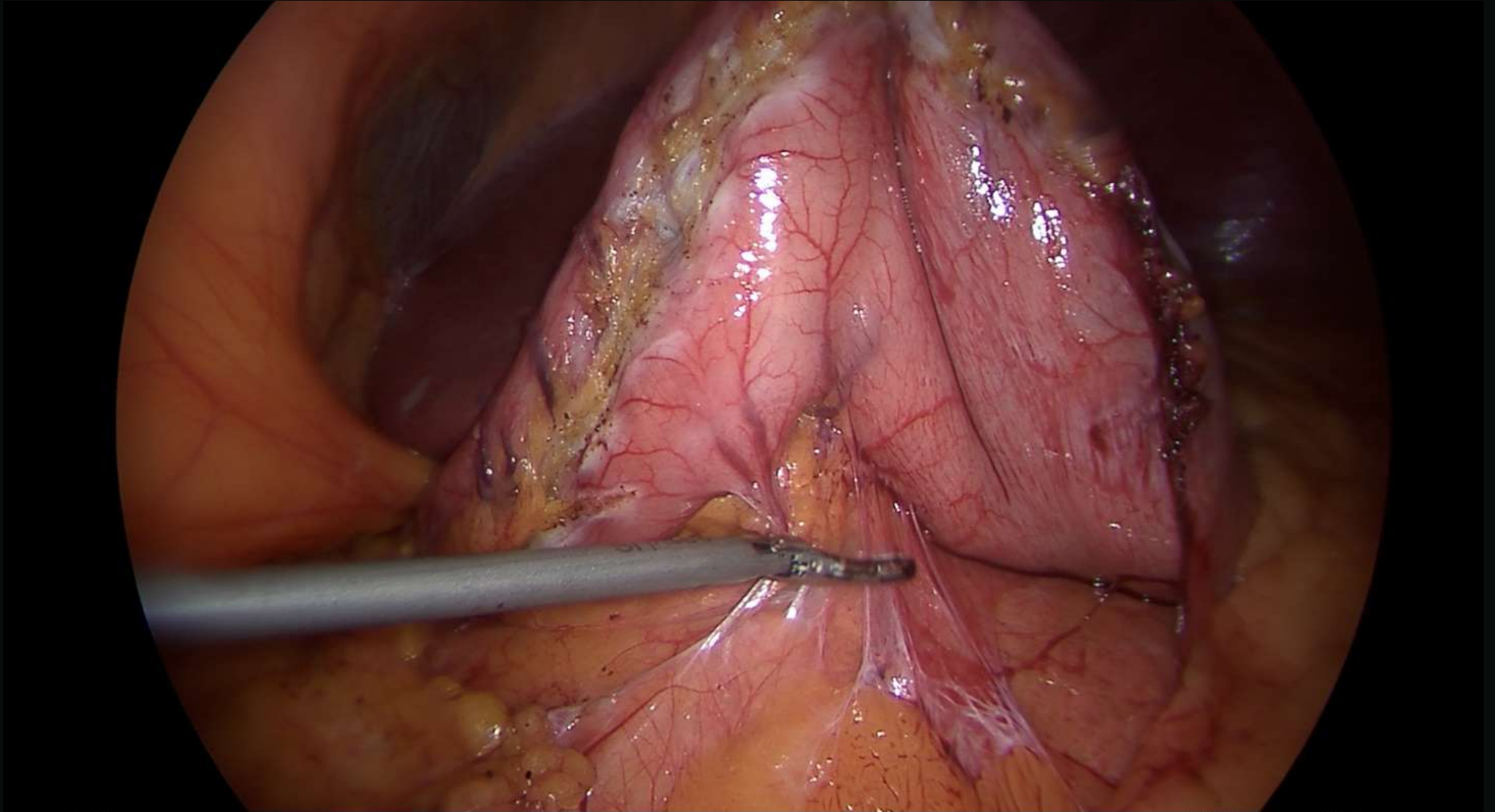
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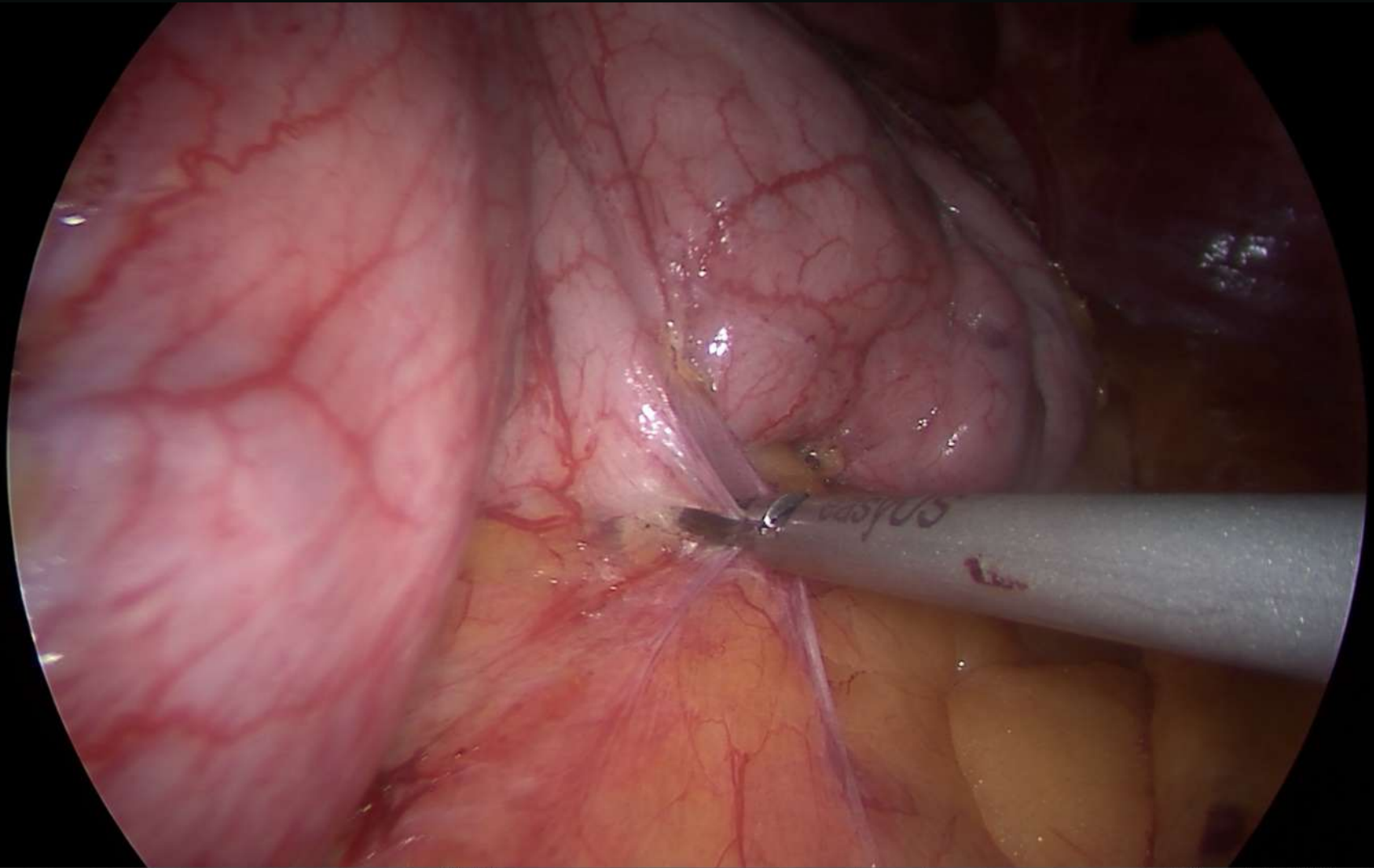
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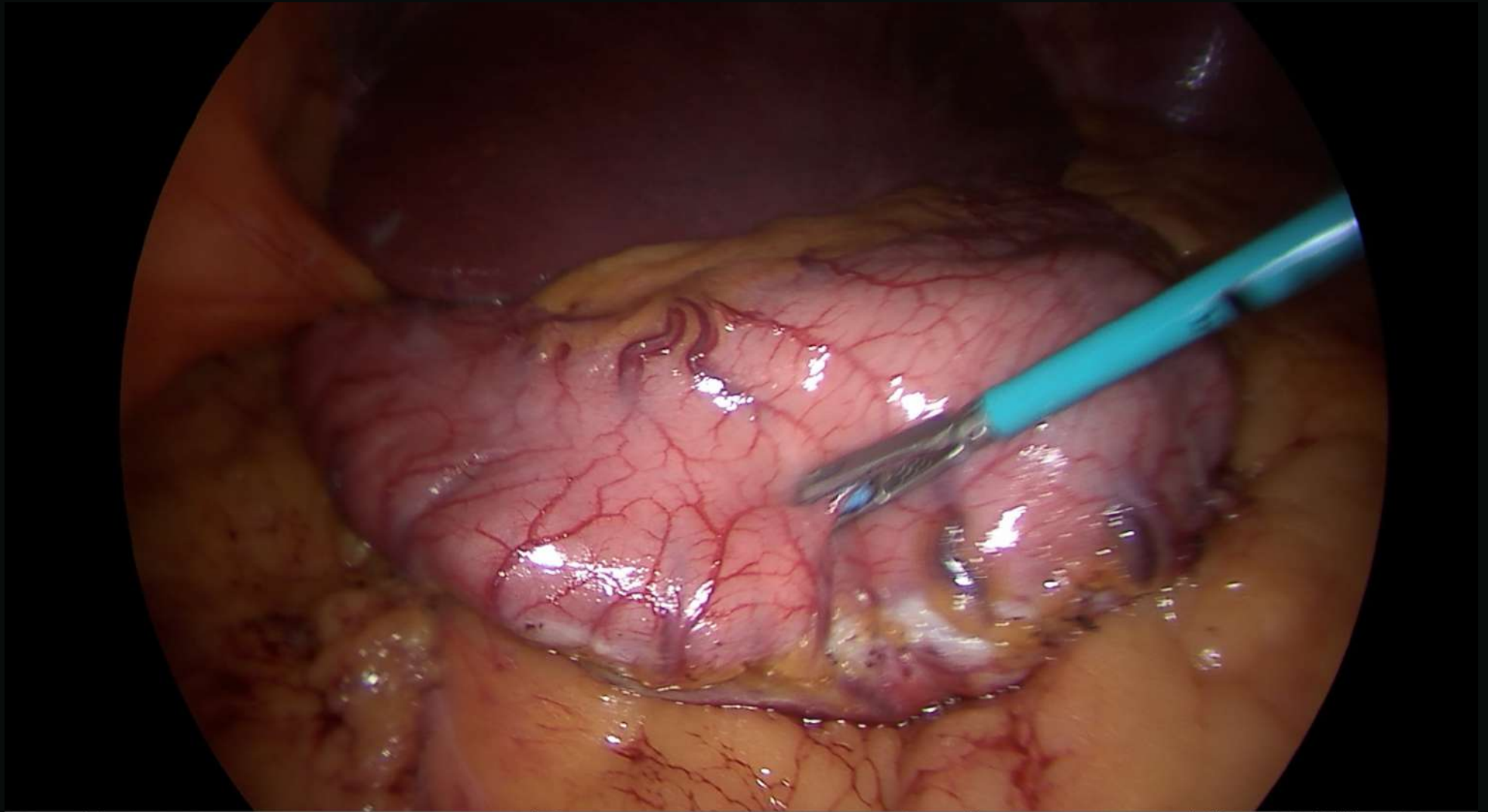
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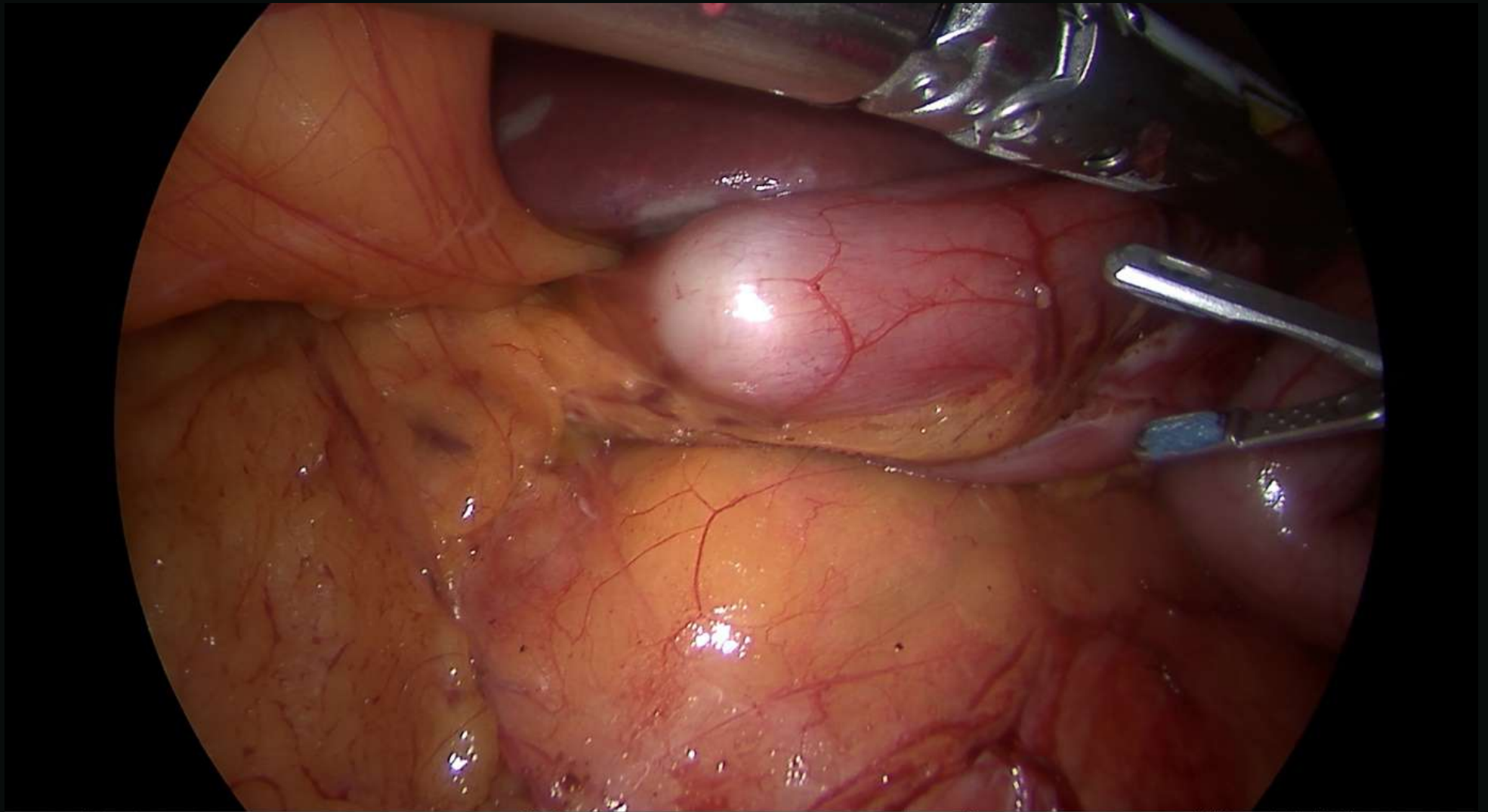
