



35th IASGO WORLD CONGRESS



November 7 – 9, 2024



Intercontinental Cairo Semiramis Hotel, Egypt



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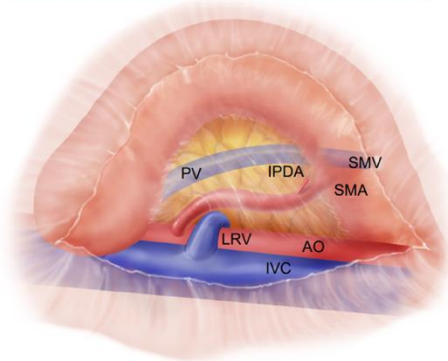
Pancreatic ductal adenocarcinoma

The perfect pancreatoduodenectomy

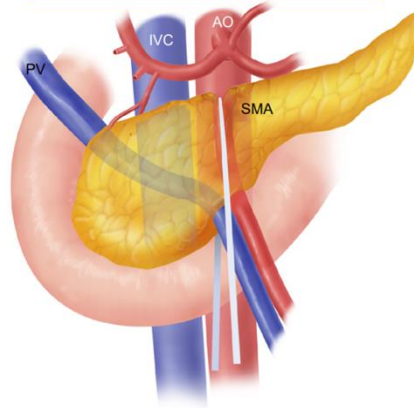
Orlando Jorge Martins Torres
Department of Gastrointestinal Surgery
Hepatopancreatobiliary Unit
Maranhao Federal University - Brazil

ARTERY FIRST APPROACH

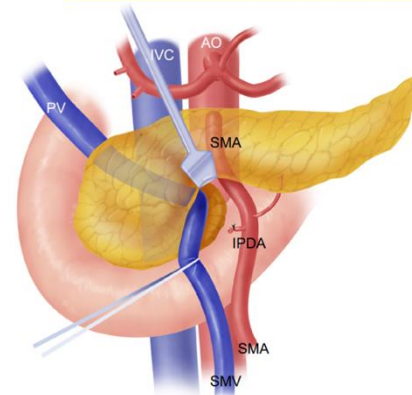
RIGHT POSTERIOR APPROACH



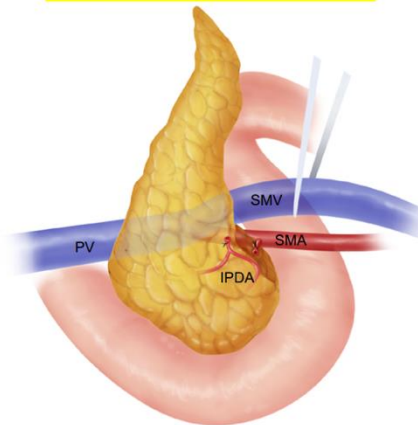
SUPERIOR APPROACH



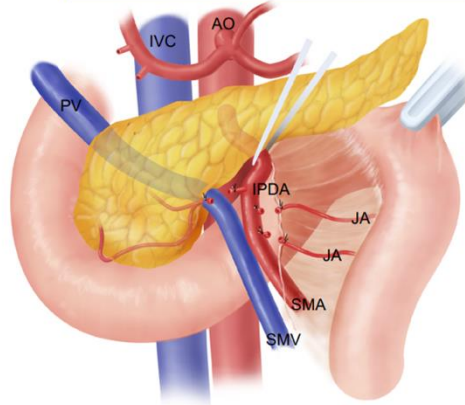
ANTERIOR APPROACH



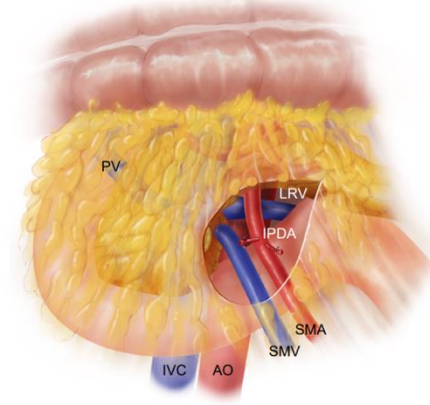
UNCINATE APPROACH



LEFT POSTERIOR APPROACH



MESENTERIC APPROACH





What do surgeons need to know about the mesopancreas


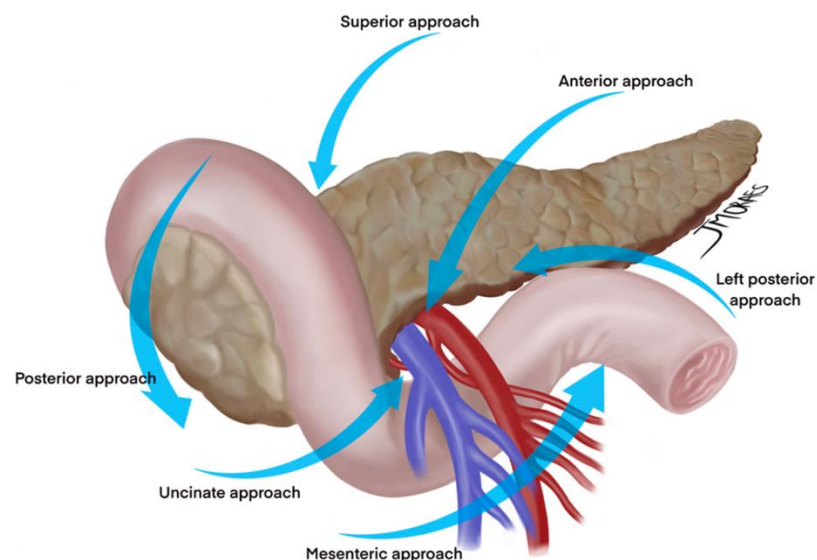
Eduardo de Souza M. Fernandes^{1,2} · Oliver Strobel^{3,4} · Camila Girão^{1,2} · Jose Maria A. Moraes-Junior^{5,6} · Orlando Jorge M. Torres^{5,6} 

Table 3 Advantages of the artery-first approach (SHARMA) [35]

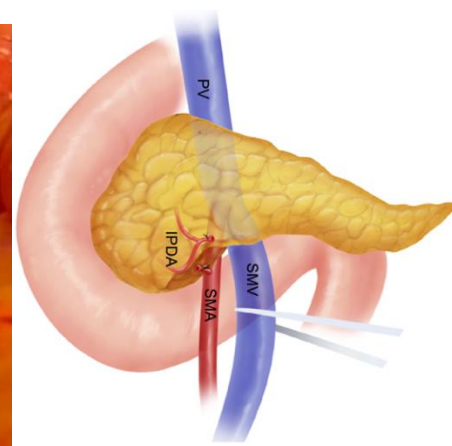
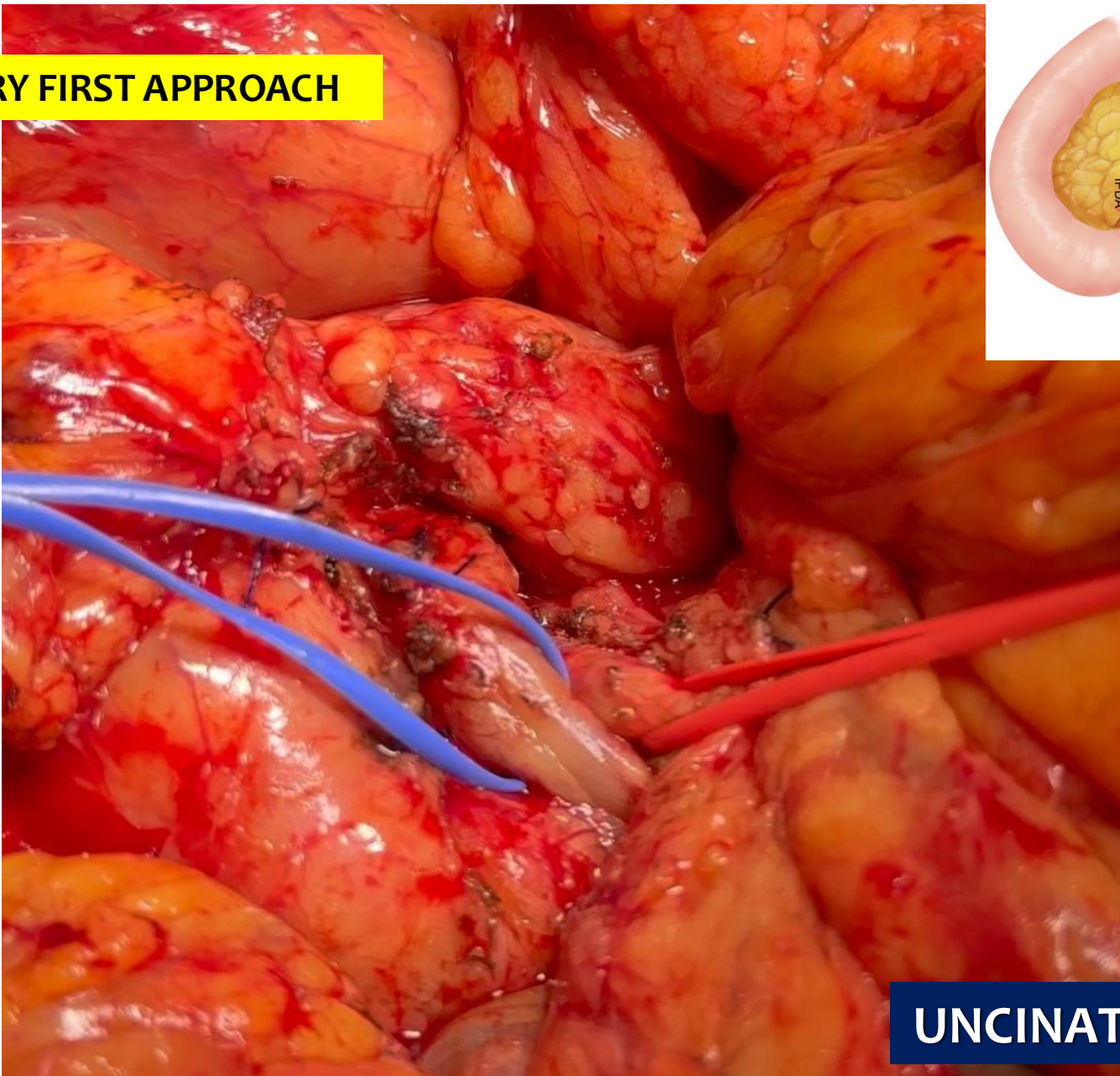
1. Resection without breaching the tumor extension plane, thereby minimizing cell spillage
2. Increases curative (R0) resection, decreases local recurrence
3. Complete resection of peripancreatic retroperitoneal tissue around the plexuses
4. Increased lymph nodal clearance
5. Early assessment of non-resectability (SMA involvement), avoiding useless R2 resections
6. Better delineation of SMA and identification of RHA anomalies
7. Easier en bloc resection and reconstruction of SMV-PV by “no touch” technique
8. Reduced need for graft substitutions
9. Reduced operative time and blood loss (early ligation of IPDA/JA1)



Fernandes ESM, et al. J Gastrointest Oncol 2023

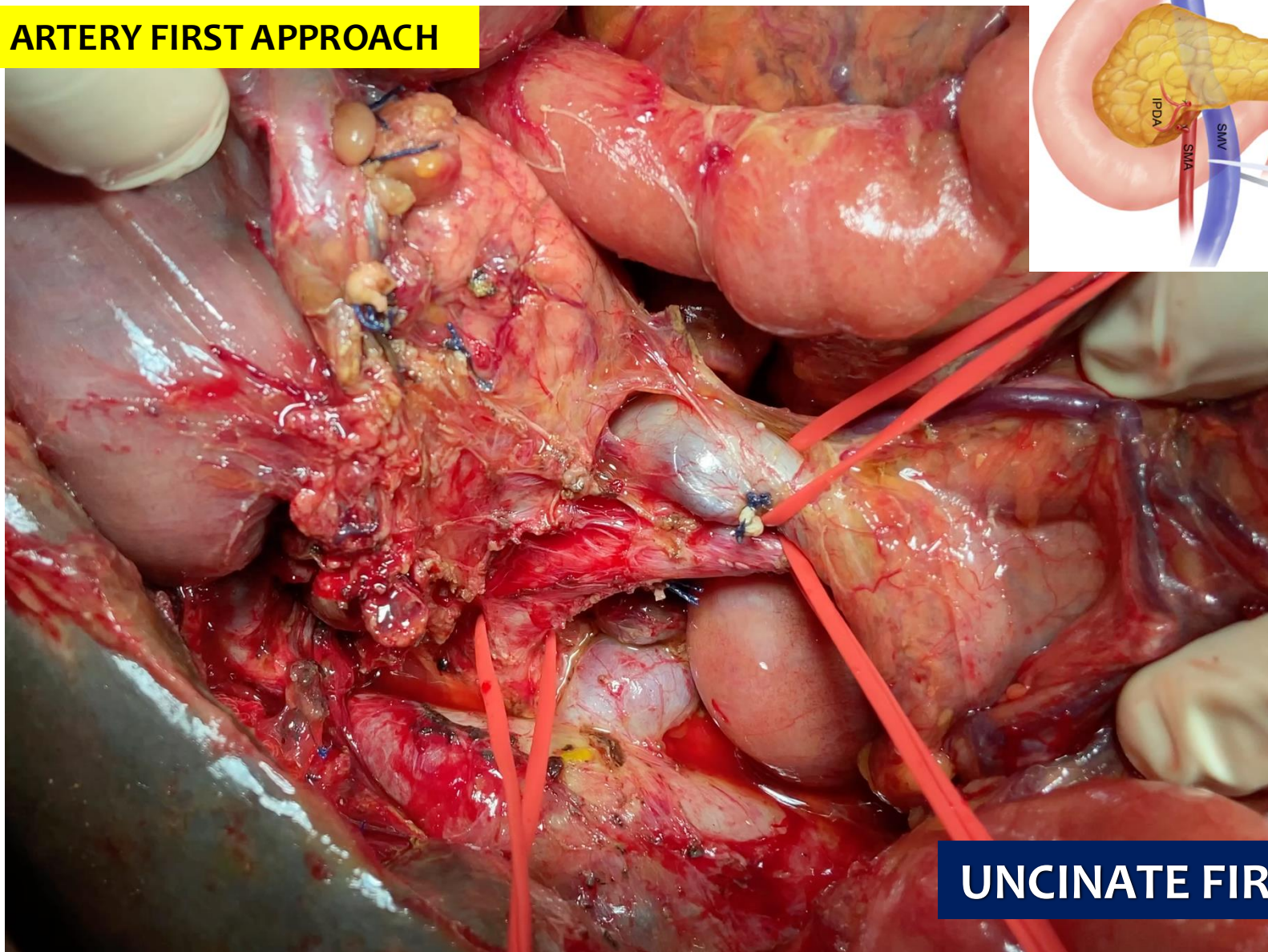
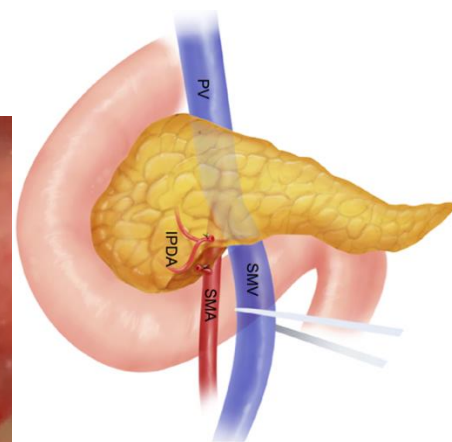
ARTERY FIRST

ARTERY FIRST APPROACH



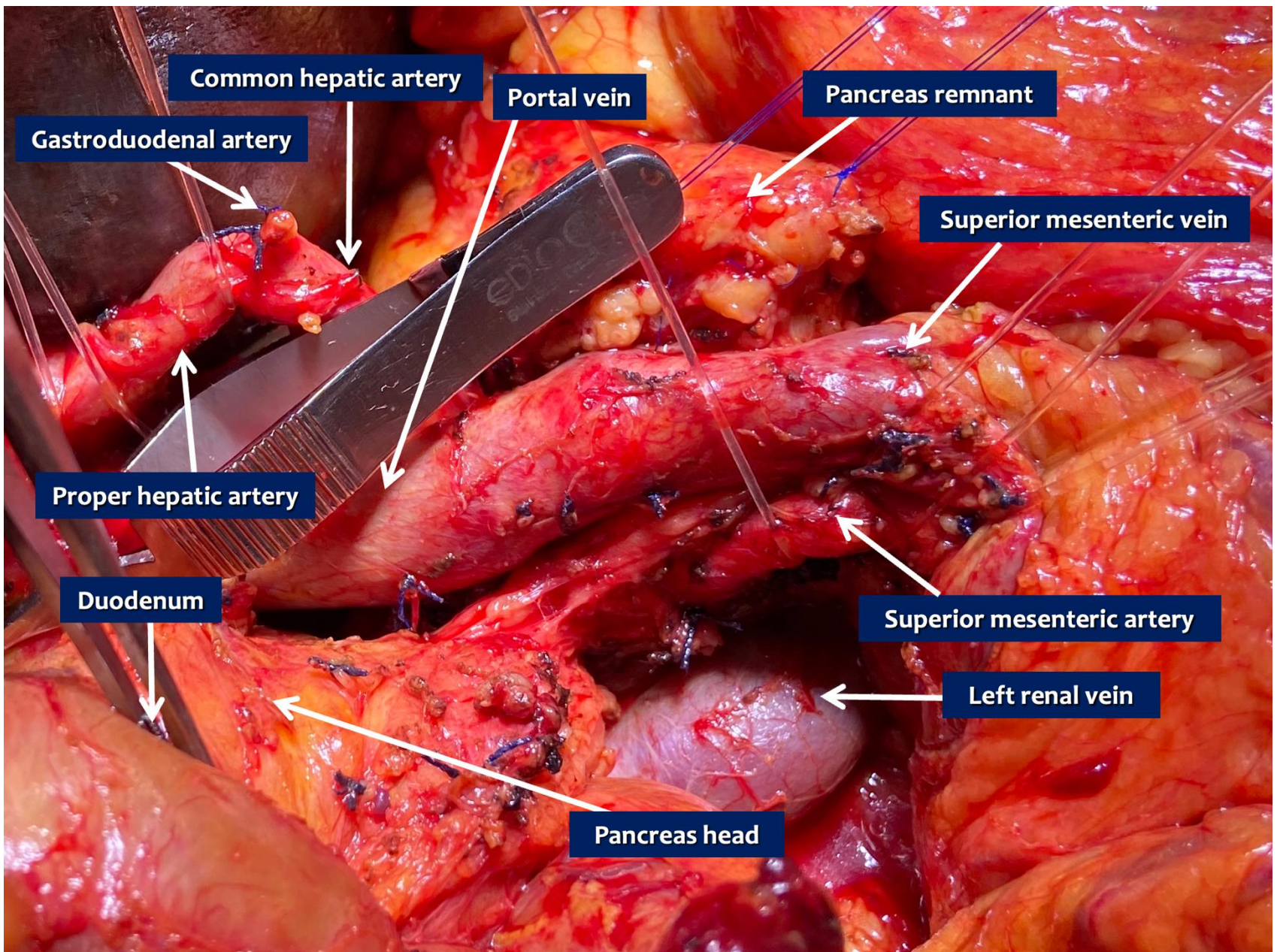
UNCINATE FIRST

ARTERY FIRST APPROACH

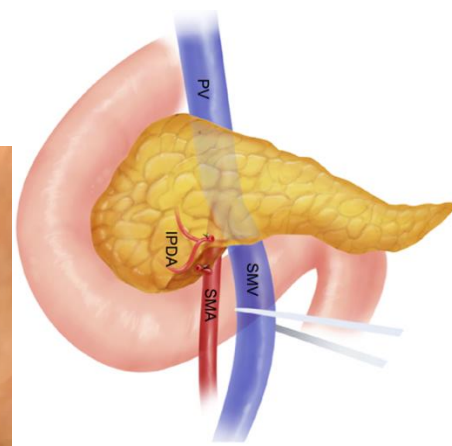
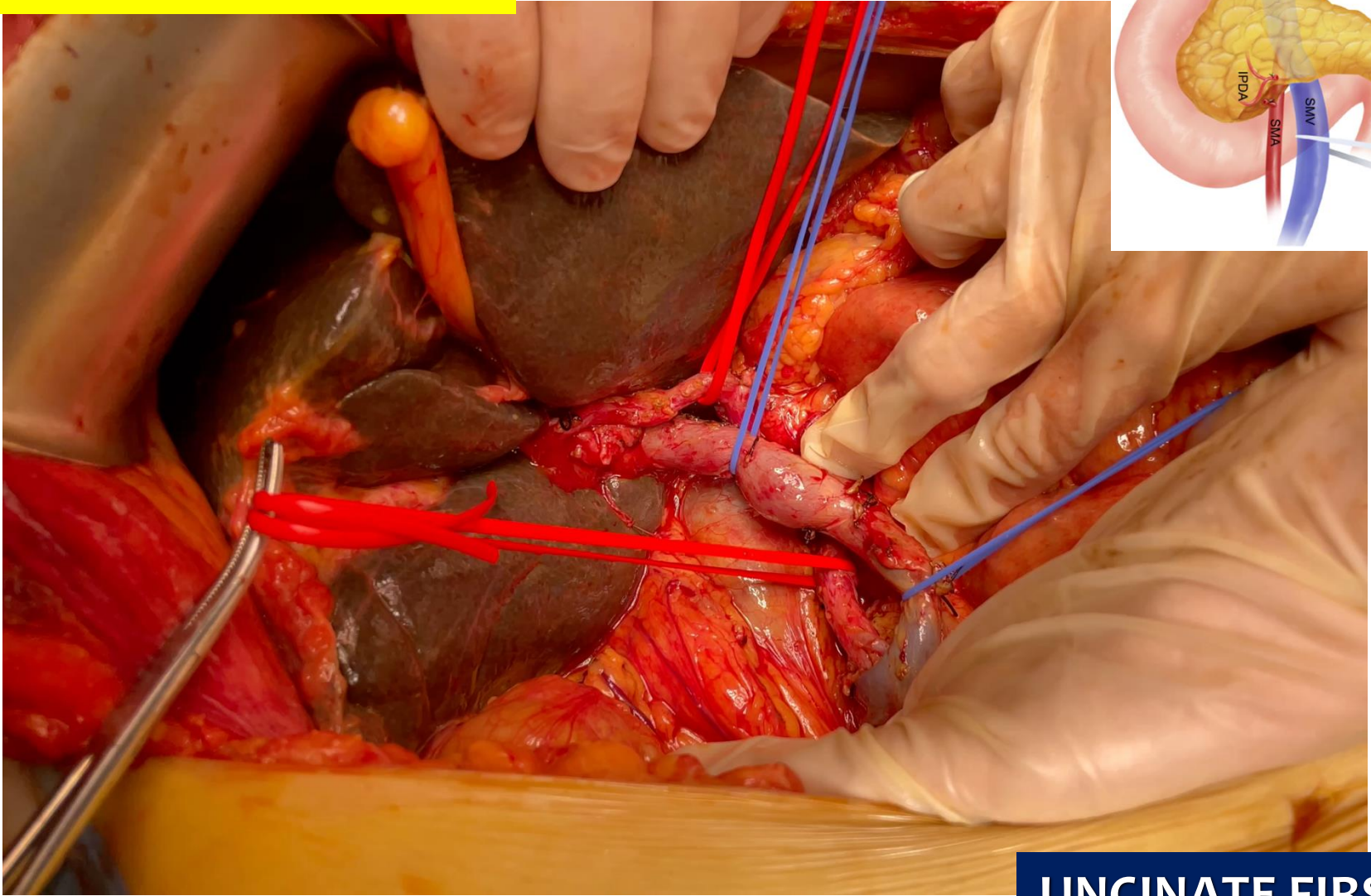


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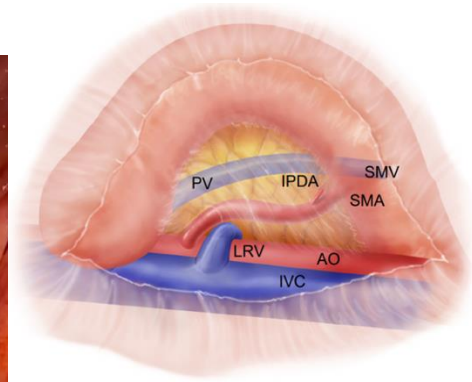
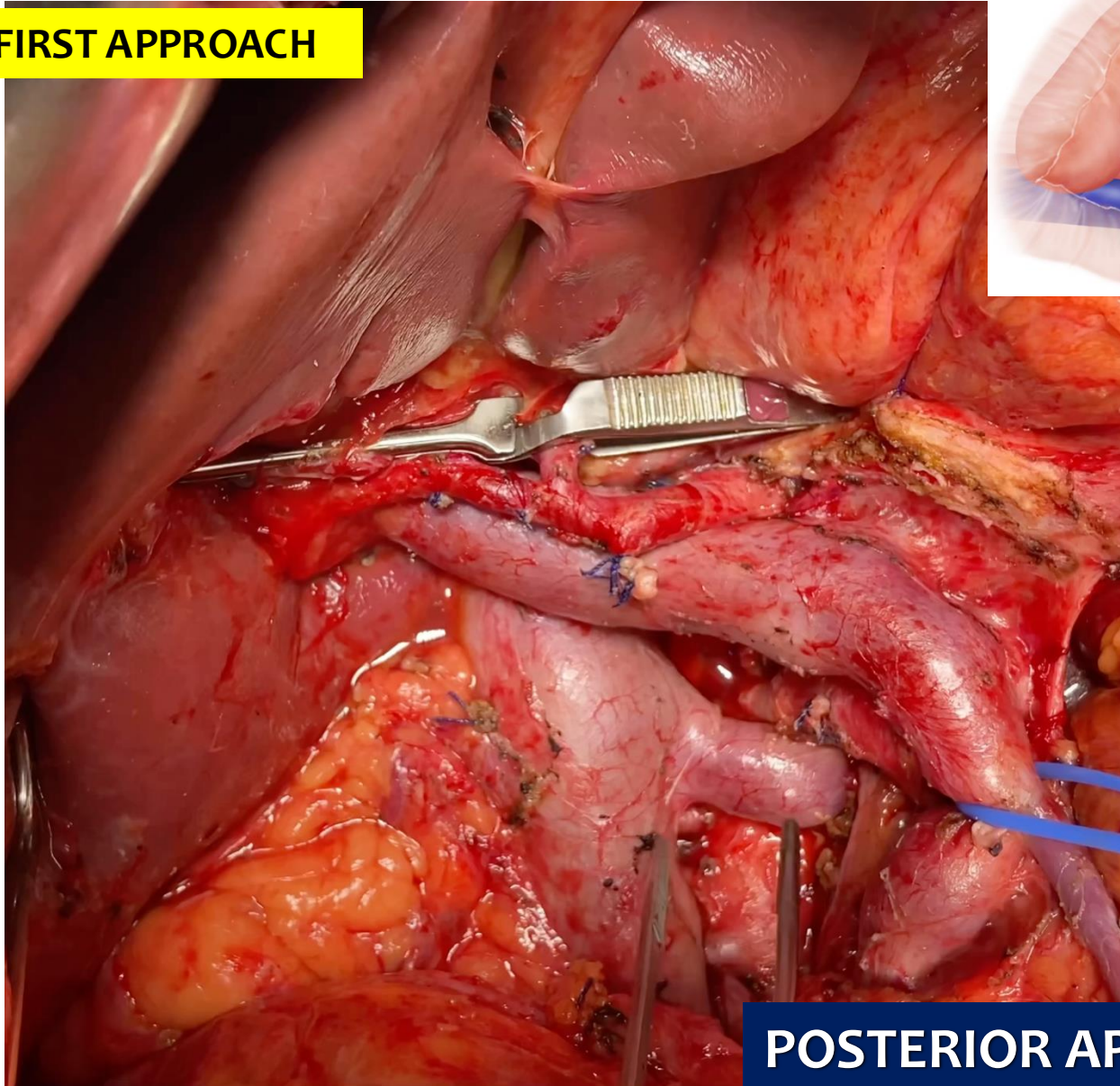


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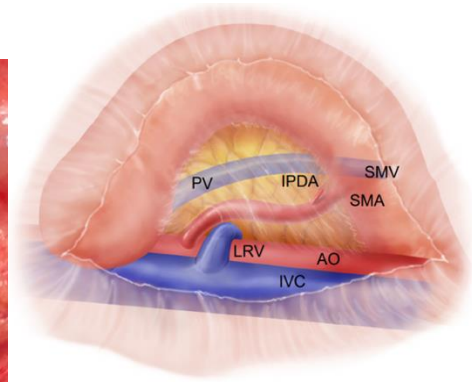
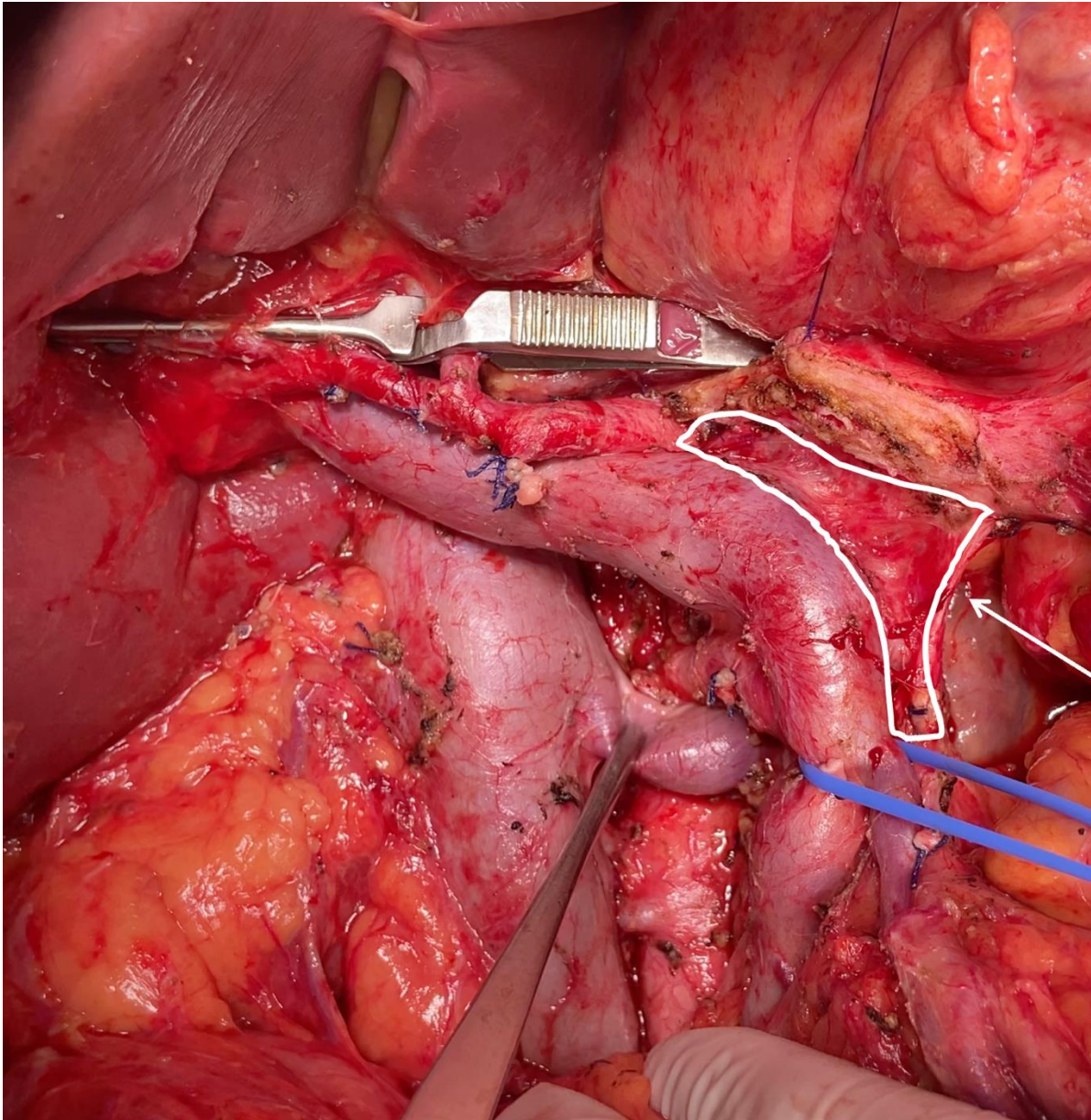


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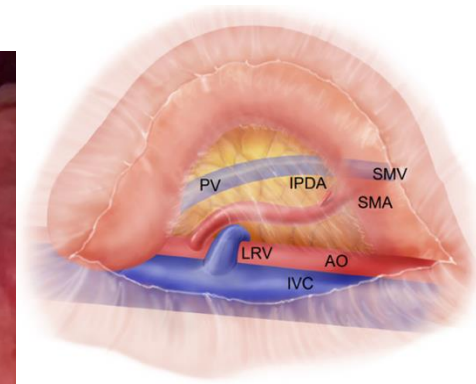
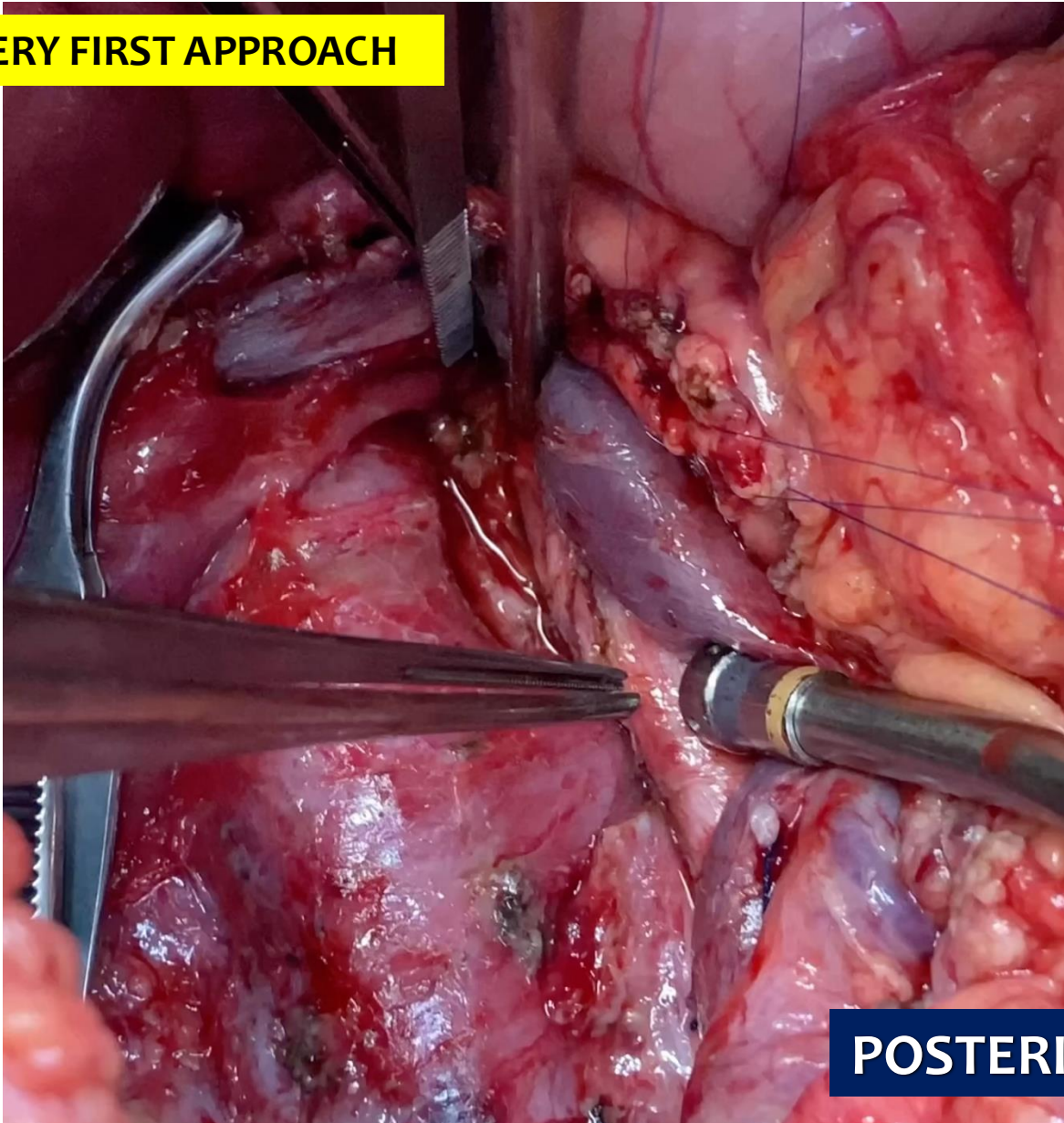
ARTERY FIRST APPROACH



POSTERIOR APPROACH

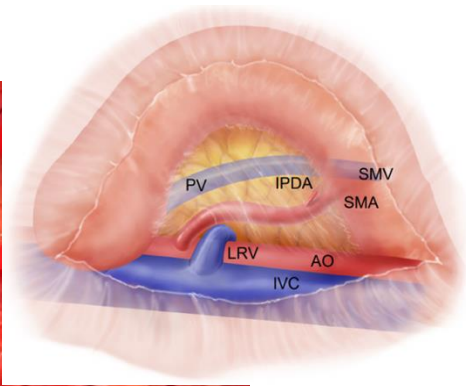
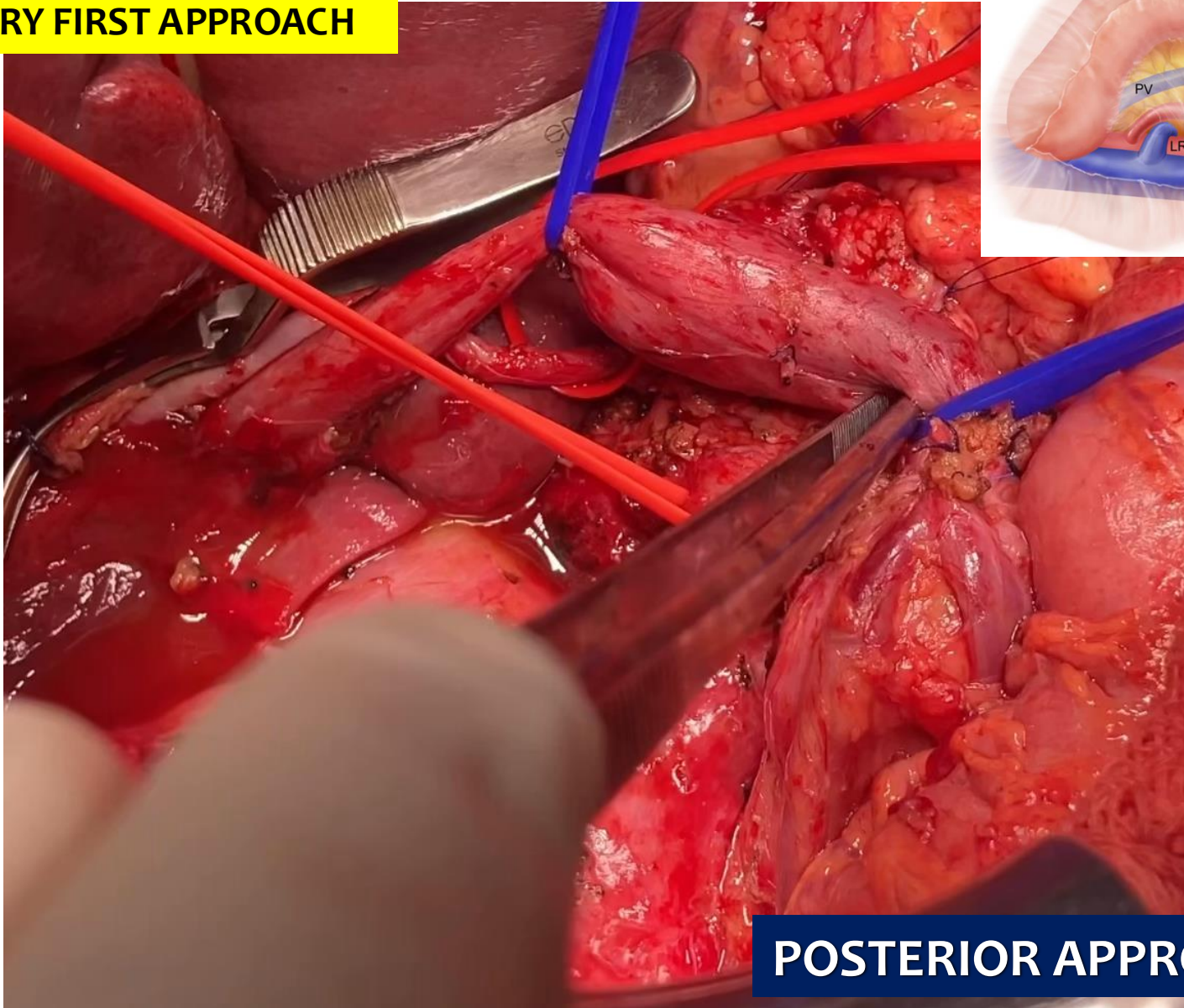