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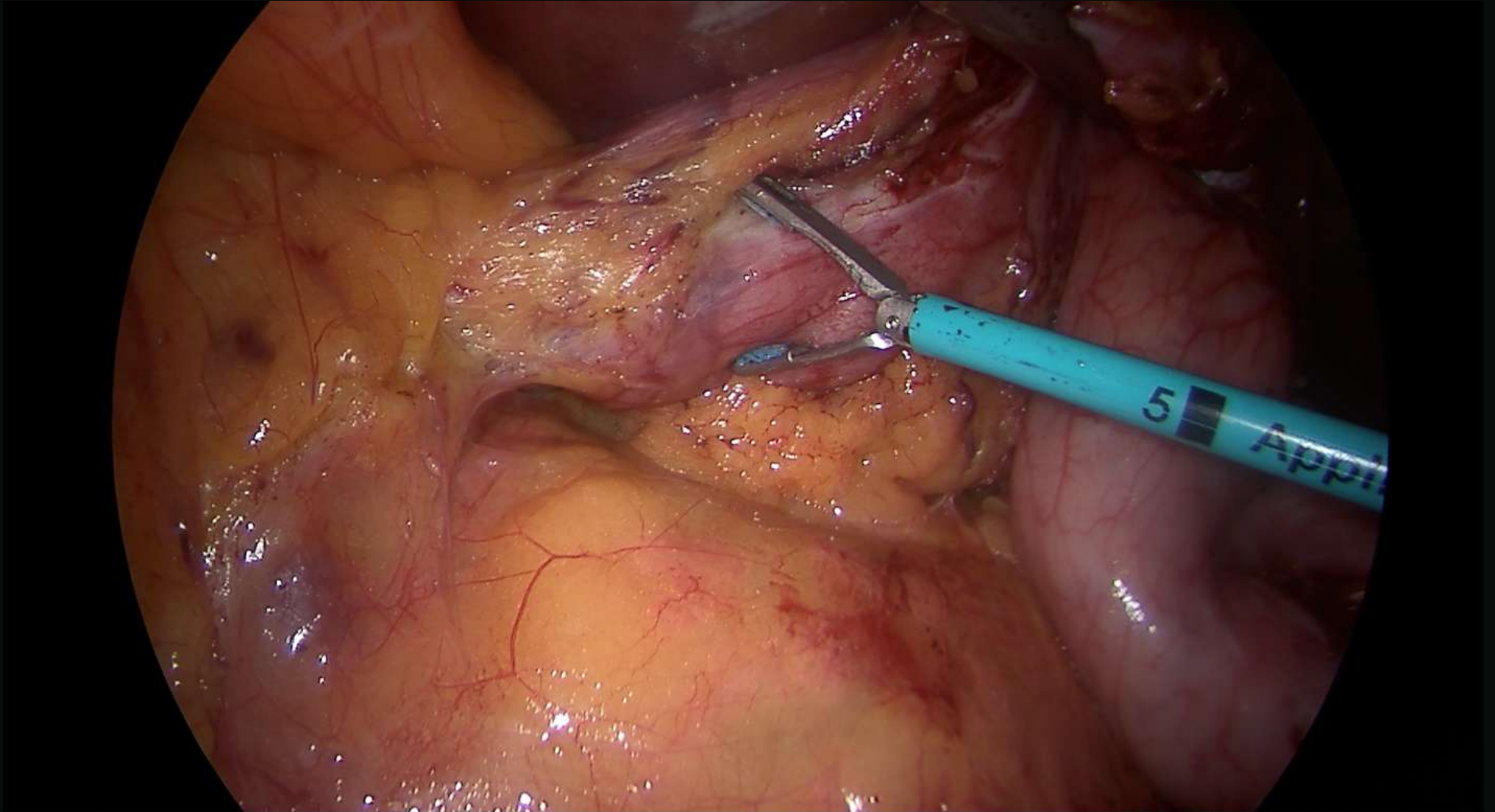
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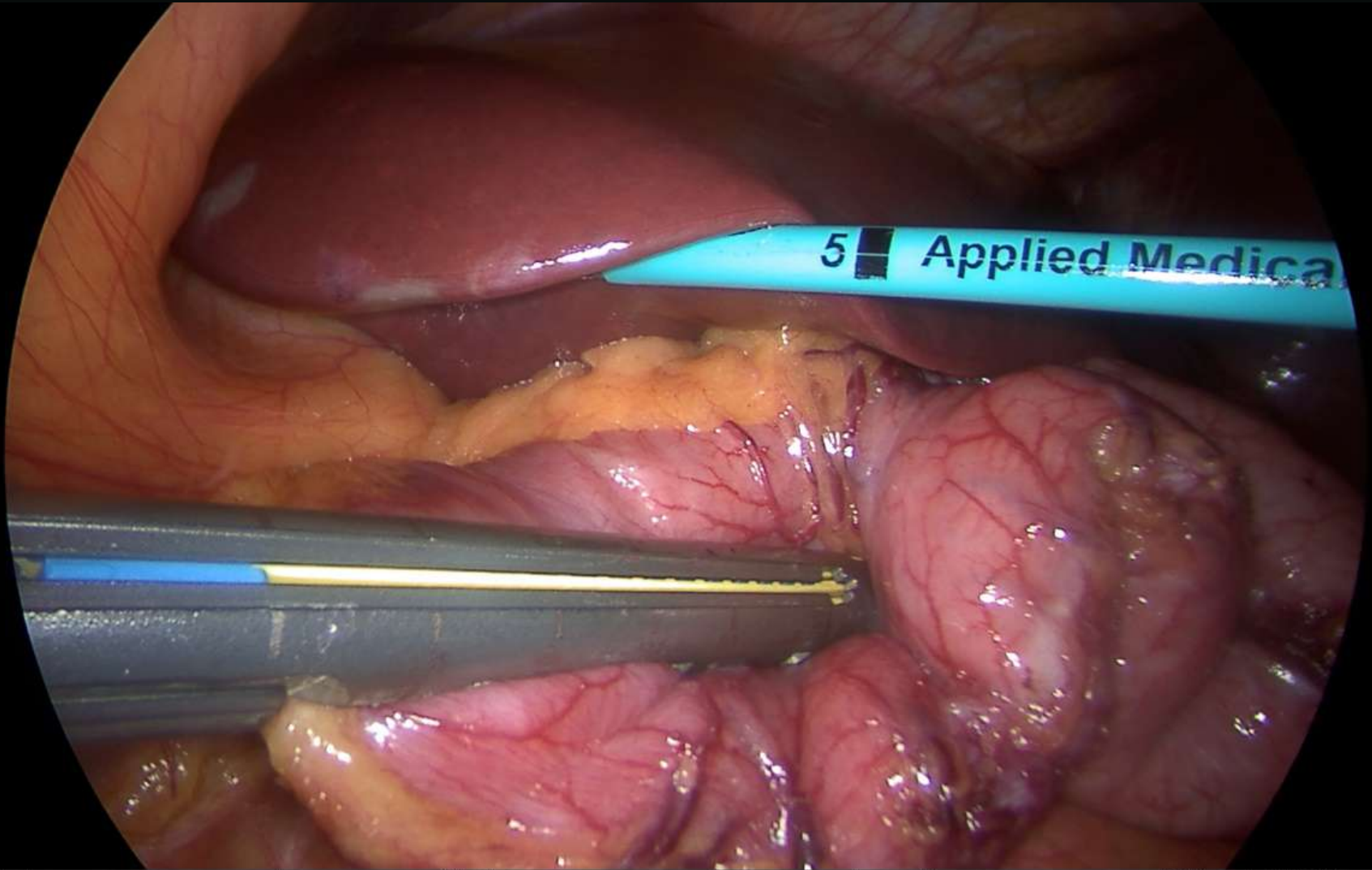
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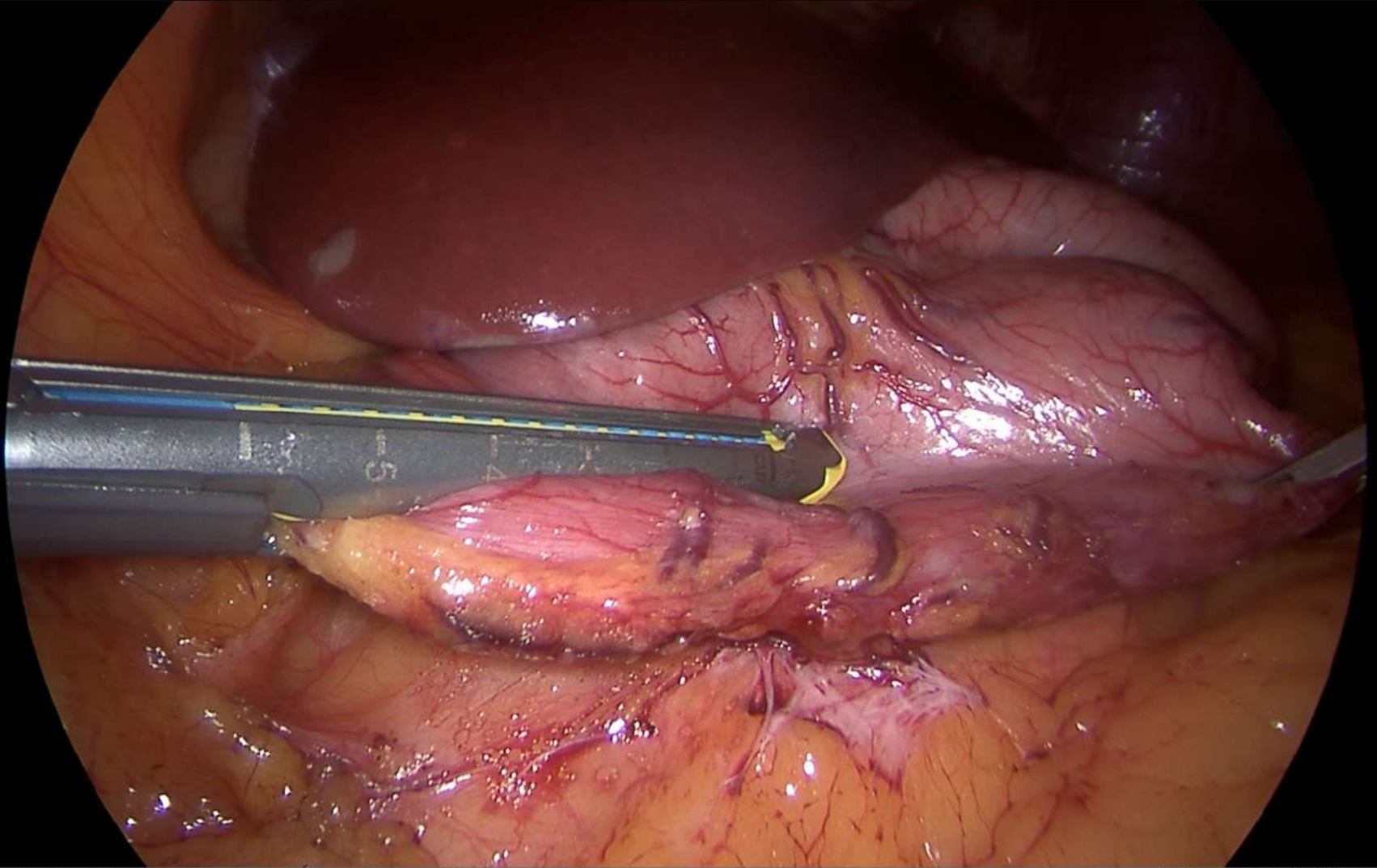
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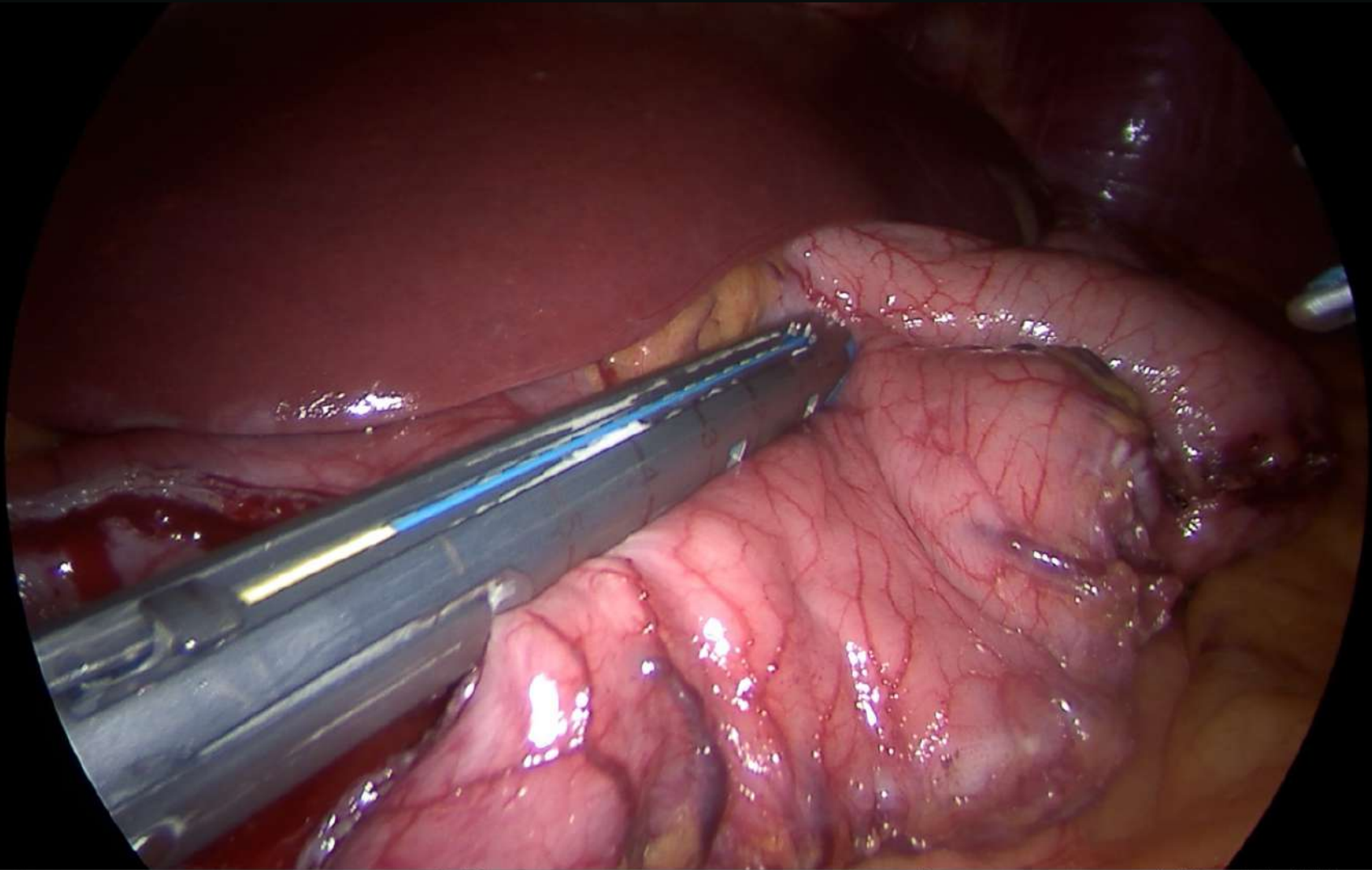