ARTERY FIRST APPROACH



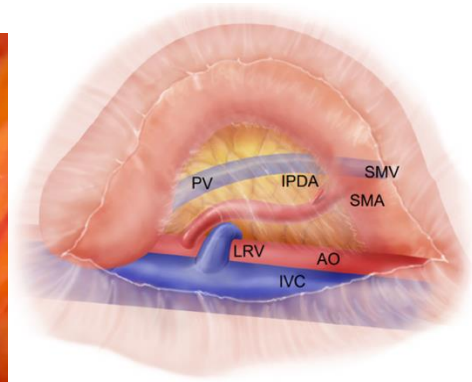
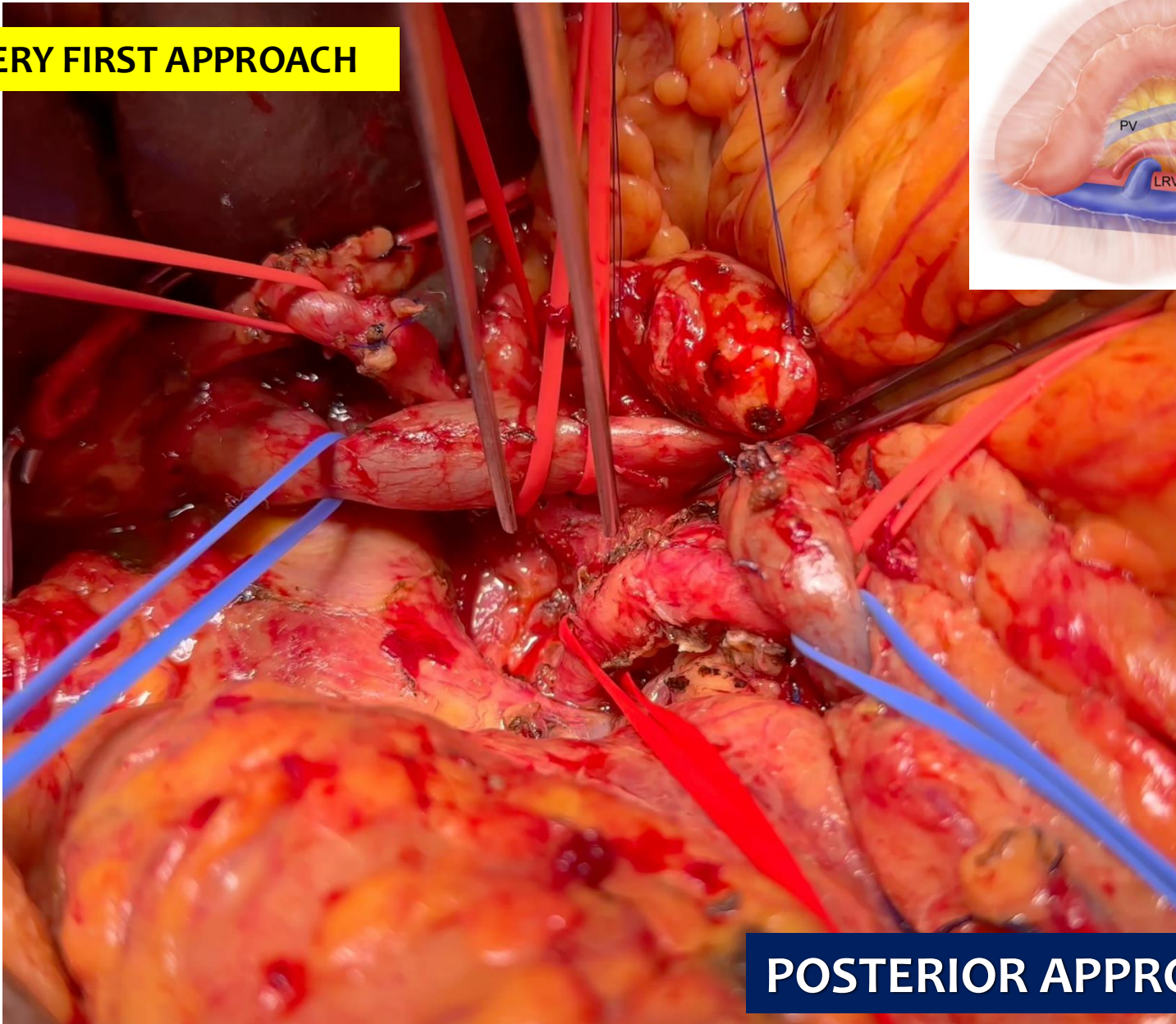
POSTERIOR APPROACH

ARTERY FIRST APPROACH



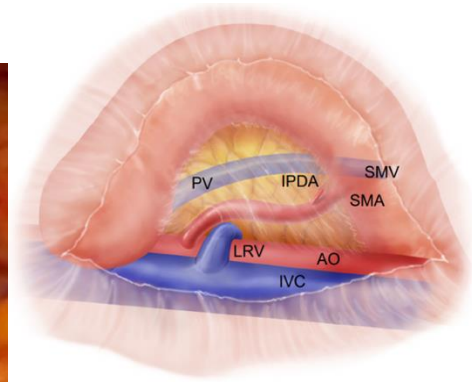
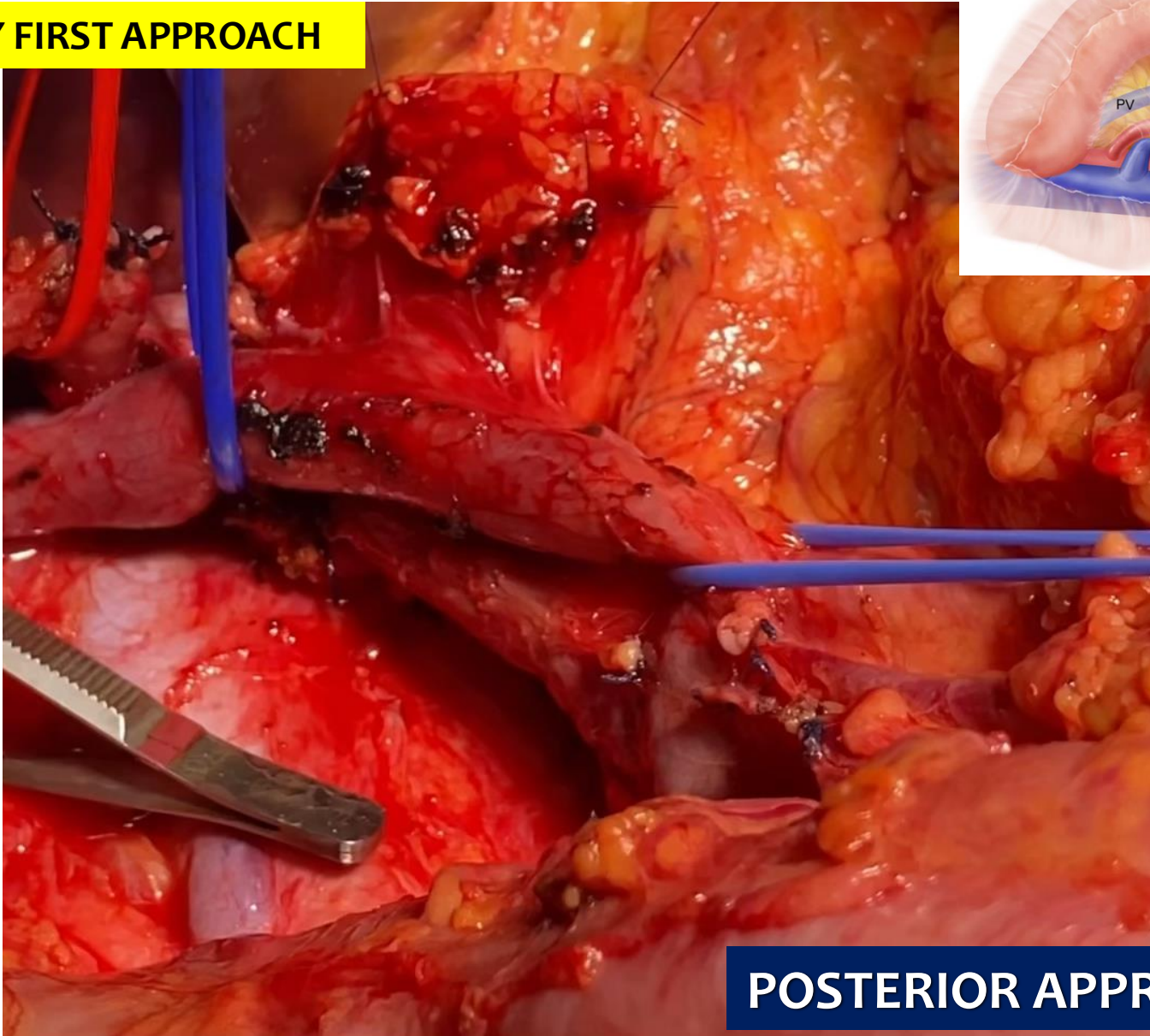
POSTERIOR APPROACH

ARTERY FIRST APPROACH



POSTERIOR APPROACH

ARTERY FIRST APPROACH



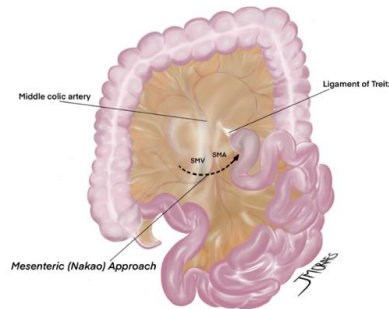
POSTERIOR APPROACH

A more radical perspective on surgical approach and outcomes in pancreatic cancer—a narrative review

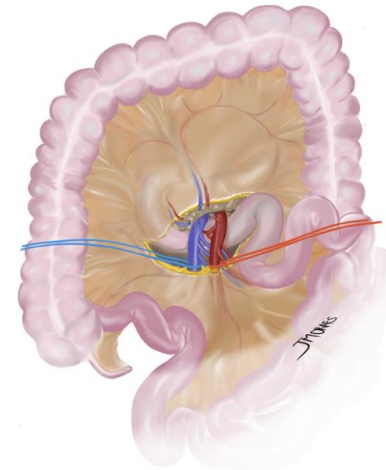
Eduardo de Souza M. Fernandes^{1,2,3}, Felipe Pedreira T. de Mello^{1,2}, Eduardo Pinho Braga¹, Gabrielle Oliveira de Souza¹, Ronaldo Andrade^{1,2}, Leandro Savatone Pimentel^{1,2}, Camila Liberato Girão^{1,2}, Munique Siqueira^{1,2}, José Maria A. Moraes-Junior^{6,7}, Romulo Varella de Oliveira⁴, Nicolas Goldaracena⁵, Orlando Jorge M. Torres^{6,7}

MESENTERIC APPROACH

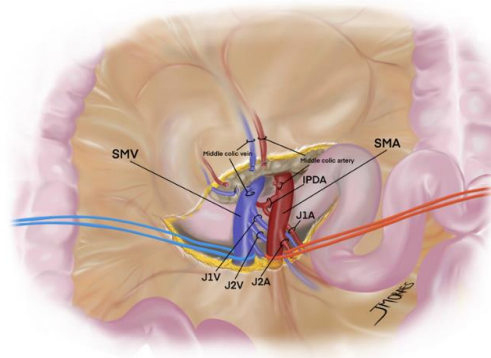
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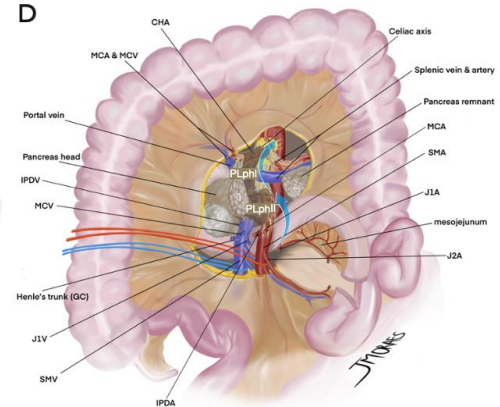
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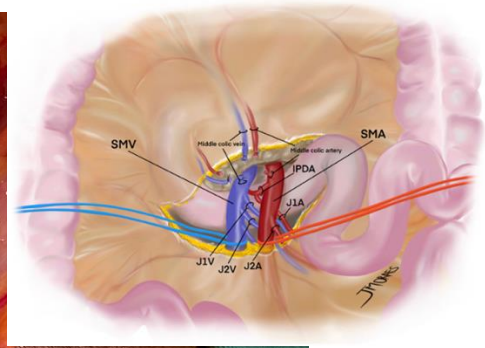
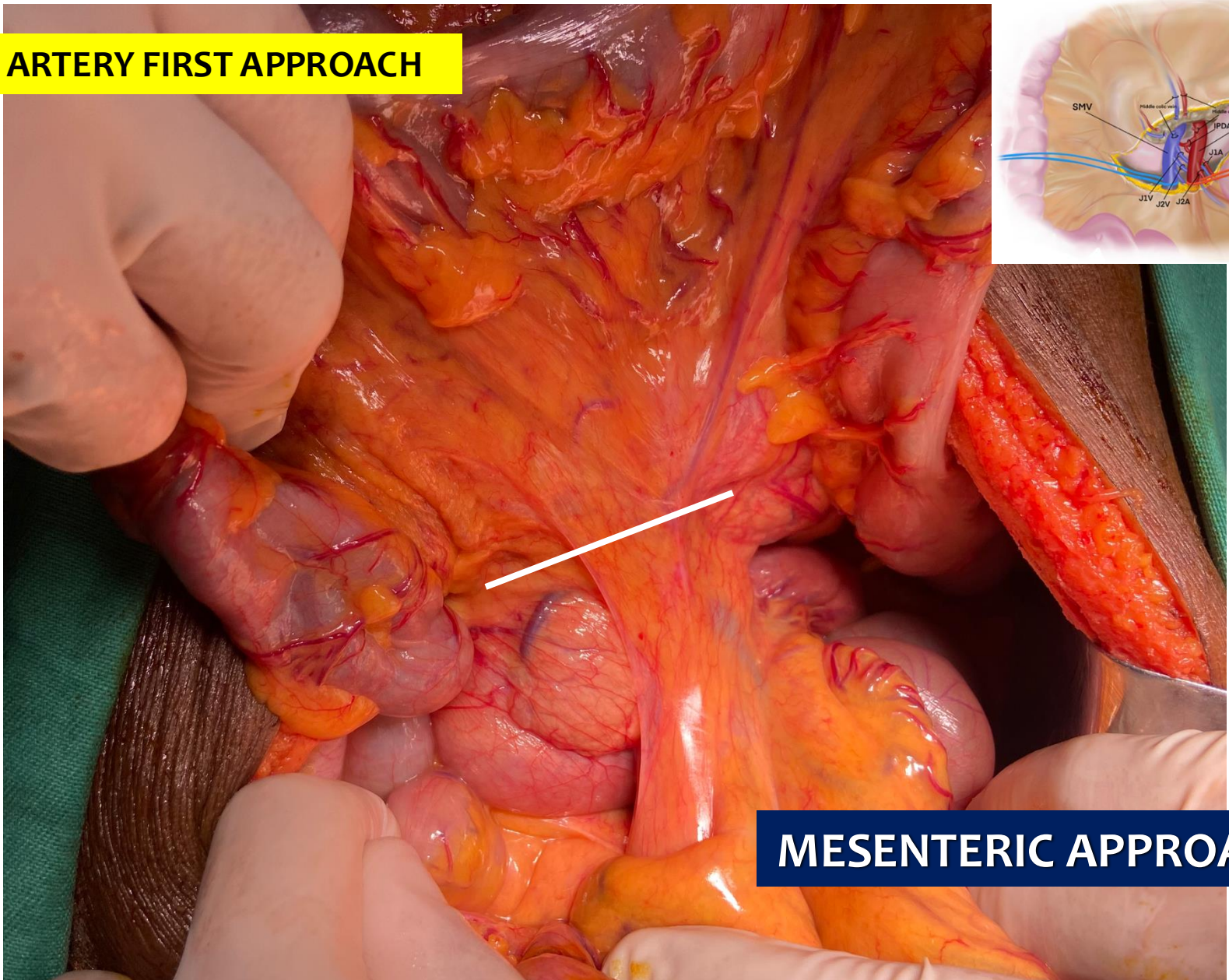
C



D

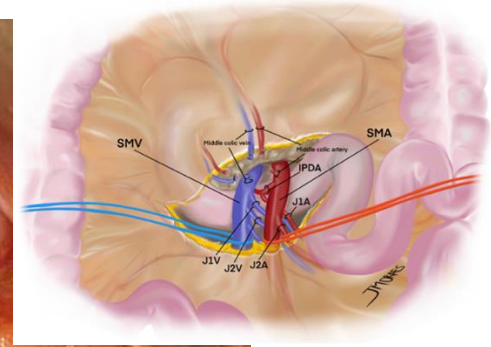
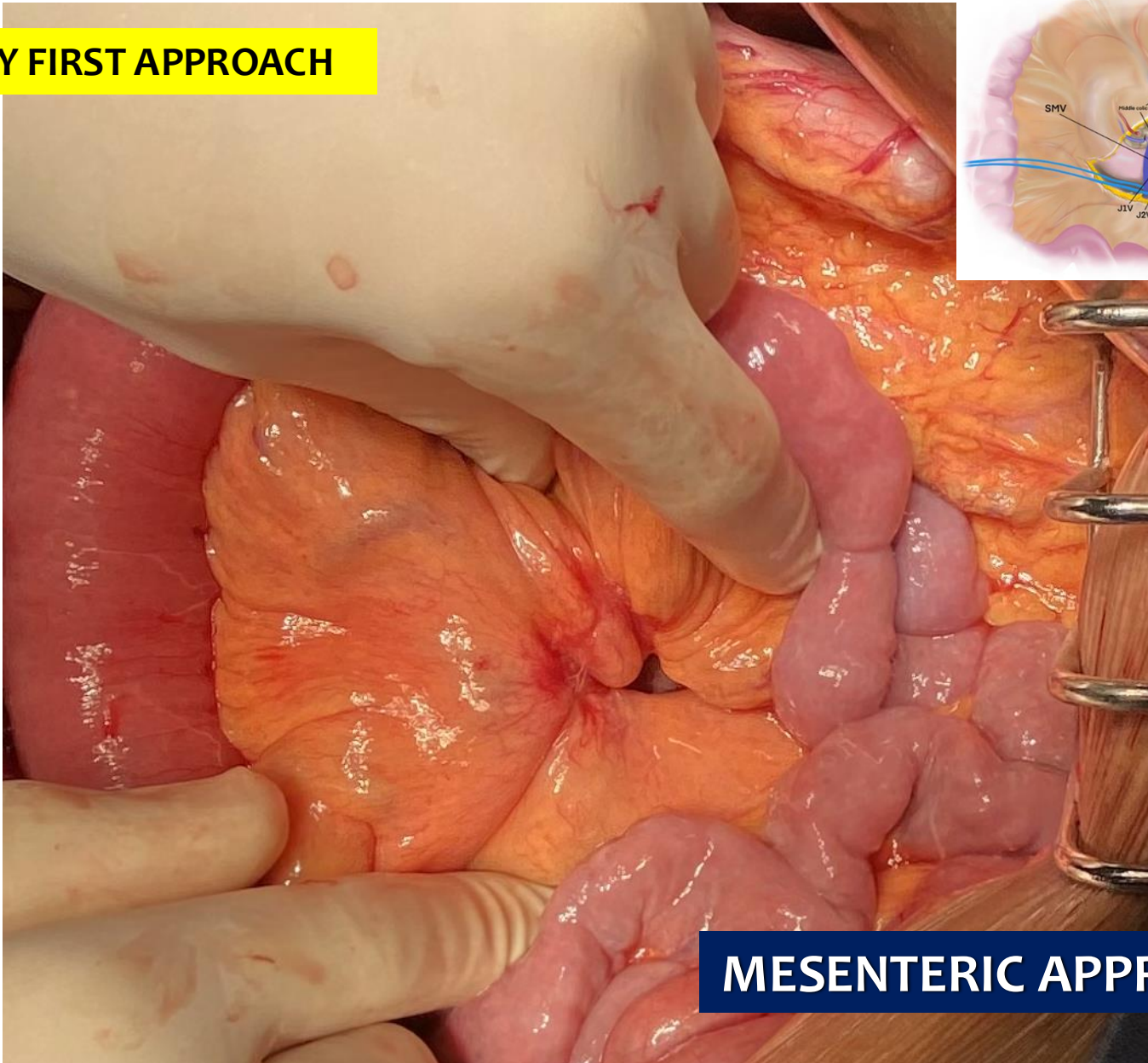


ARTERY FIRST APPROACH



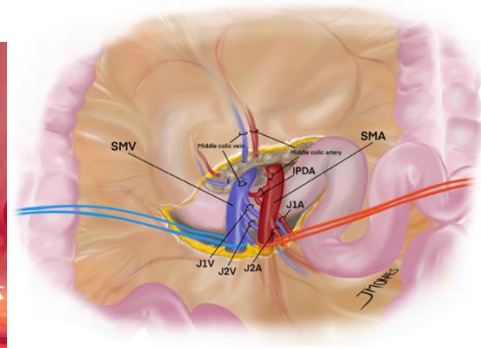
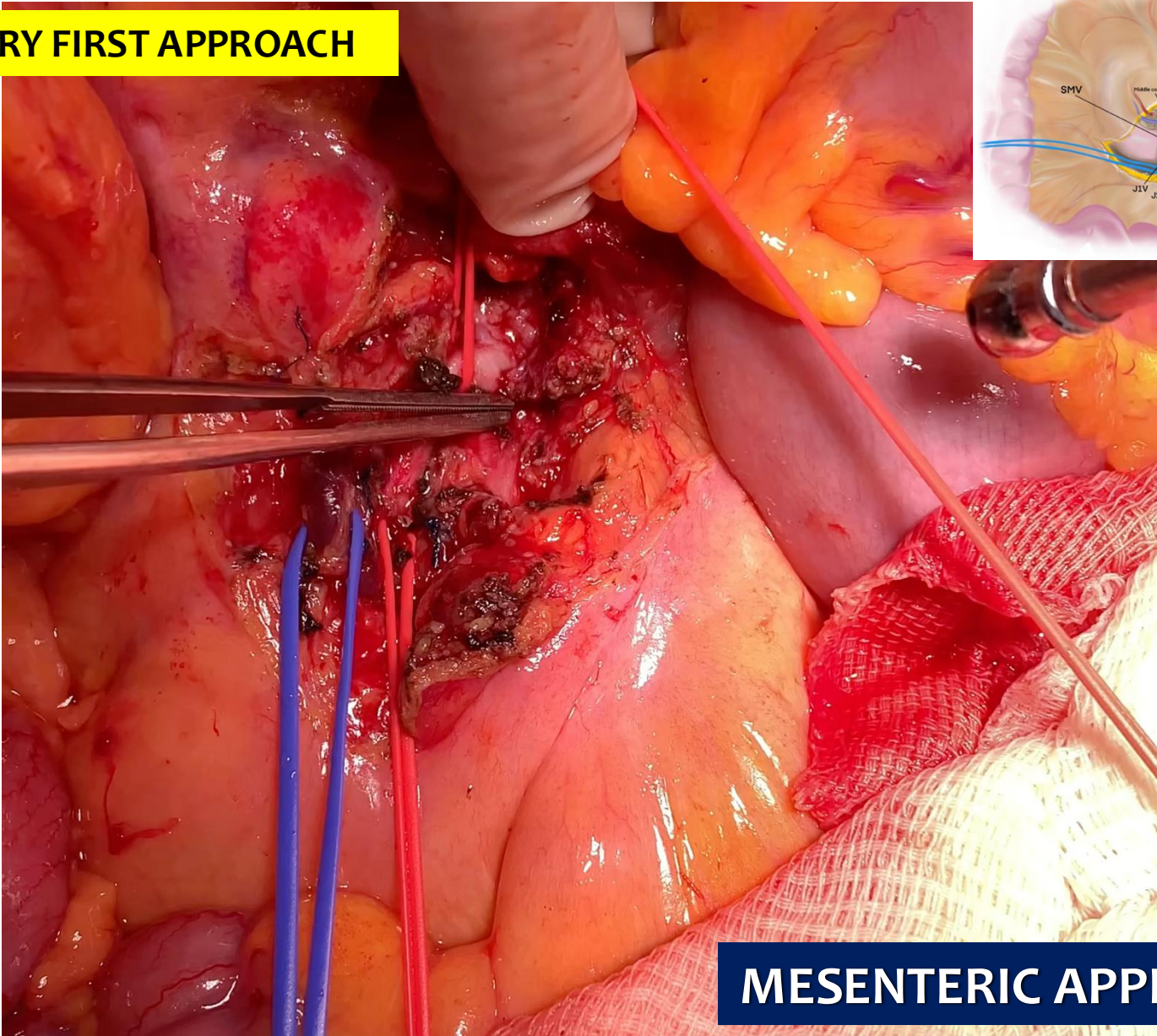
MESENTERIC APPROACH

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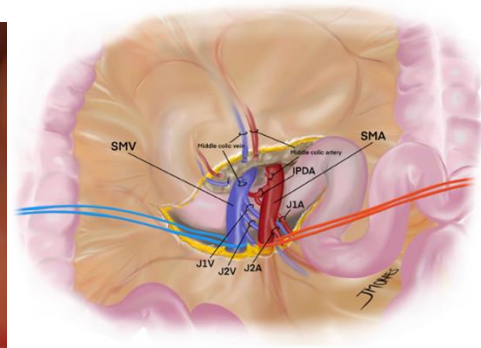
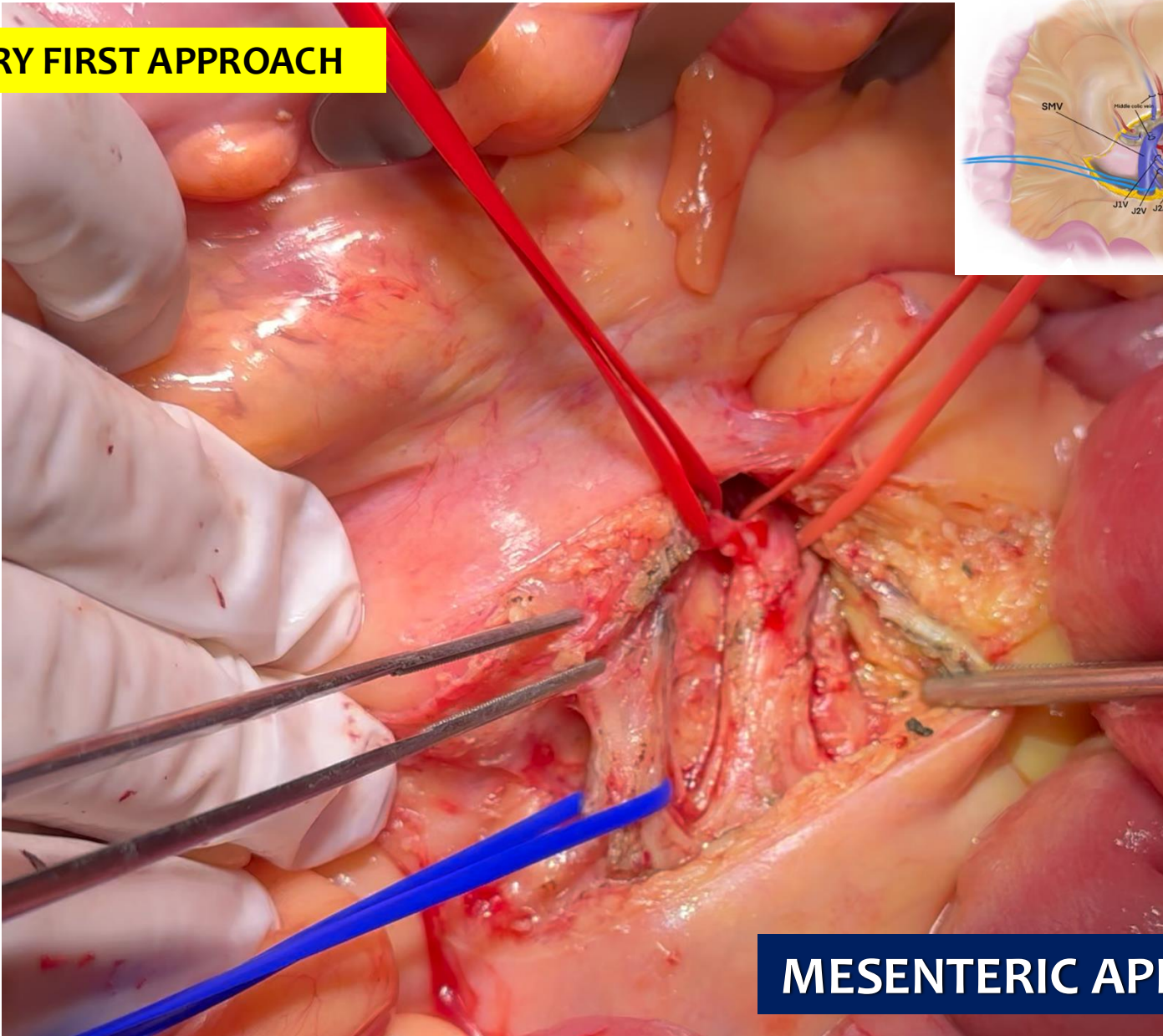
MESENTERIC APPROACH

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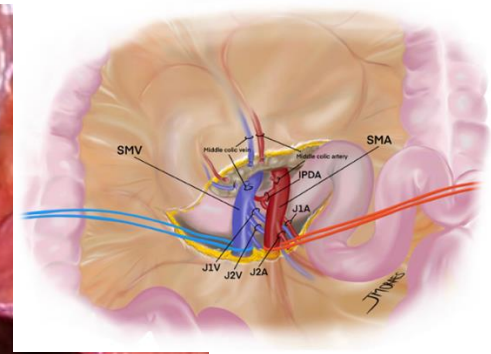
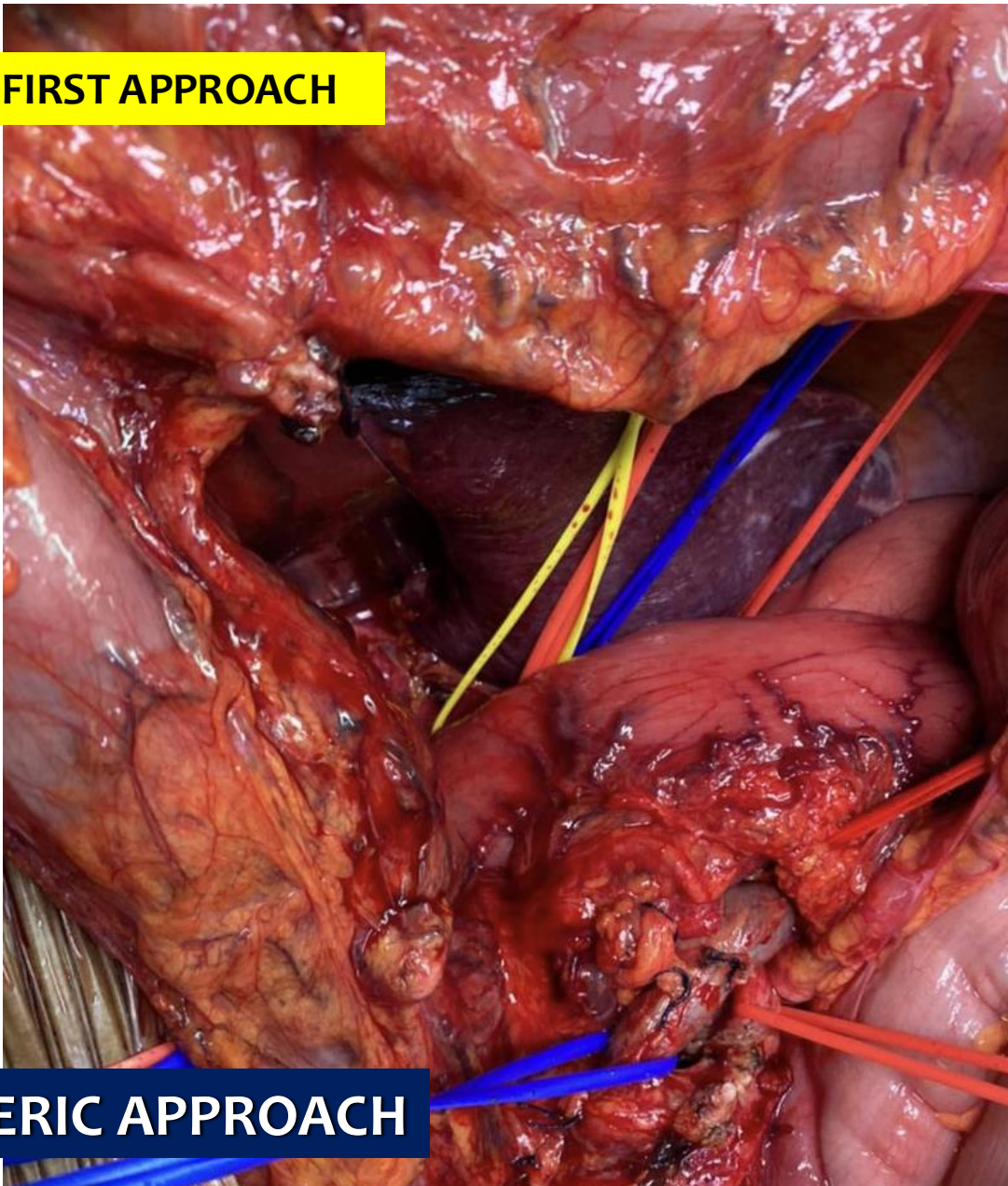
MESENTERIC APPROACH

ARTERY FIRST APPROACH



MESENTERIC APPROACH

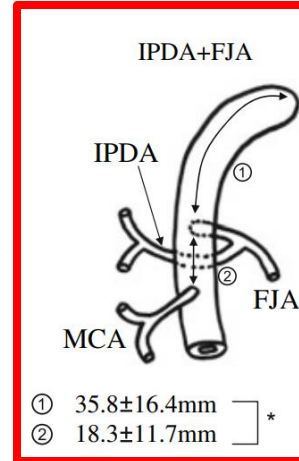
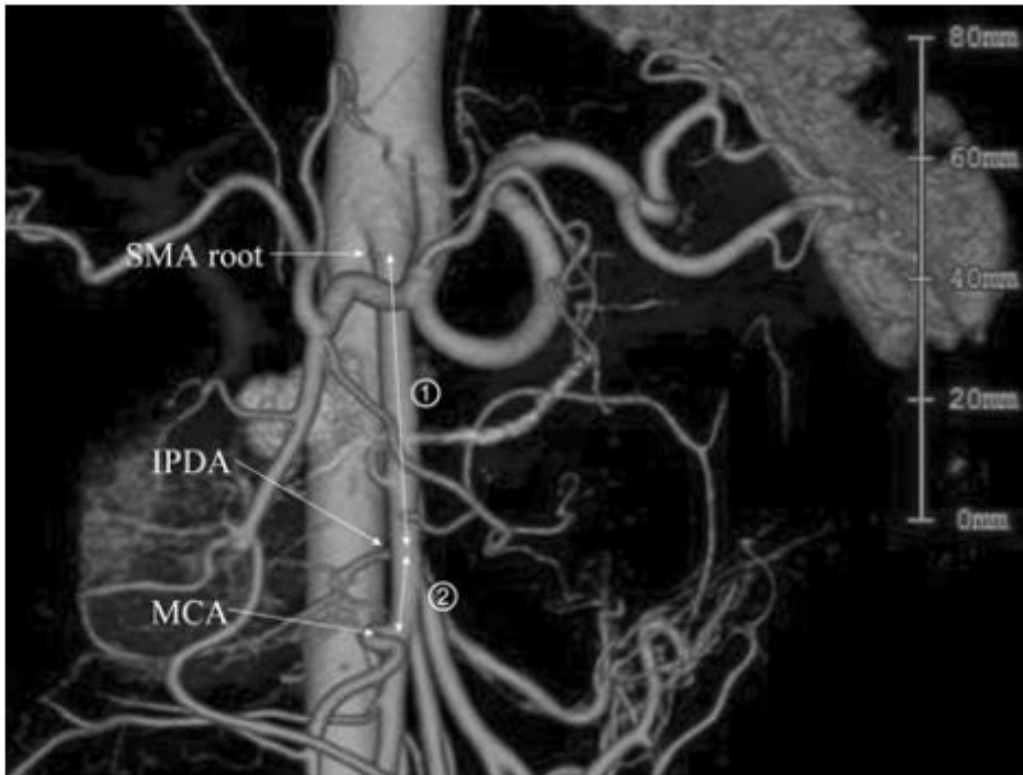
ARTERY FIRST APPROACH