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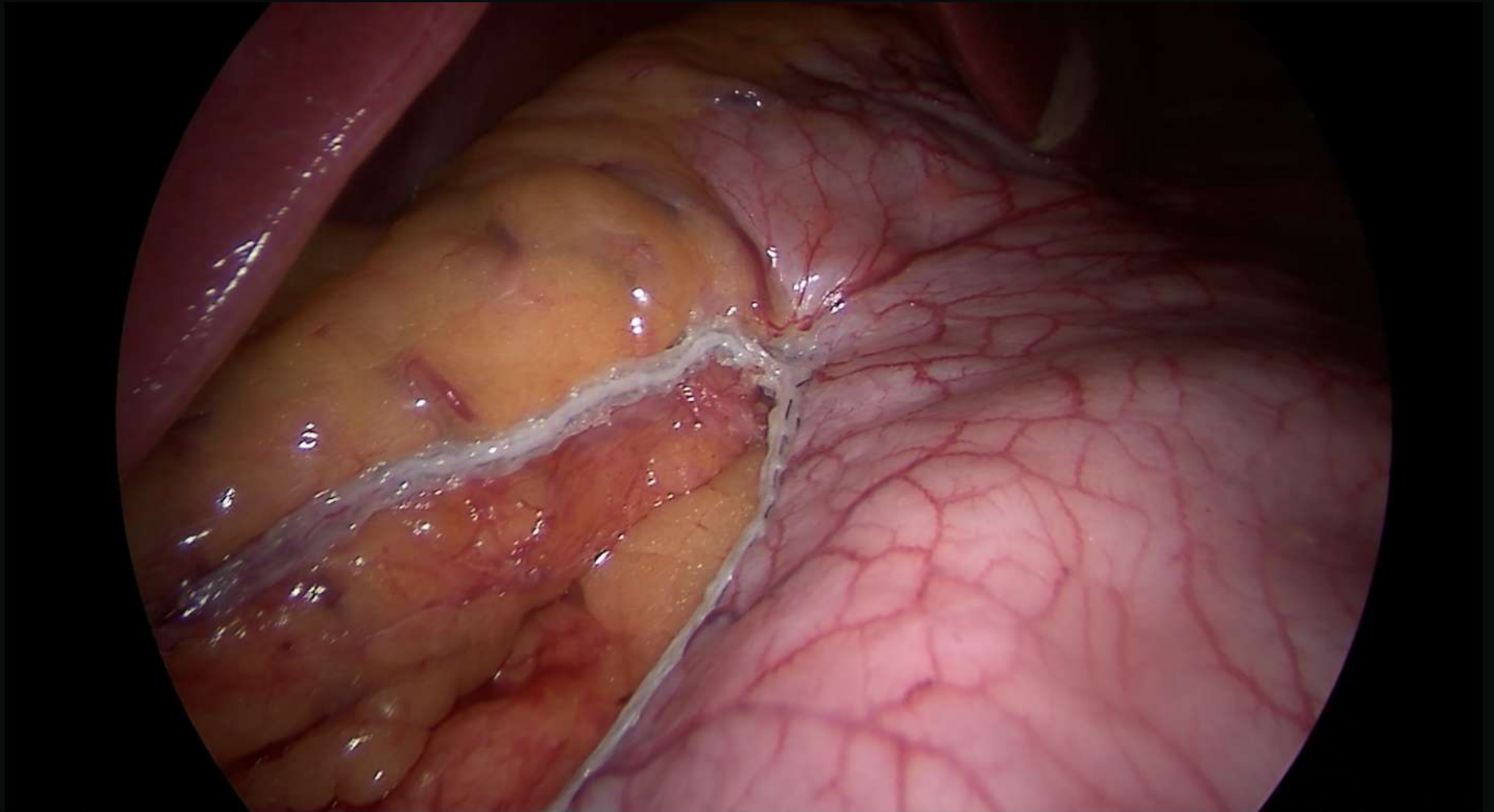
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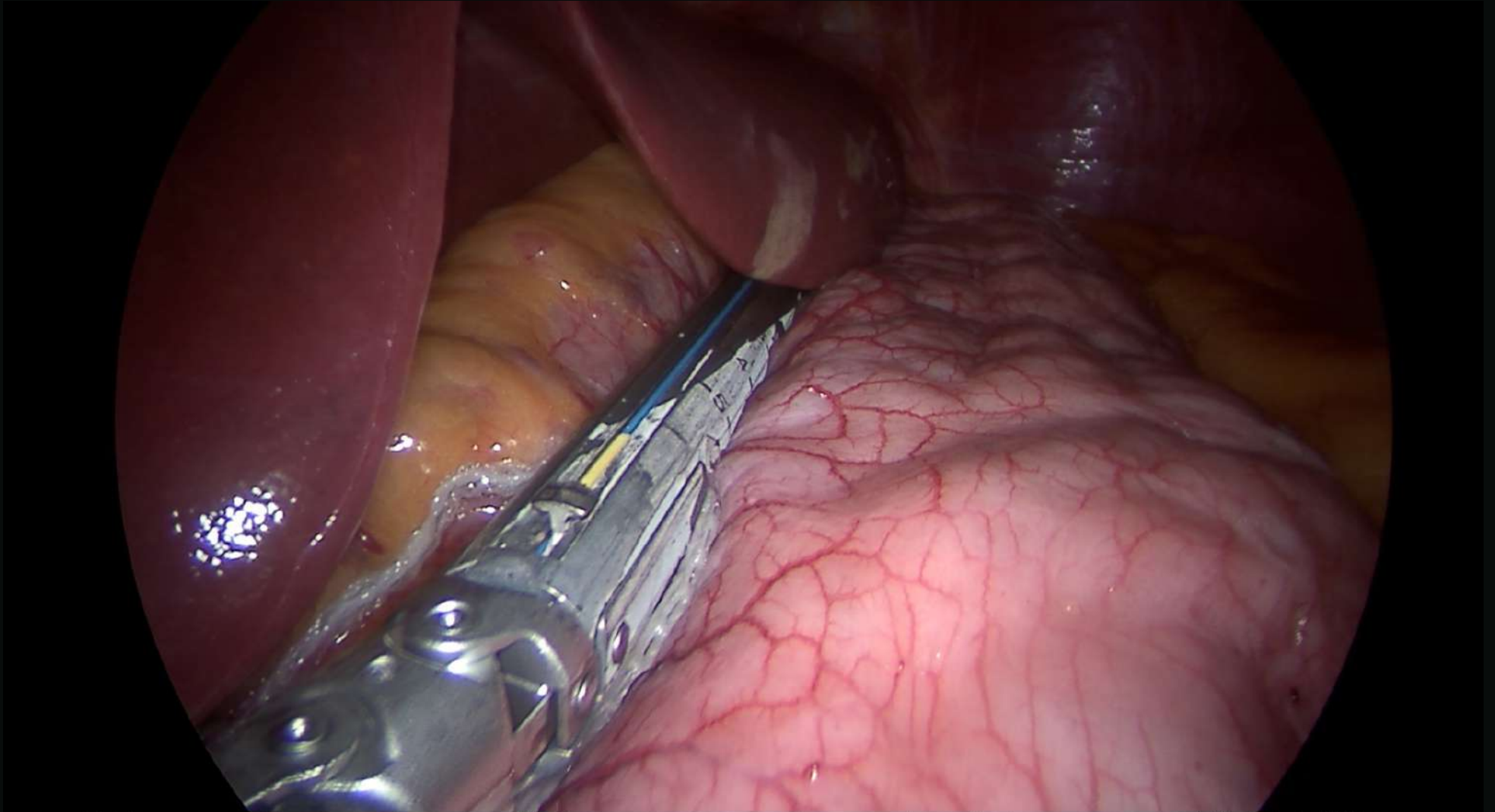
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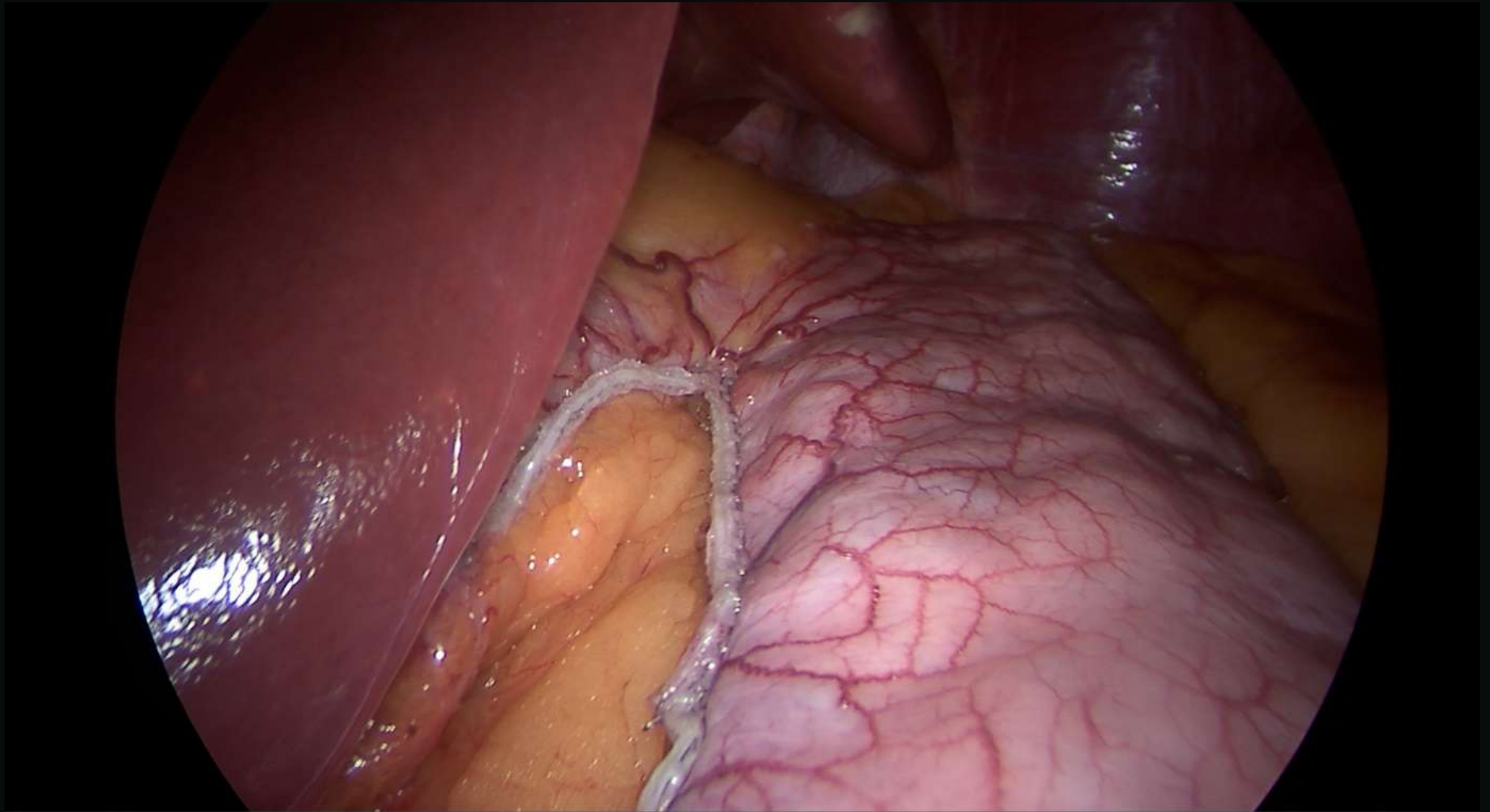