MESENTERIC APPROACH

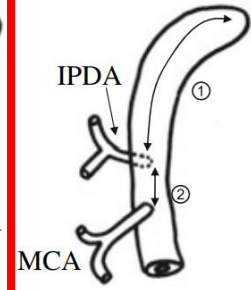


INFERIOR PANCREATODUODENAL ARTERY



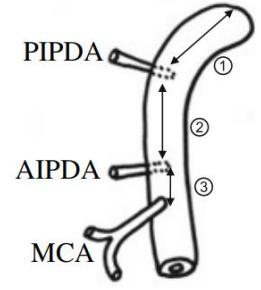
① 35.8±16.4mm
② 18.3±11.7mm]*

IPDA independent



① 36.3±15.2mm
② 18.6±9.2mm]*

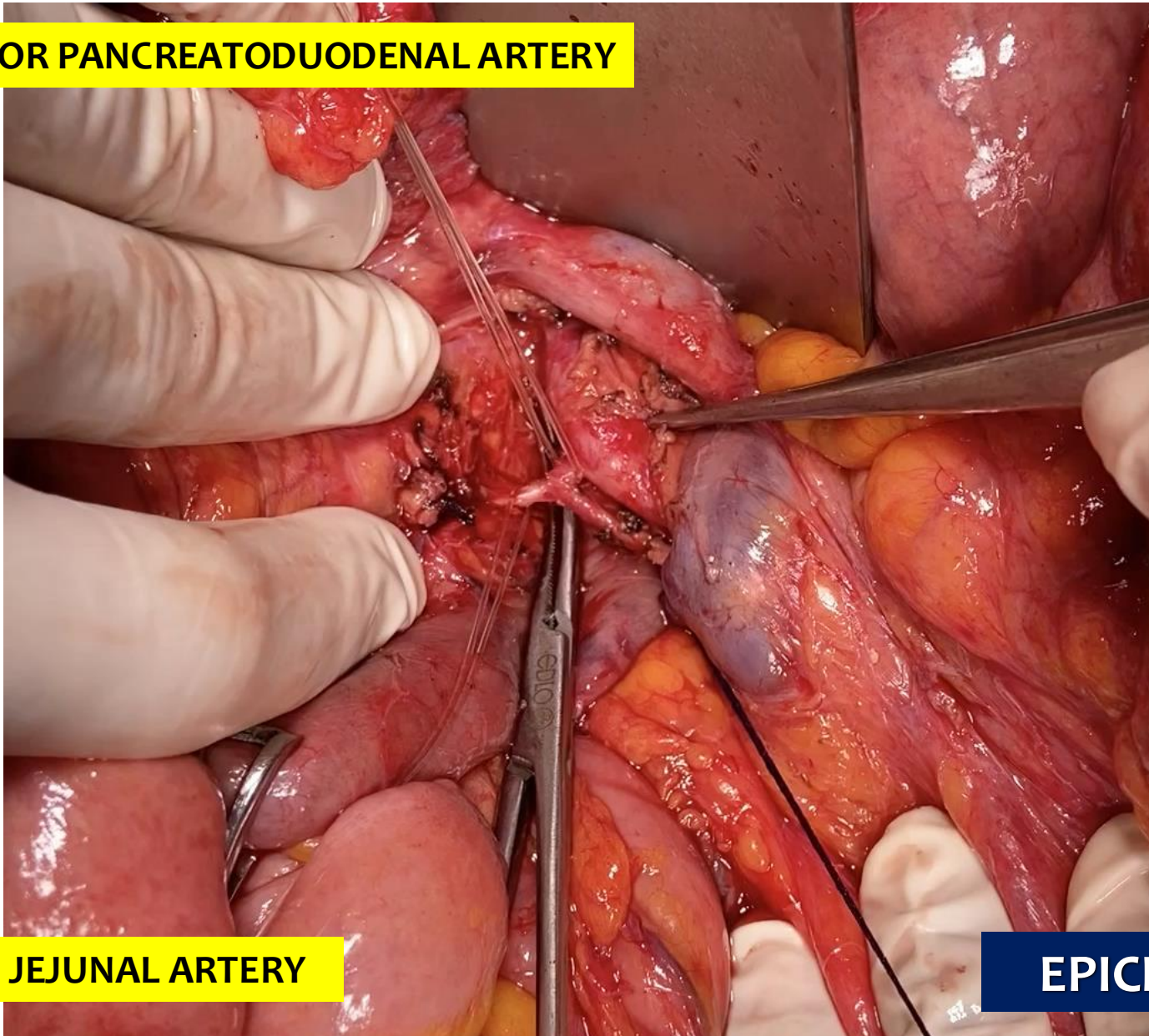
AIPDA/PIPDA independent



① 18.8±7.2mm
② 19.2±6.2mm
③ 17.6±4.2mm

IPDA

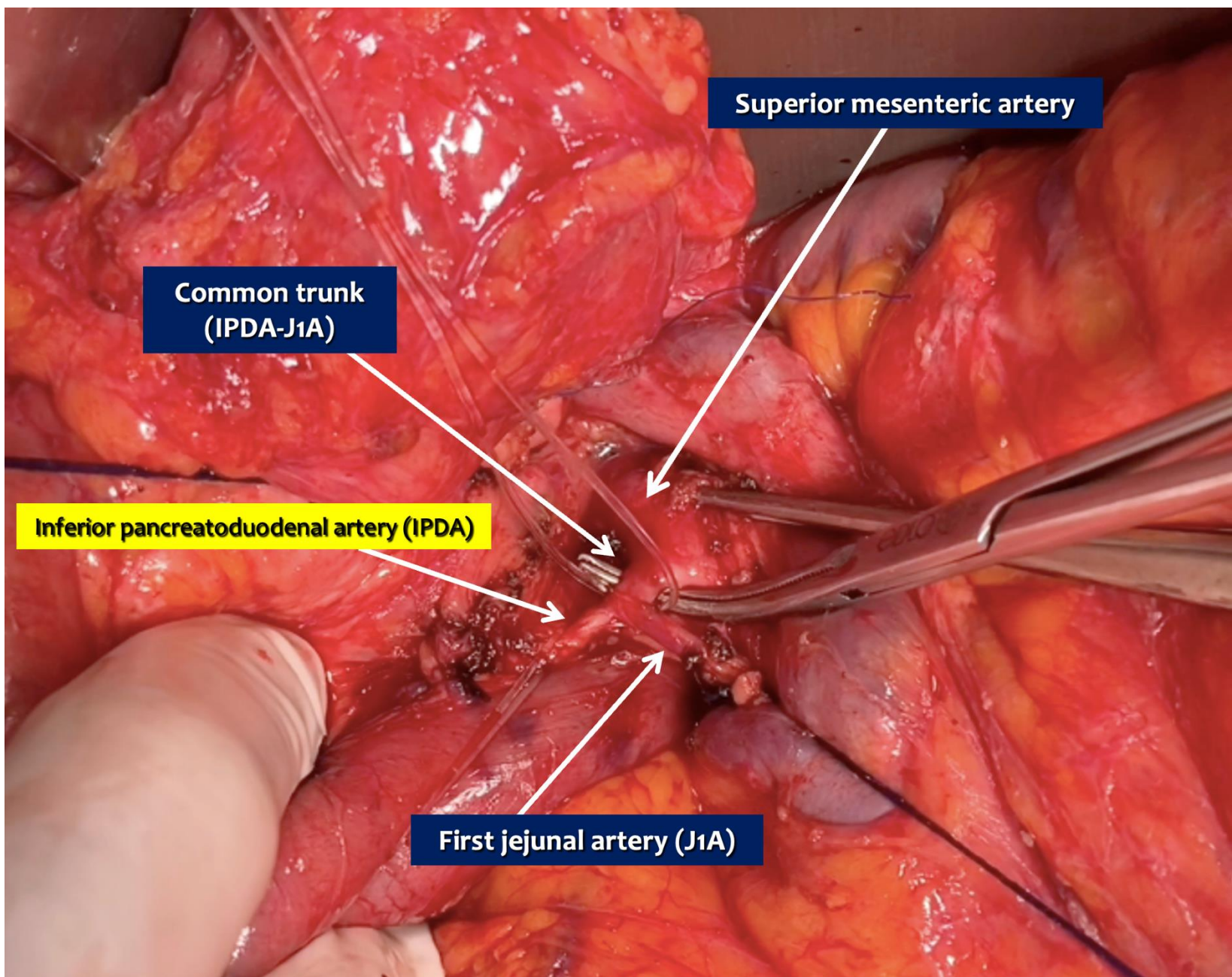
INFERIOR PANCREATODUODENAL ARTERY



FIRST JEJUNAL ARTERY

EPICENTER





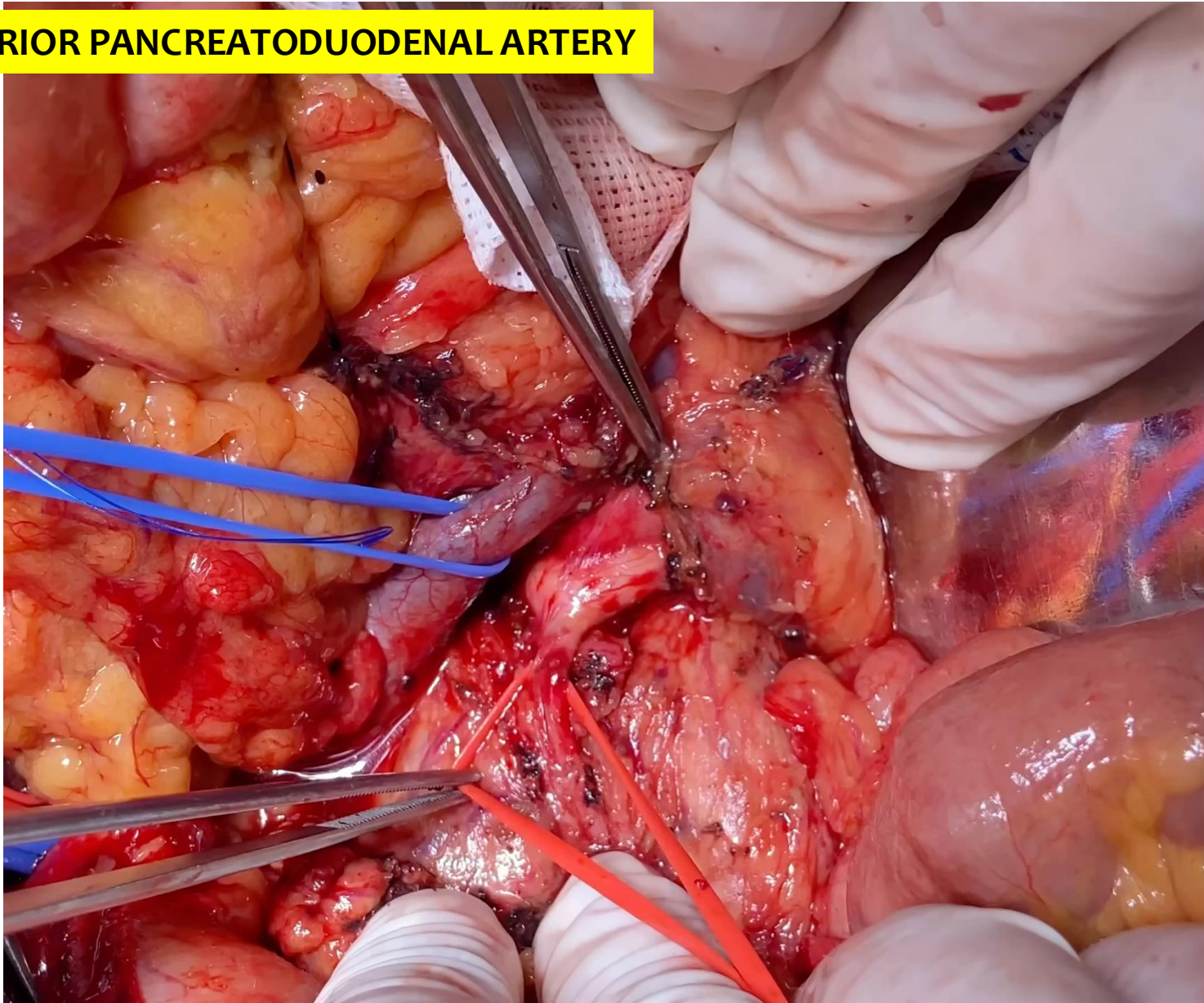
Superior mesenteric artery

Common trunk
(IPDA-J1A)

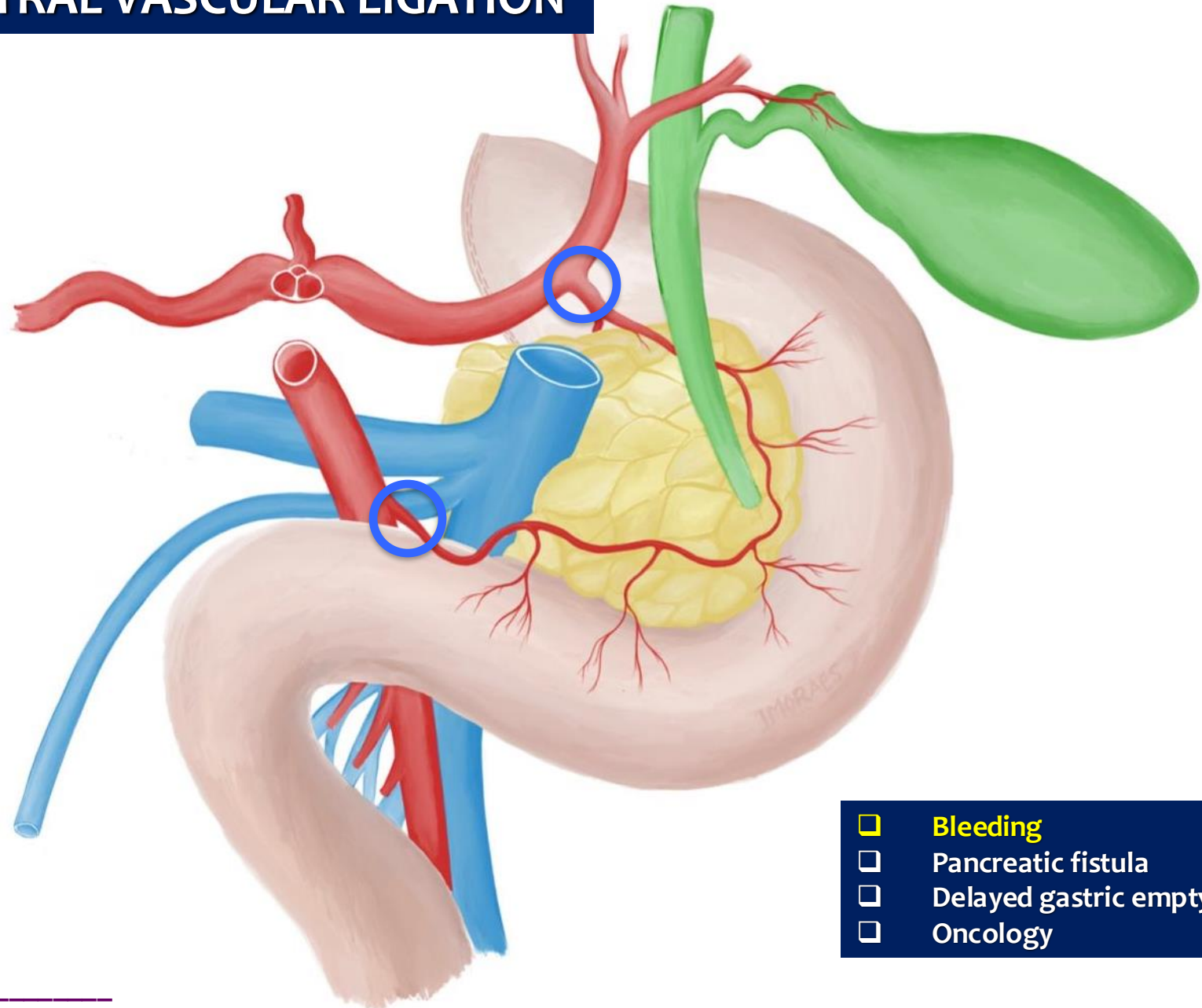
Inferior pancreaticoduodenal artery (IPDA)

First jejunal artery (J1A)

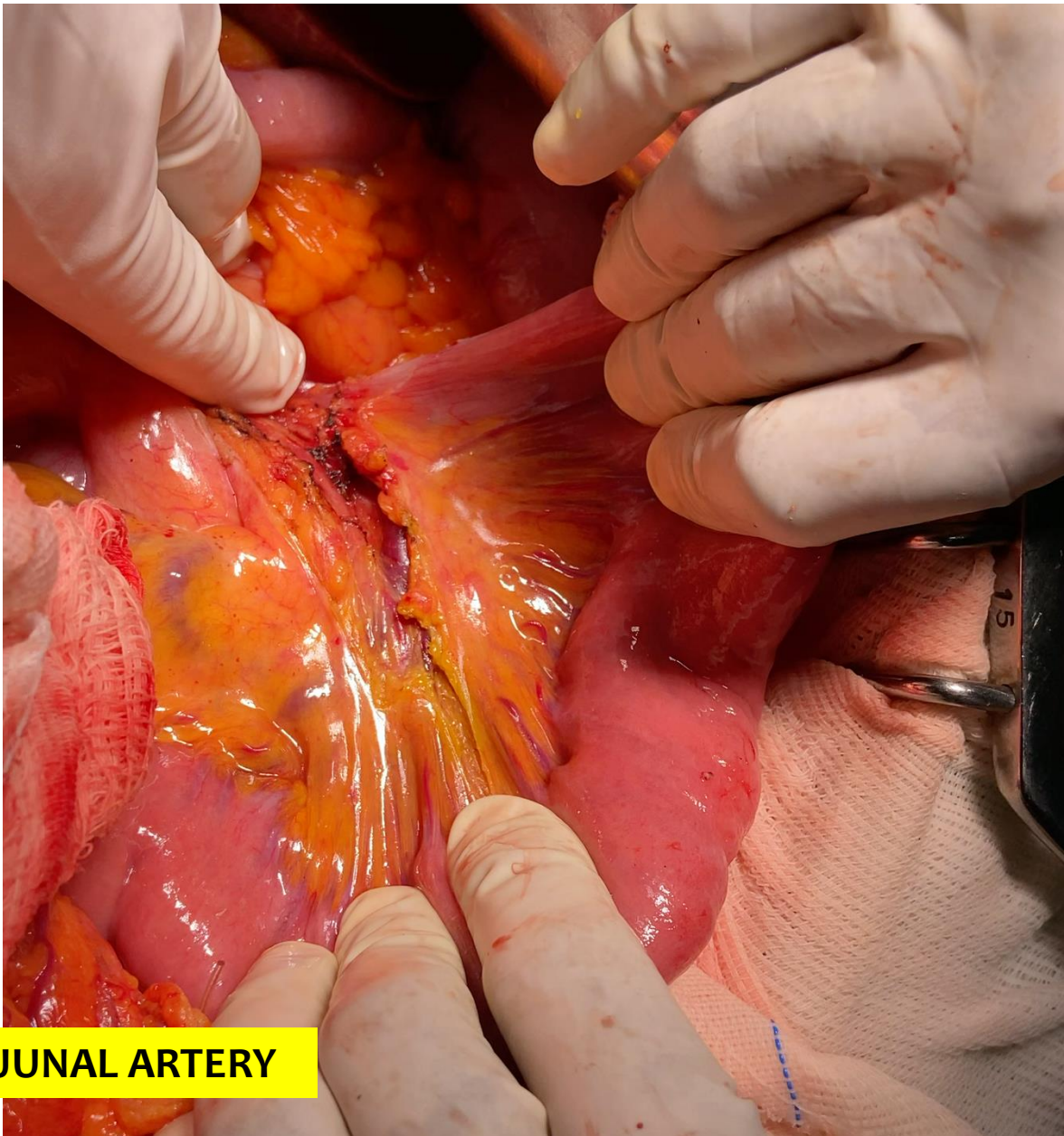
INFERIOR PANCREATODUODENAL ARTERY



CENTRAL VASCULAR LIGATION

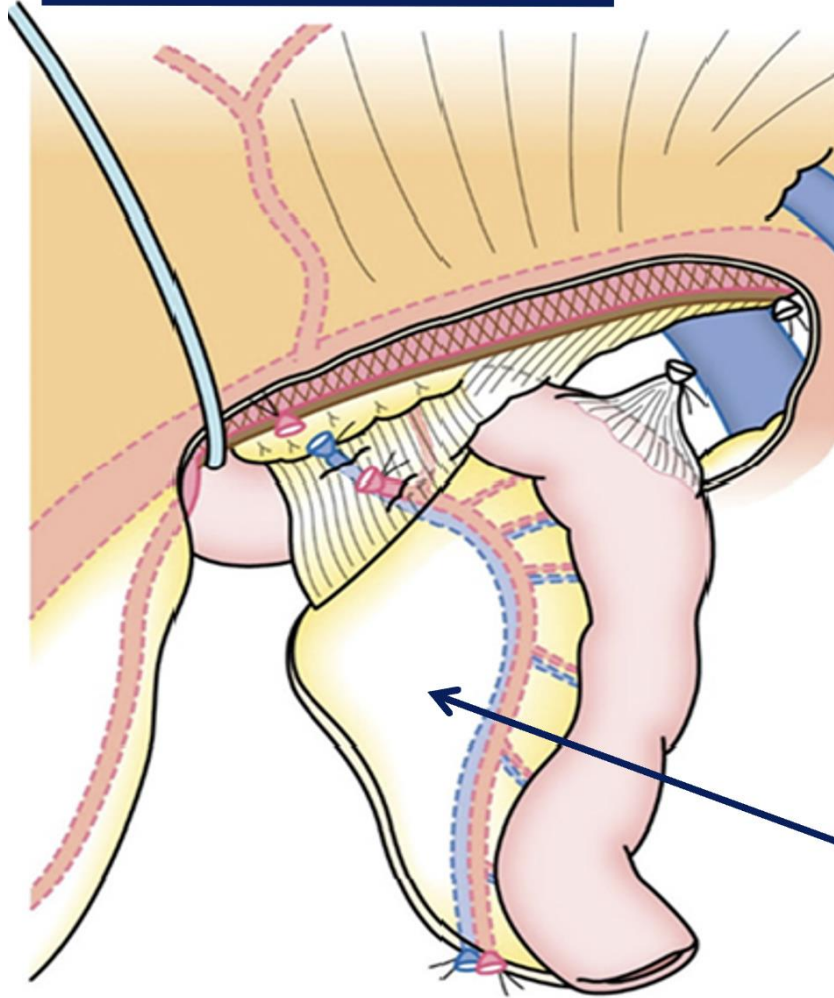


- Bleeding
- Pancreatic fistula
- Delayed gastric emptying
- Oncology

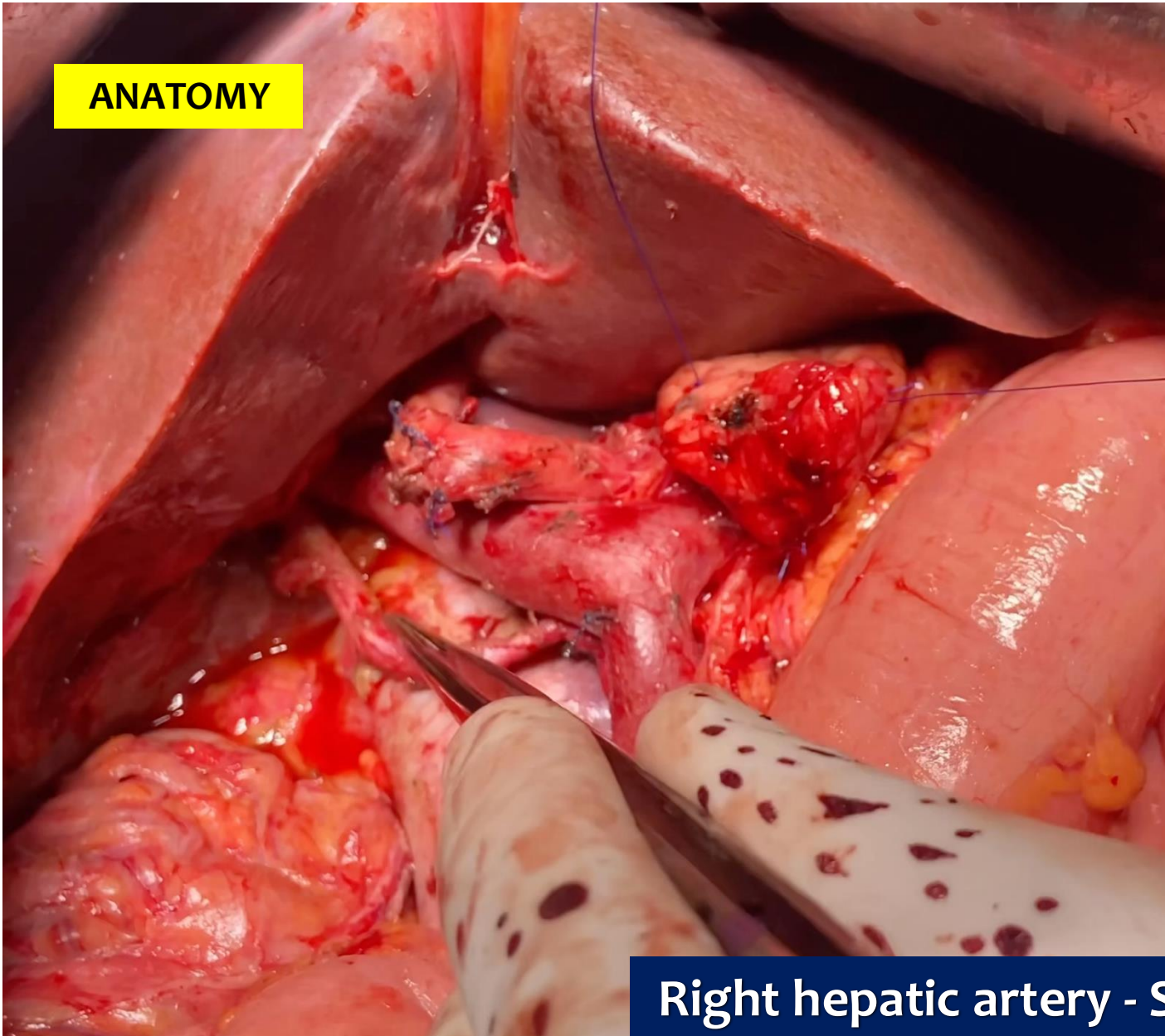


FIRST JEJUNAL ARTERY

FIRST JEJUNAL ARTERY



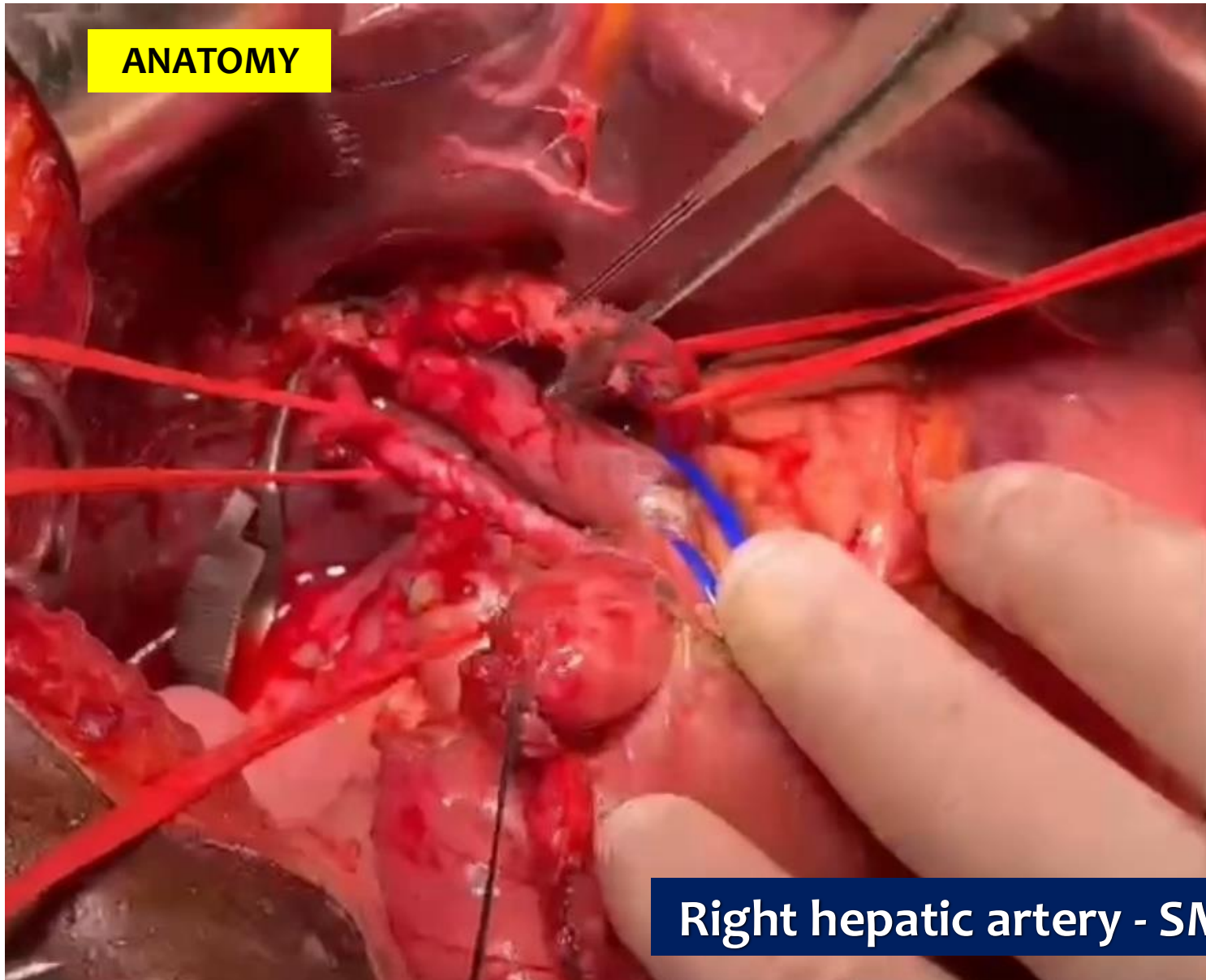
ANATOMY



Right hepatic artery - SMA

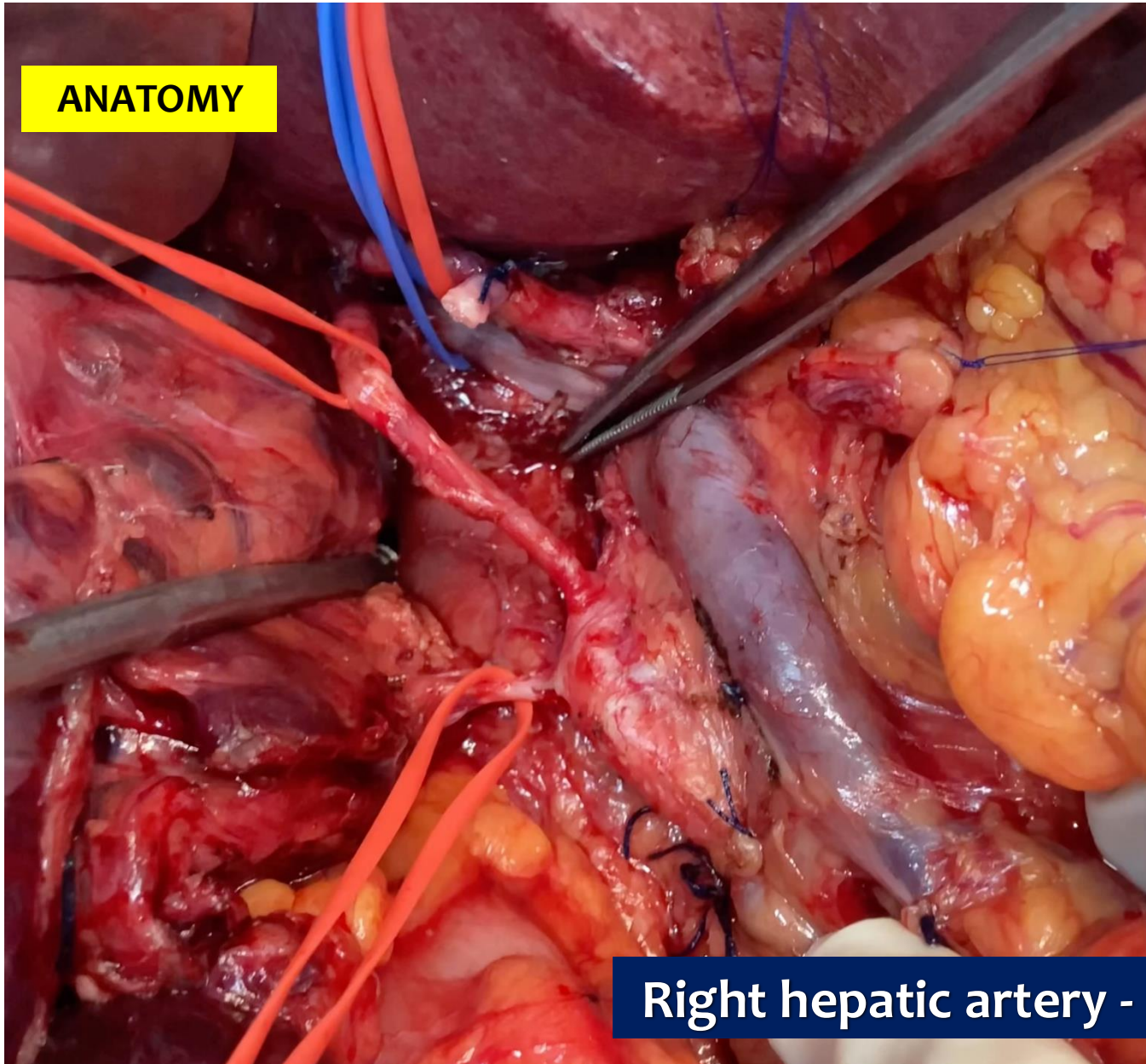


ANATOMY



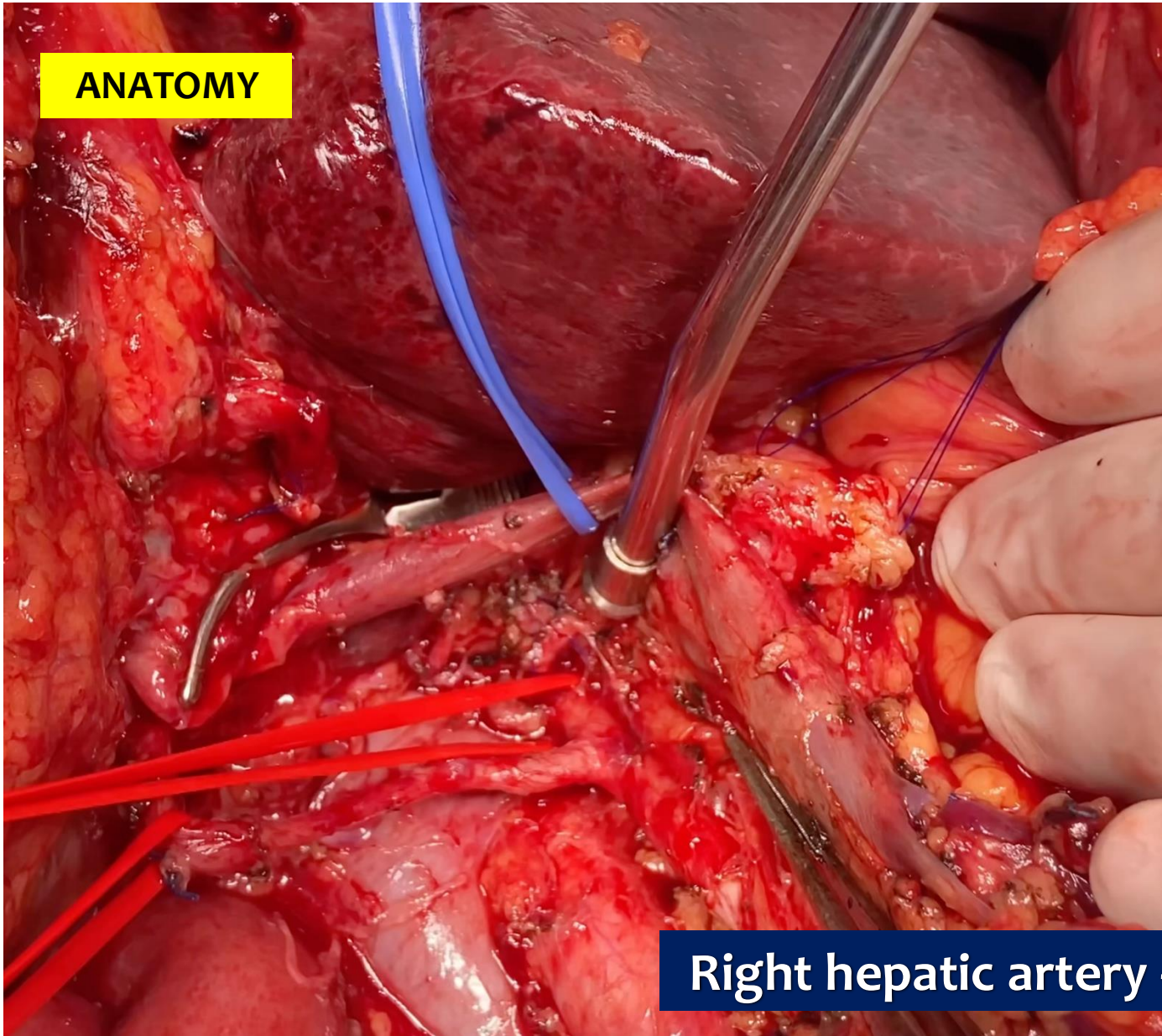
Right hepatic artery - SMA

ANATOMY



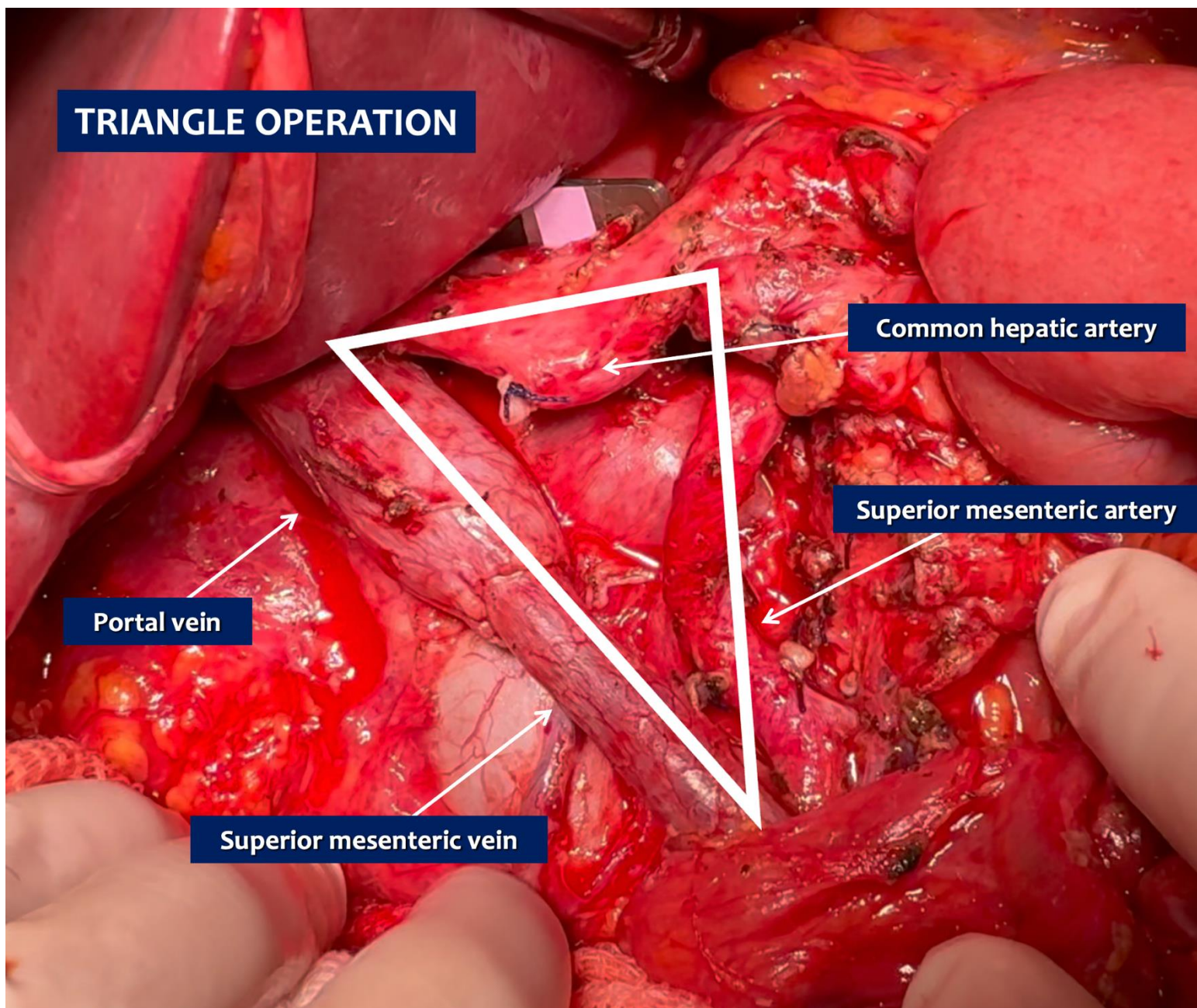
Right hepatic artery - SMA

ANATOMY



Right hepatic artery - SMA

TRIANGLE OPERATION



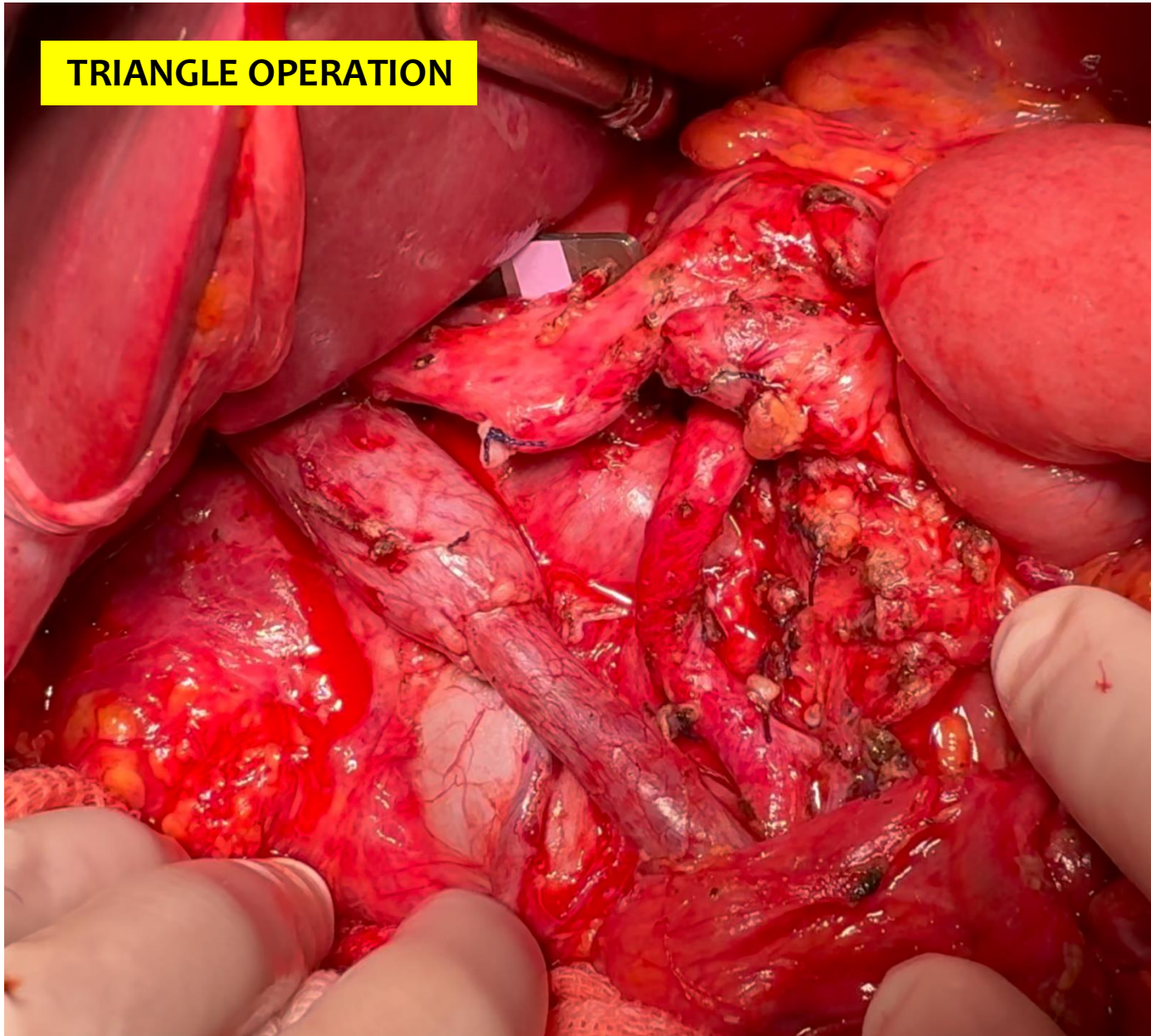