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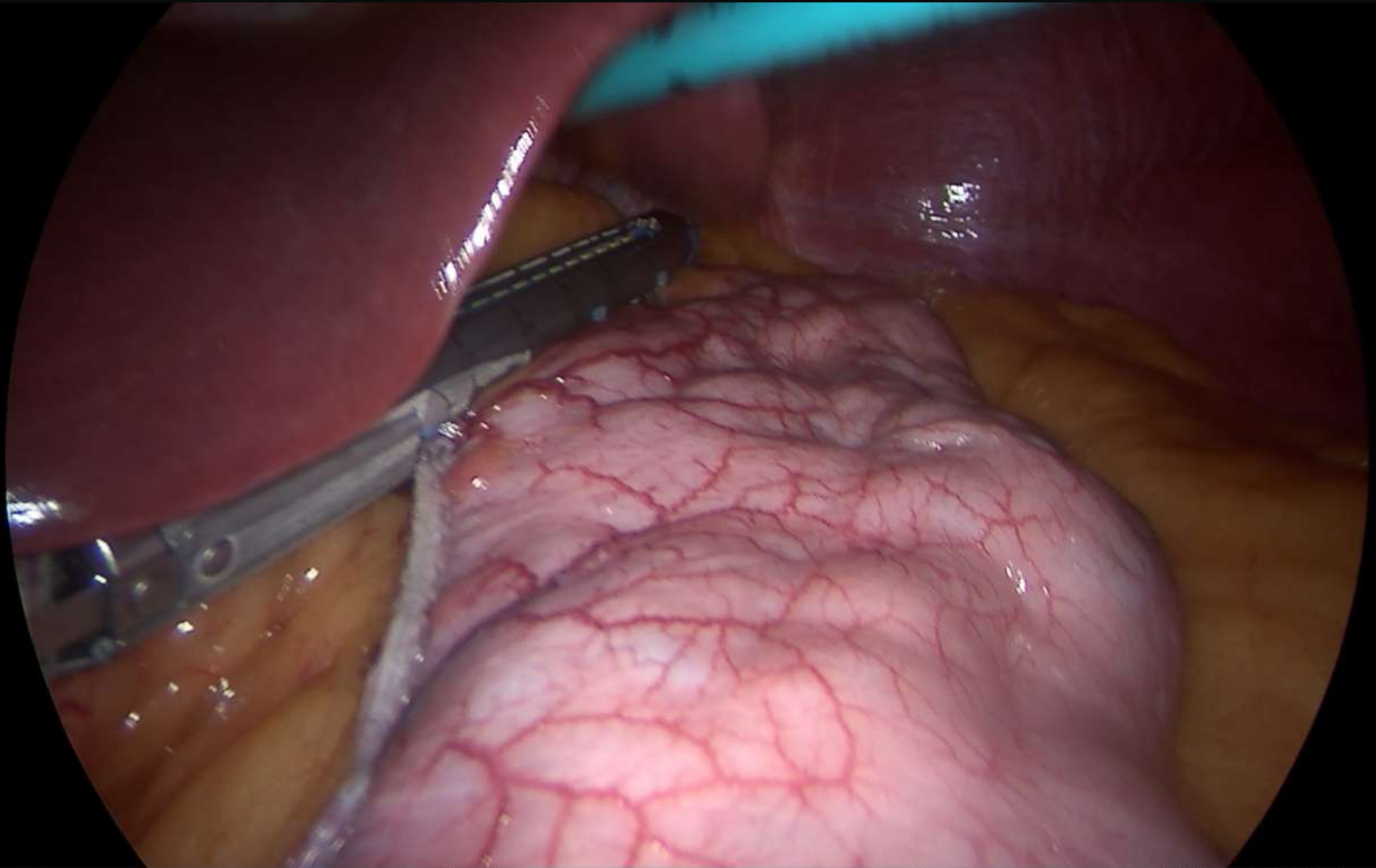
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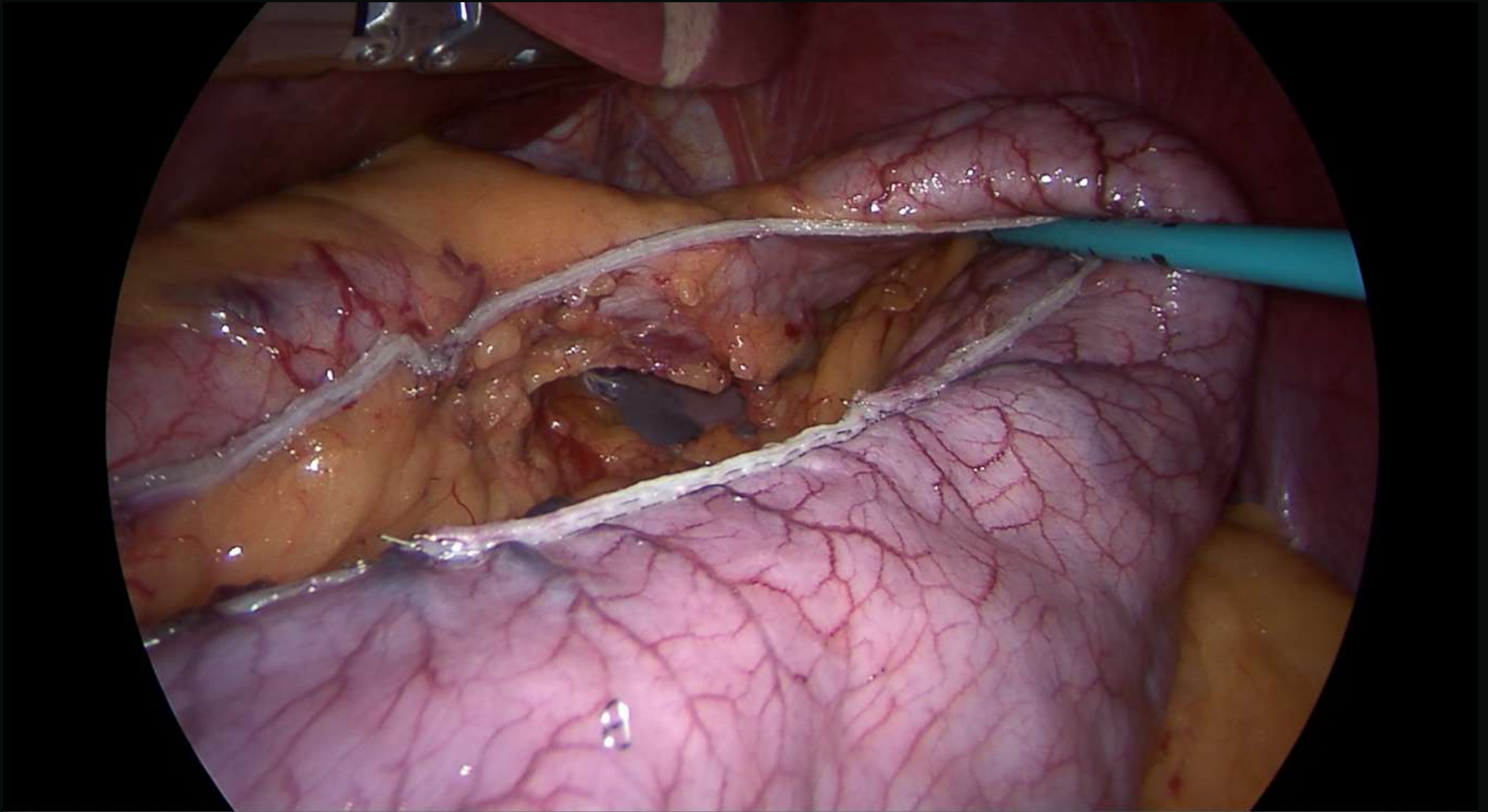
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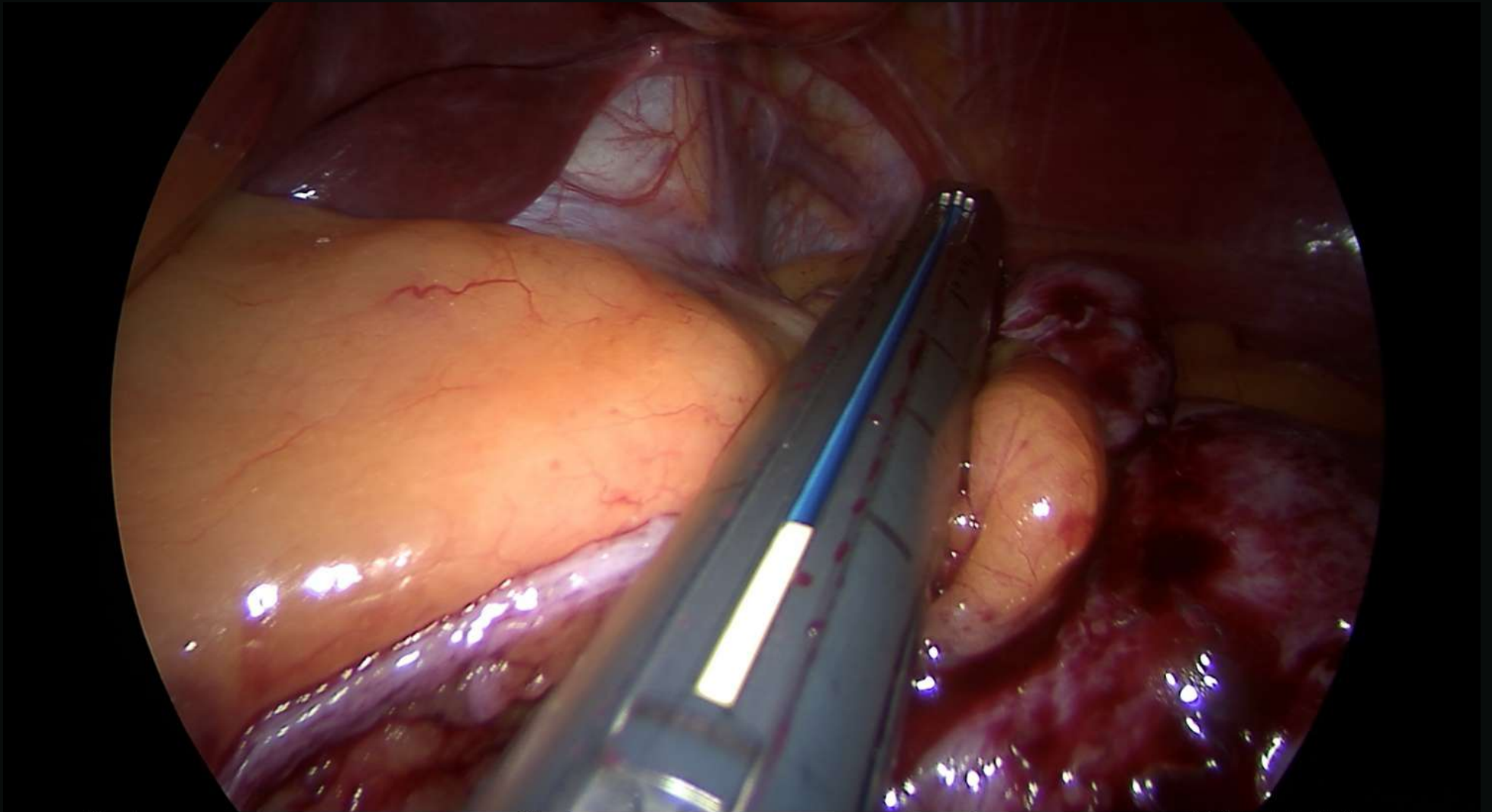
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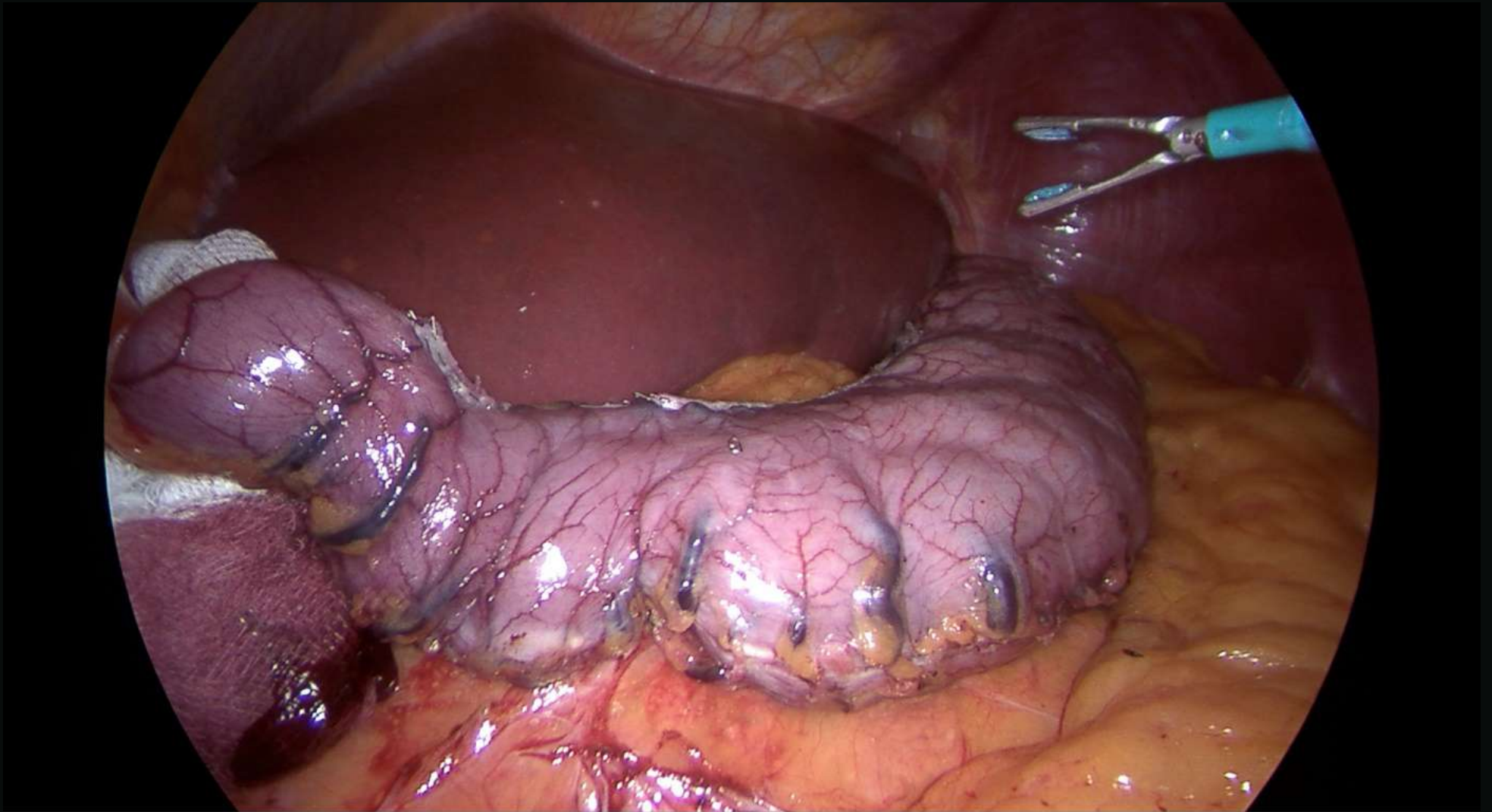
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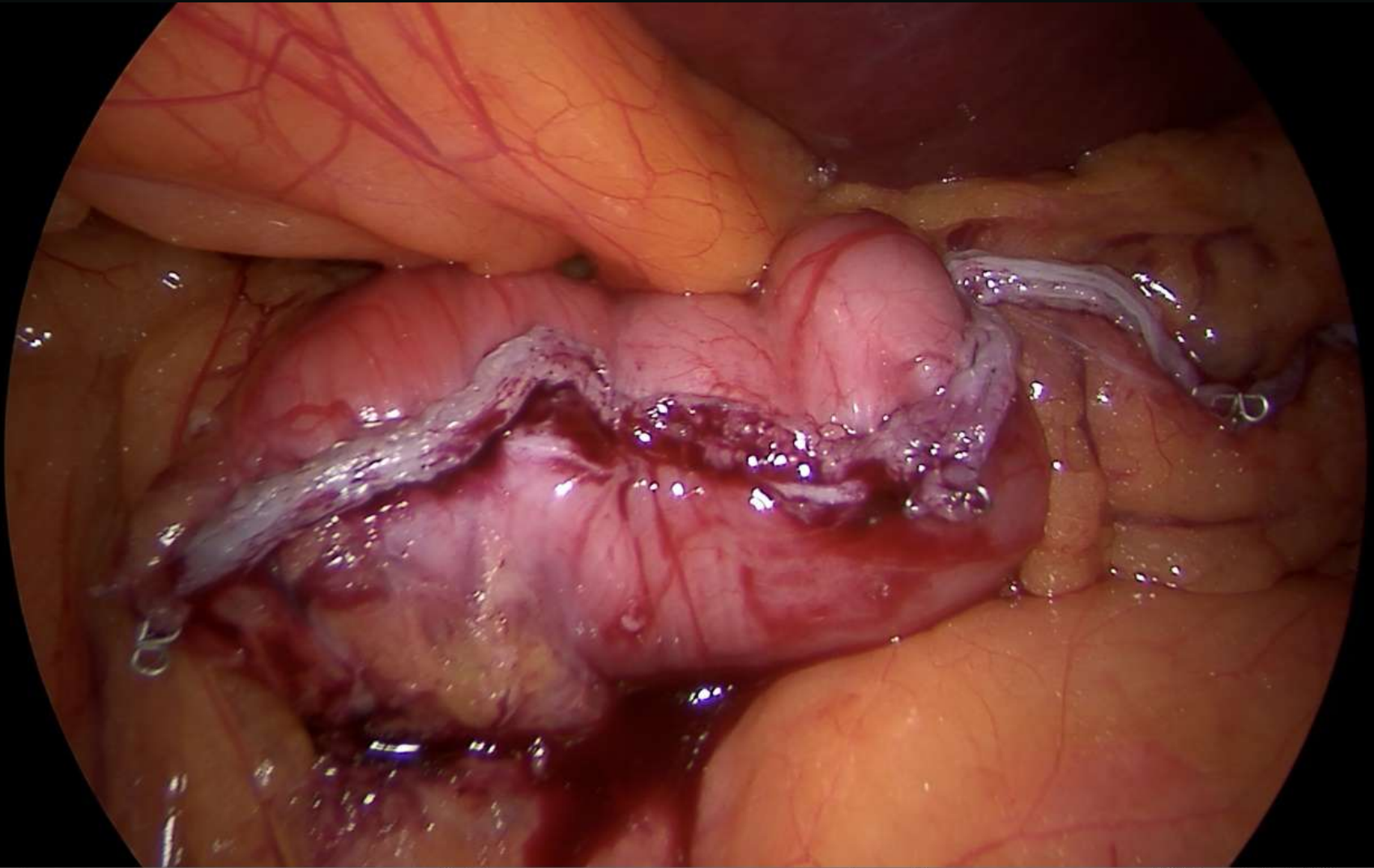
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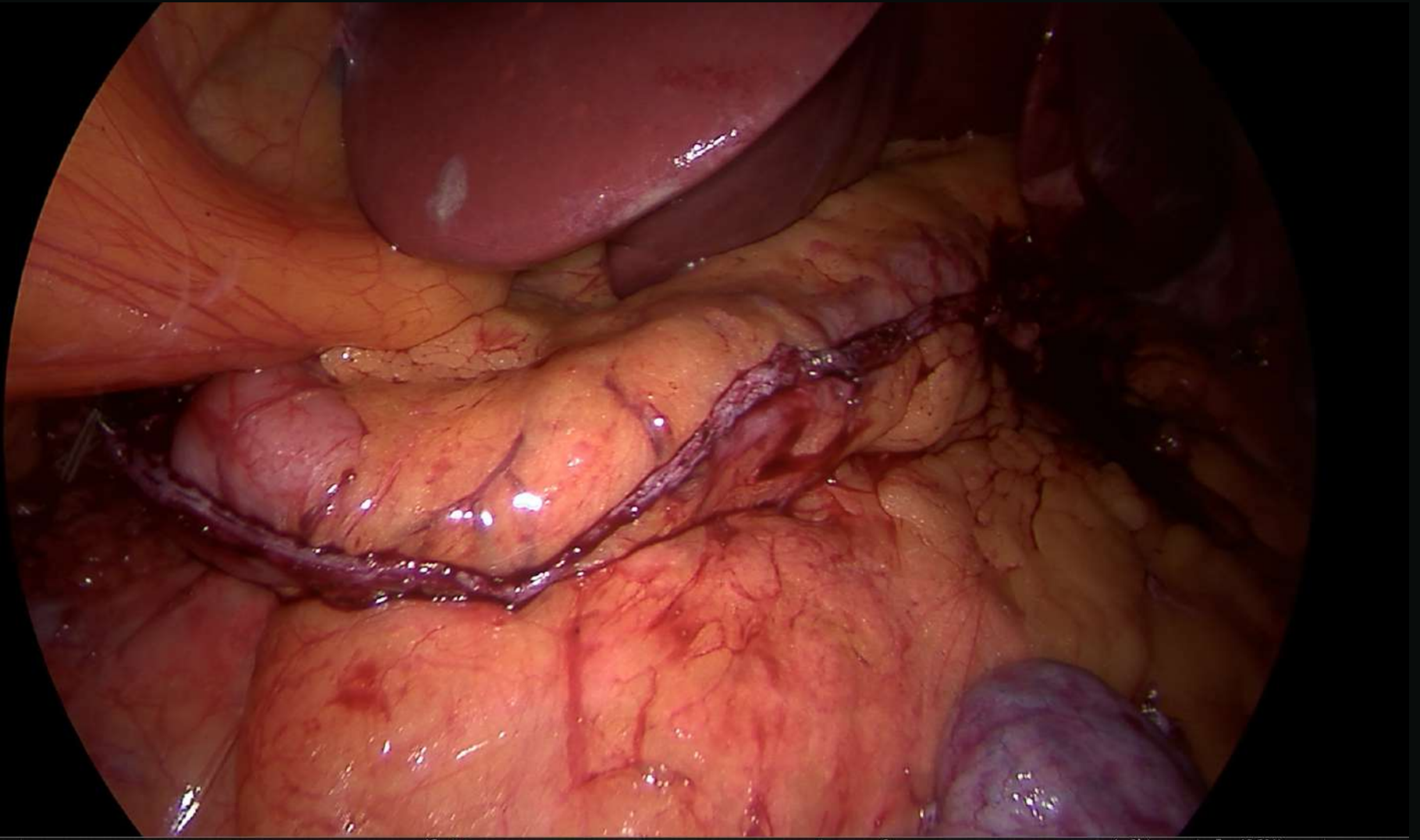
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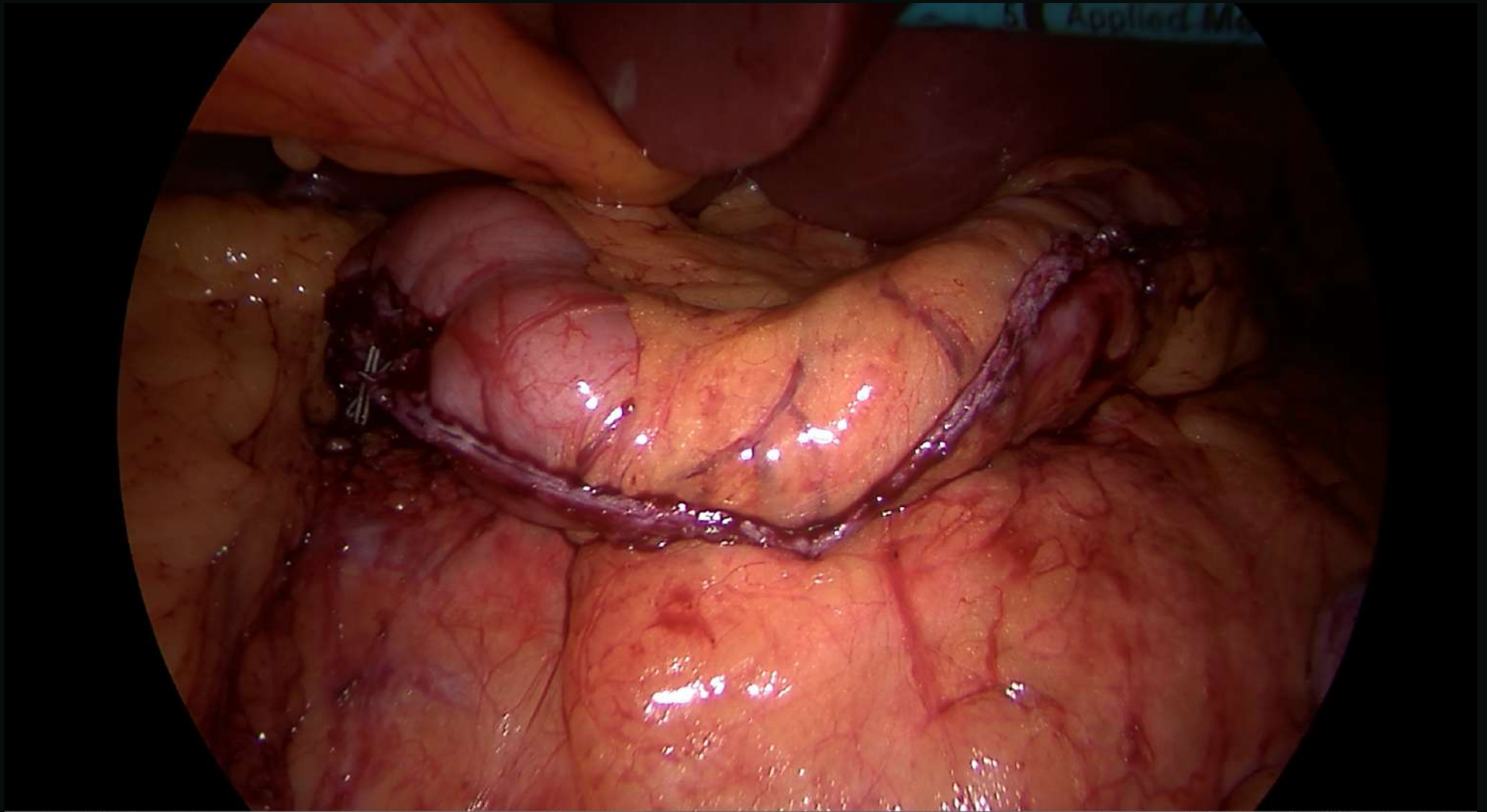