Common hepatic artery

Superior mesenteric artery

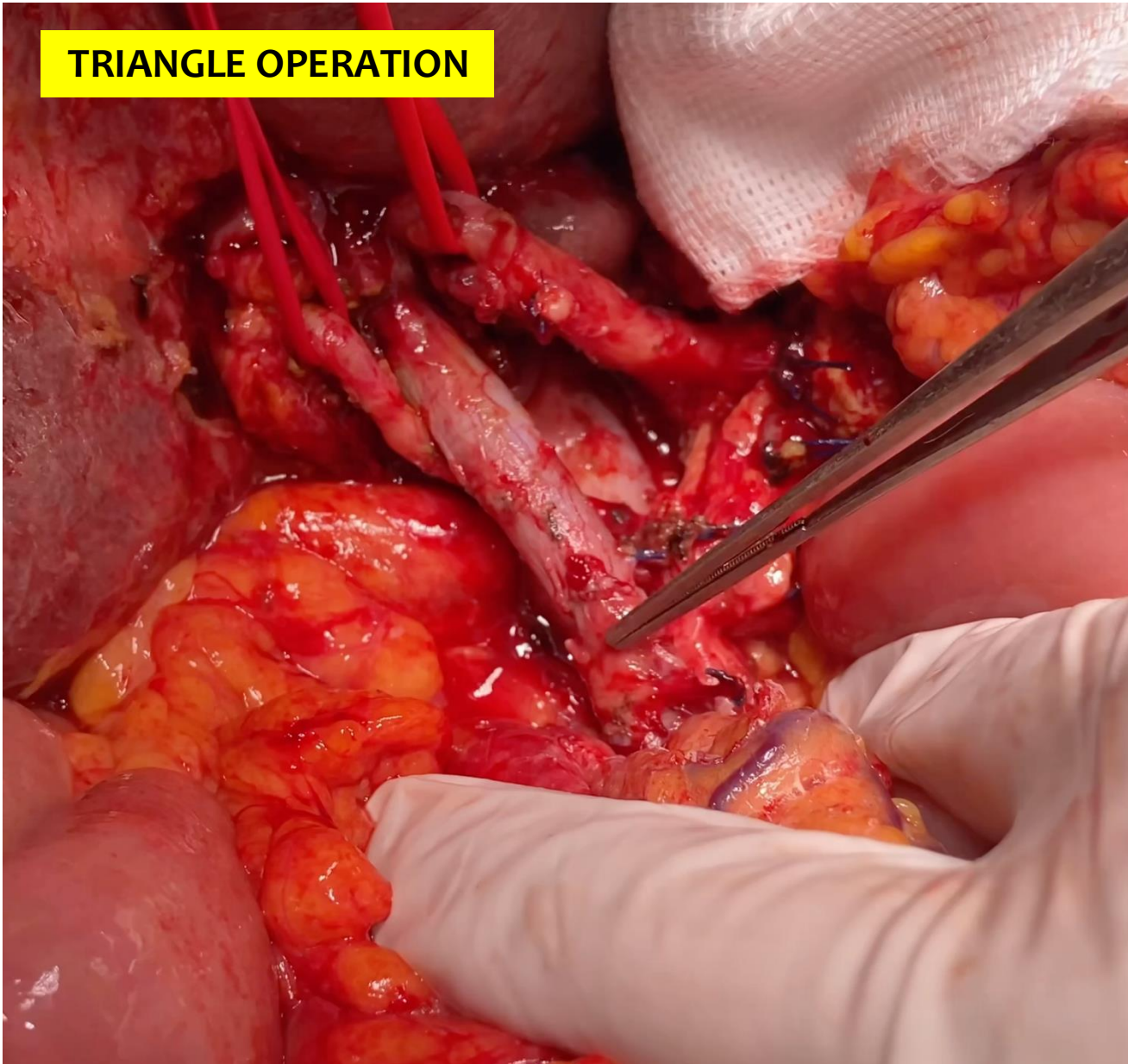
Portal vein

Superior mesenteric vein

TRIANGLE OPERATION



TRIANGLE OPERATION



LYMPHADENECTOMY

□ Hepatoduodenal ligament
12a, 12b1, 12b2, 12p, 12c

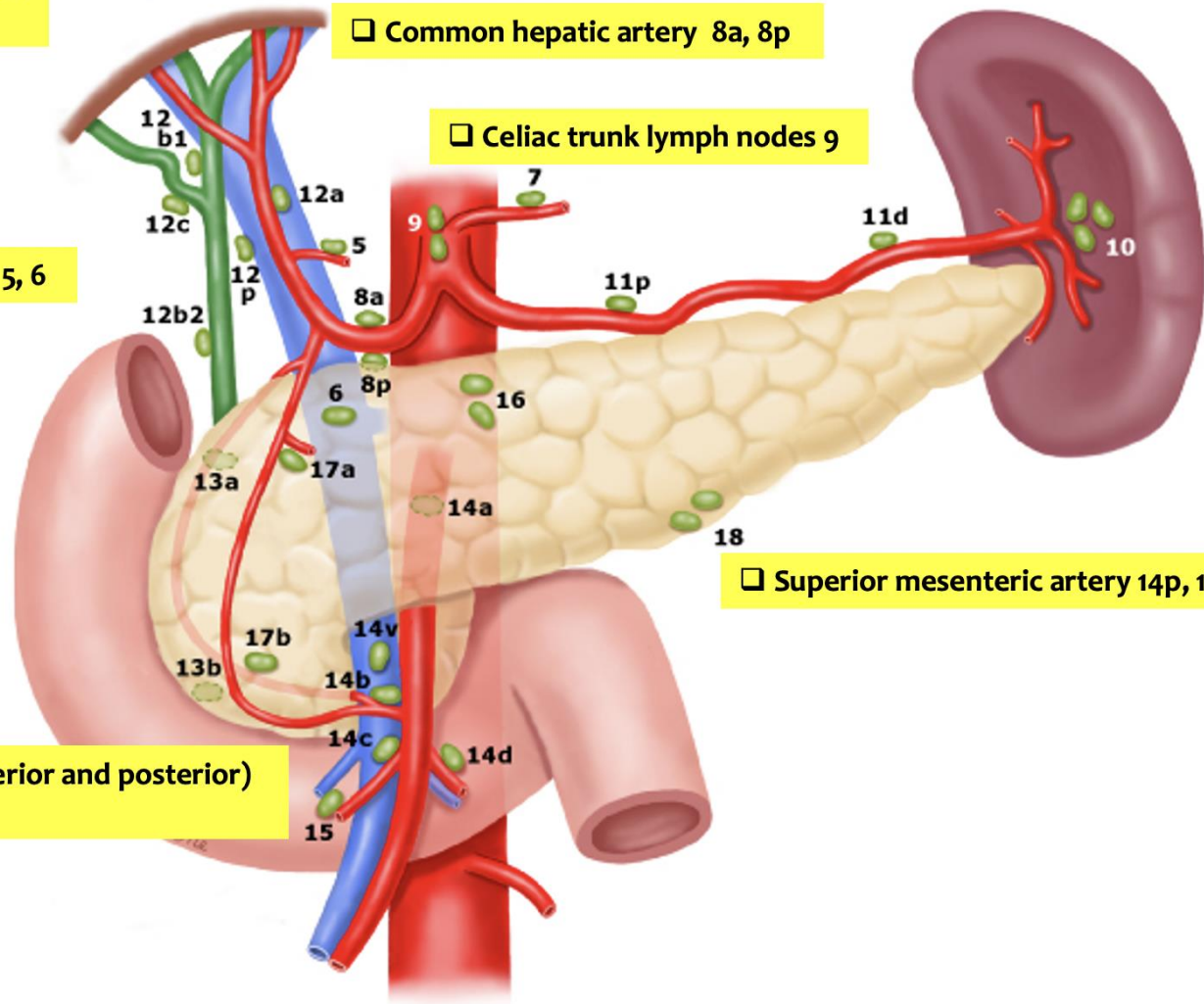
□ Common hepatic artery 8a, 8p

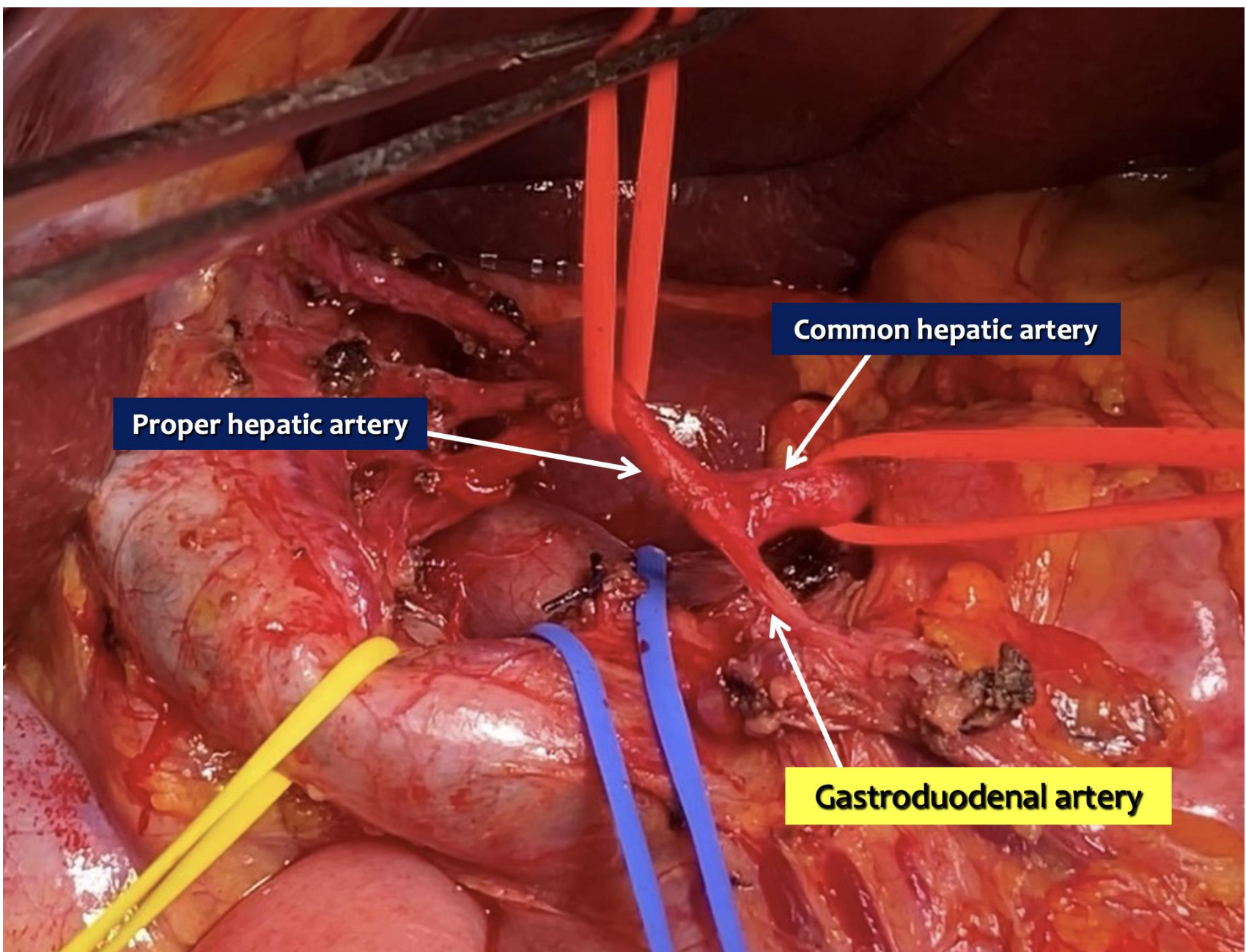
□ Celiac trunk lymph nodes 9

□ Pyloric 5, 6

□ Superior mesenteric artery 14p, 14d

□ Pancreatoduodenal (anterior and posterior)
13a, 13b, 17a, 17b






Proper hepatic artery

Common hepatic artery

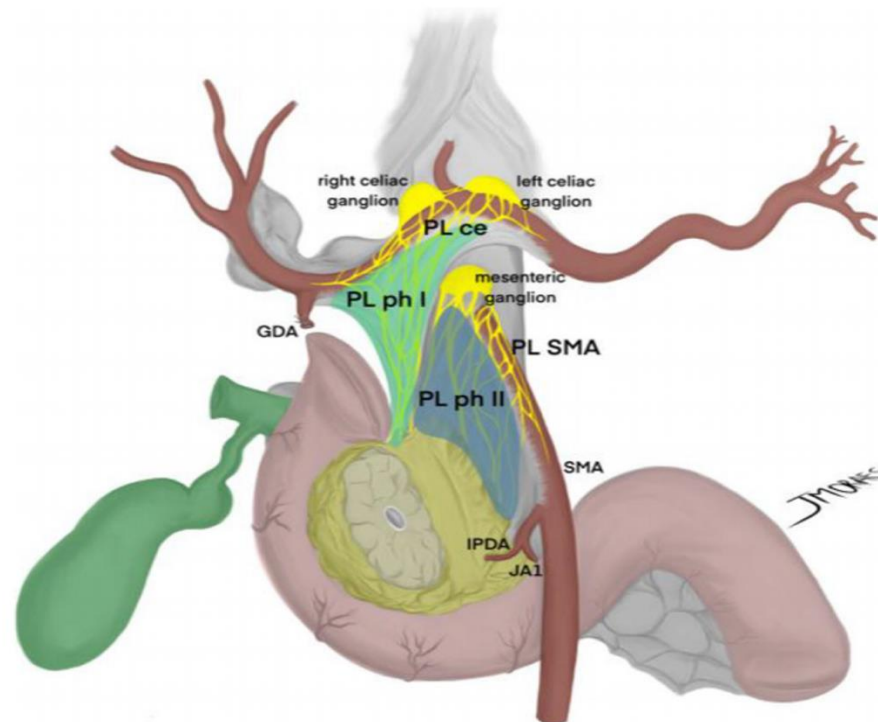
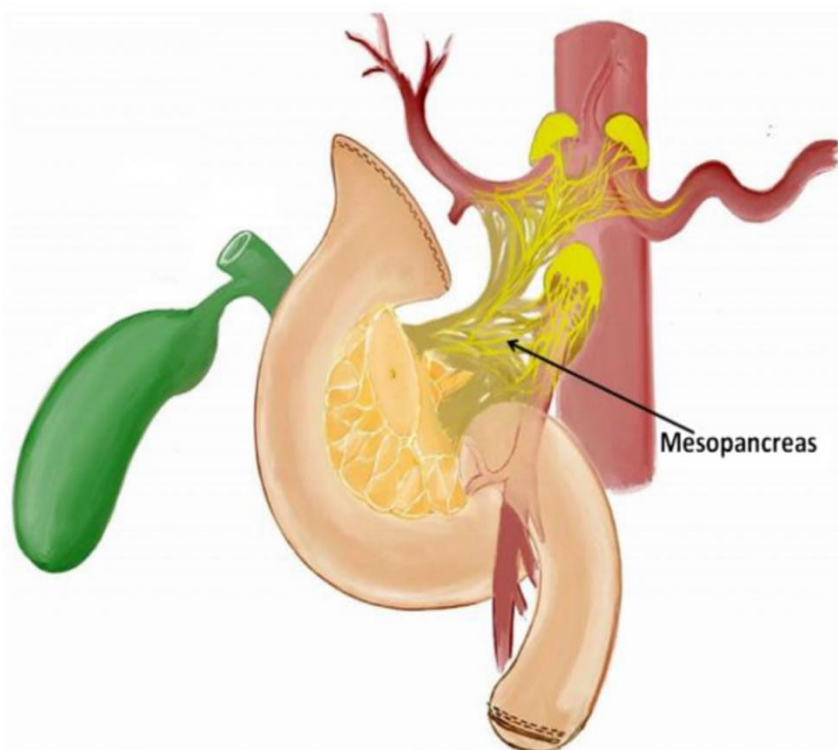
Gastroduodenal artery