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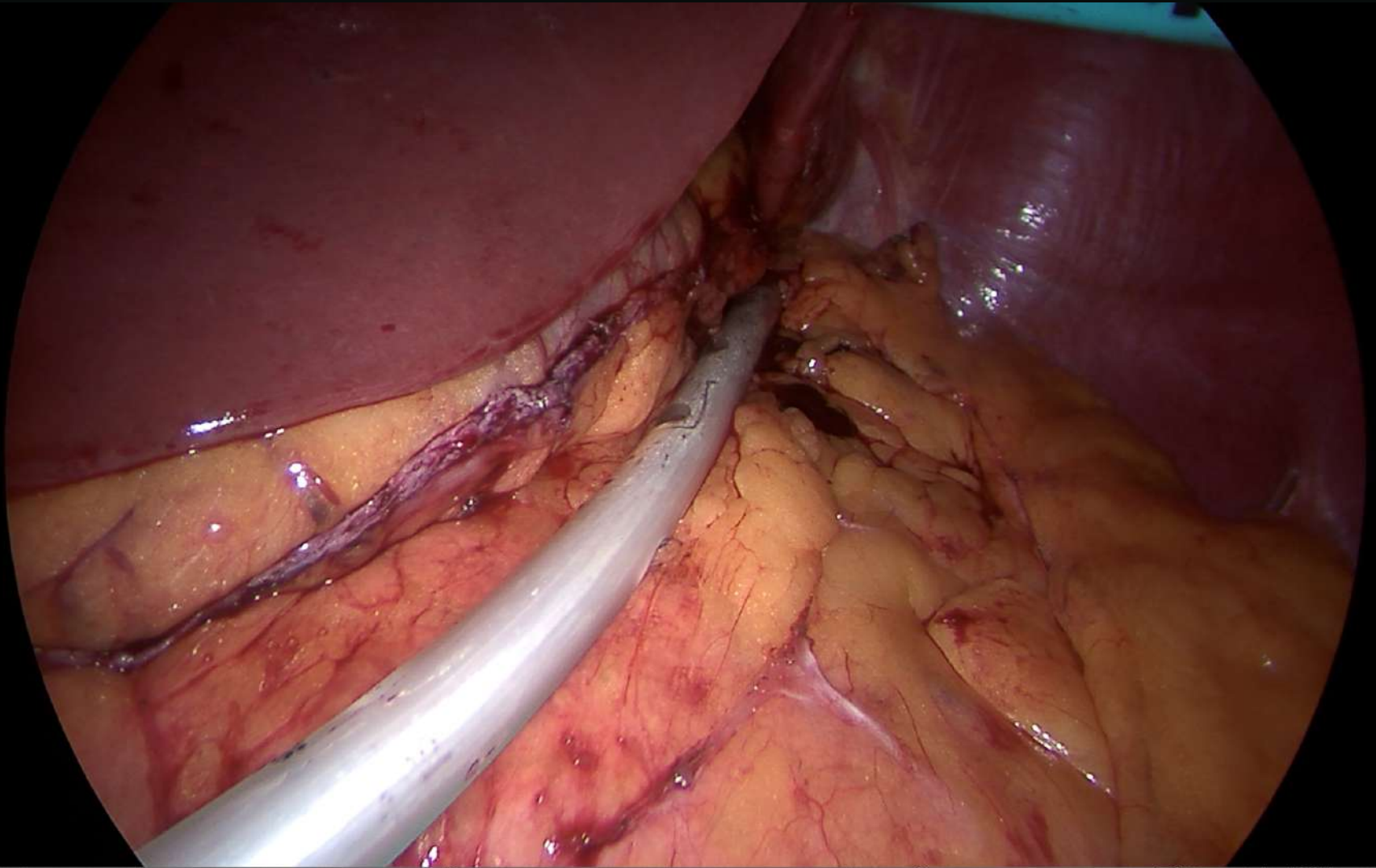
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Surgery after Gastric Sleeve?

SG has significantly lower risk of reintervention in all categories studied when compared with RYGB at 5-year follow-up. The long-term safety profile of LSG compared with RYGB should be an essential part of the discussion in patient-centered decision making when choosing between bariatric procedure options. (15 319 SG and 19 954 RYGB)

Li RA, Lyen L, Arterburn D et al. Five-year Longitudinal Cohort Study of Reinterventions After Sleeve Gastrectomy and Roux-en-Y Gastric Bypass. Annals of Surgery: April 2021; 273: 758-765



***After Gastric Sleeve procedure
numerous added malaportive operations are possible***

***BPD-DS
MGB/OAGB
SADI-S
RYBP
Transit bi-
partition***



Conclusion

Gastric Sleeve is a possible first choice in most of patients who suffered of obesity and metabolic disorders, but have to be done properly.