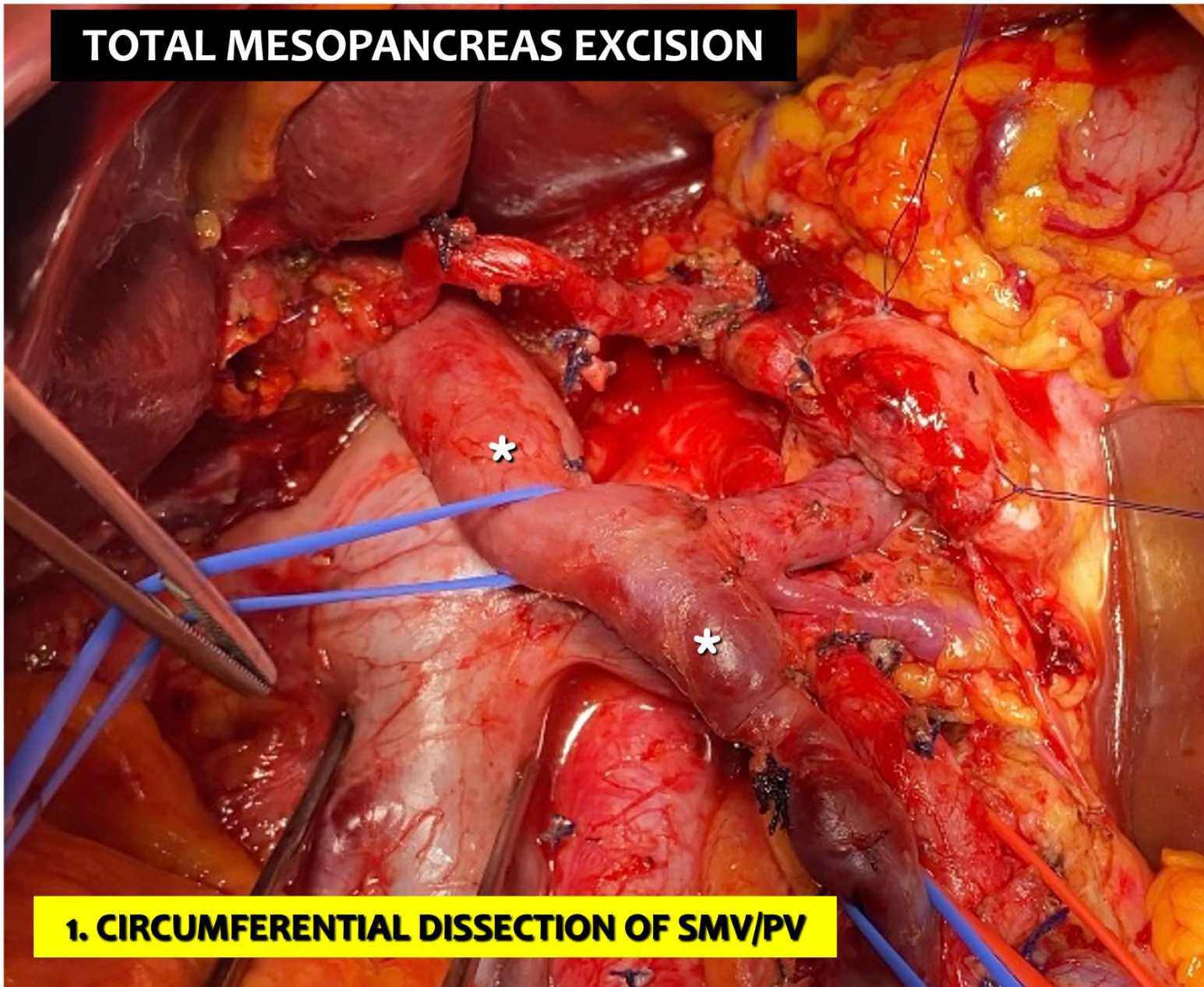
What do surgeons need to know about the mesopancreas

Eduardo de Souza M. Fernandes^{1,2} · Oliver Strobel^{3,4} · Camila Girão^{1,2} · Jose Maria A. Moraes-Junior^{5,6} · Orlando Jorge M. Torres^{5,6} 

TOTAL MESOPANCREAS EXCISION

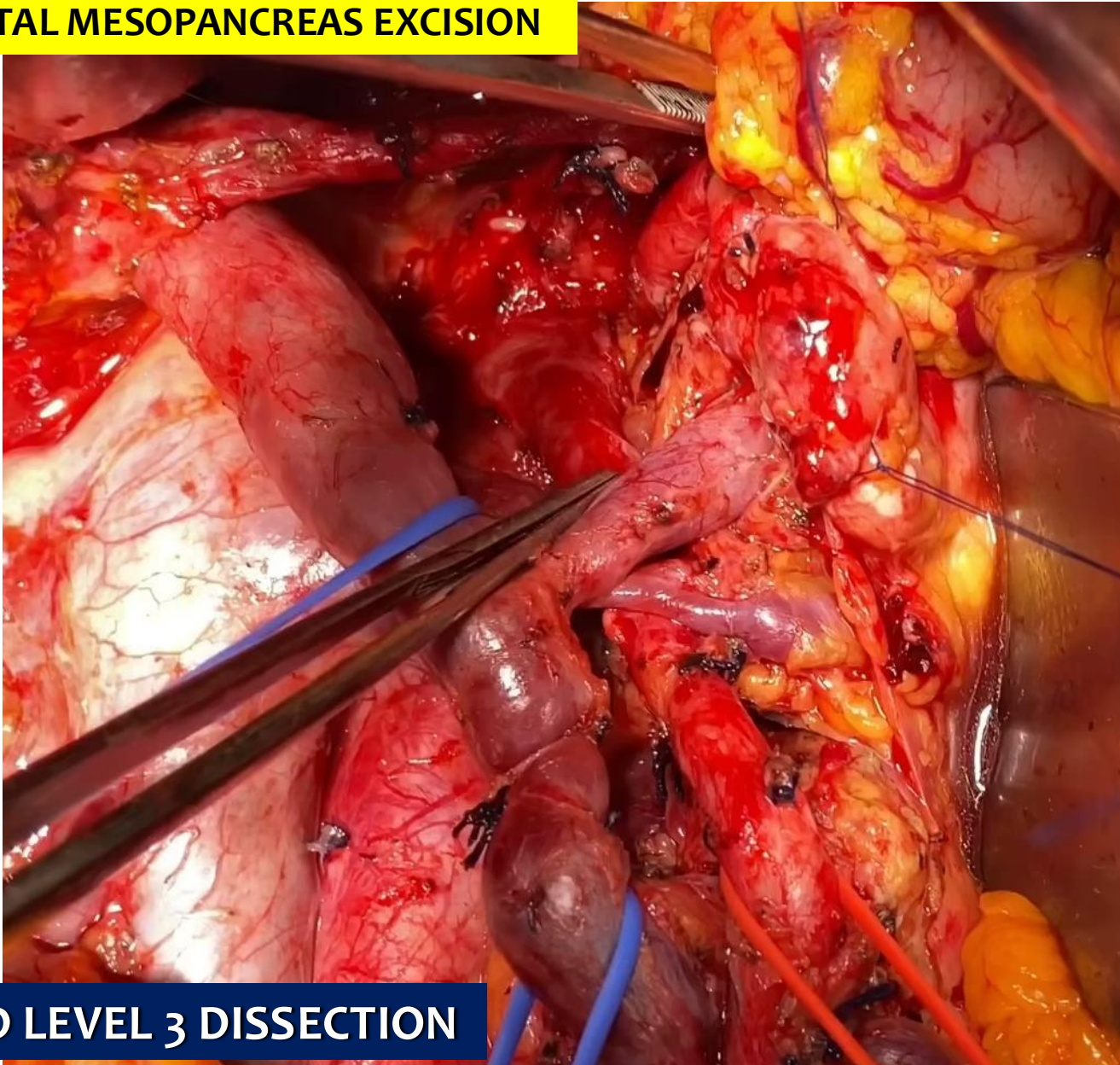


TOTAL MESOPANCREAS EXCISION



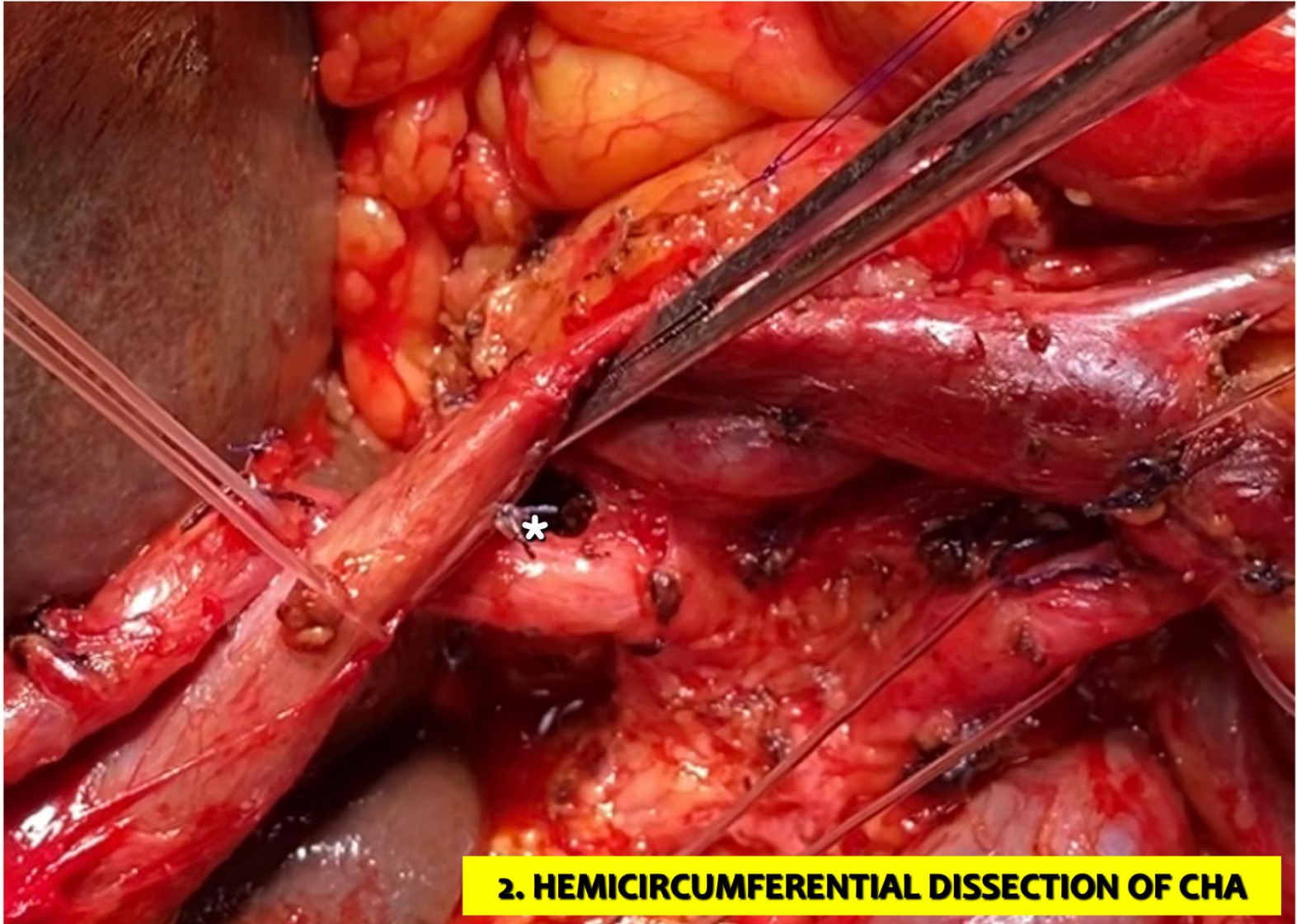
1. CIRCUMFERENTIAL DISSECTION OF SMV/PV

TOTAL MESOPANCREAS EXCISION



EXTENDED LEVEL 3 DISSECTION



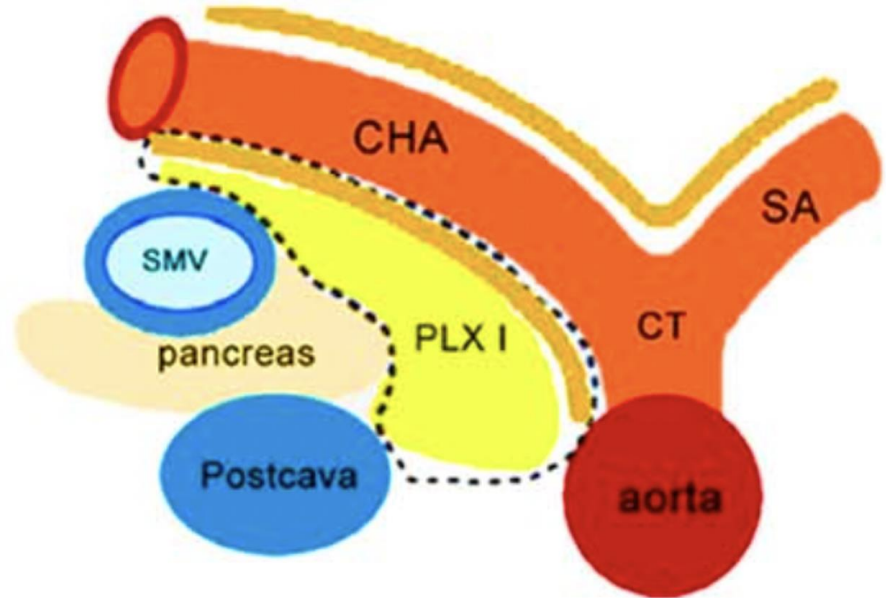
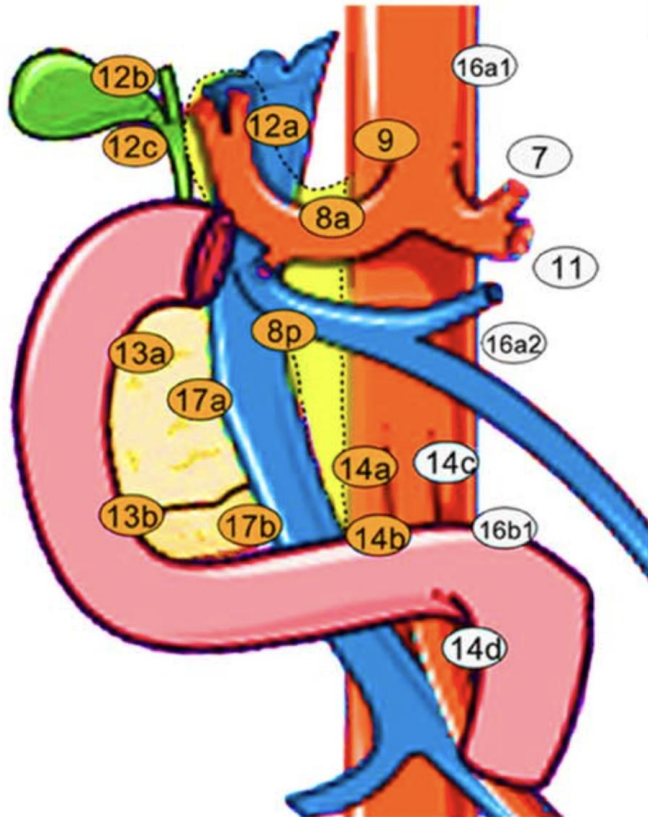


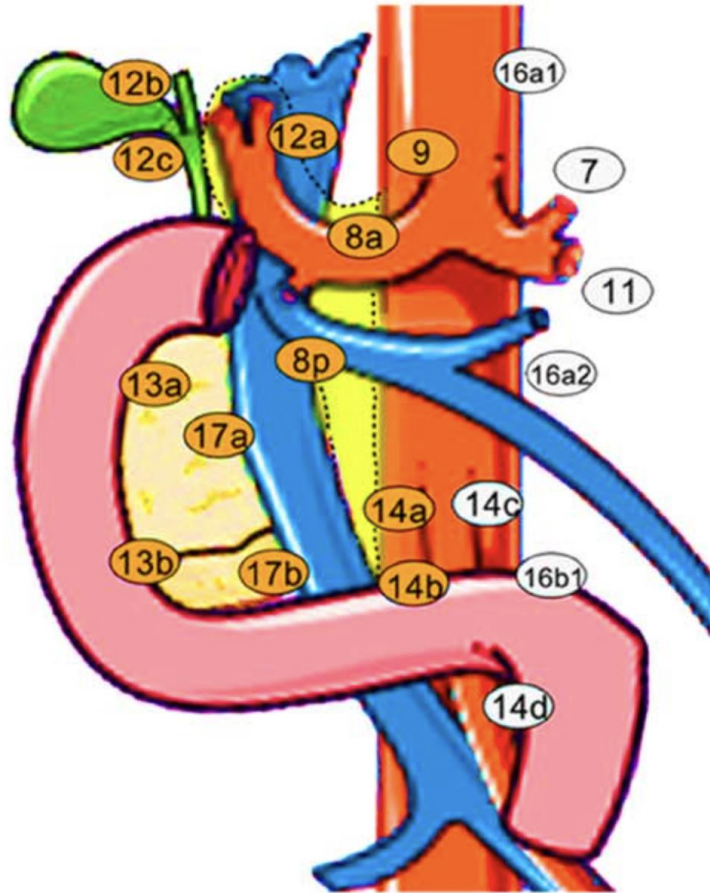
2. HEMICIRCUMFERENTIAL DISSECTION OF CHA

□ Common hepatic artery lymph nodes 8a, 8p

□ 8a

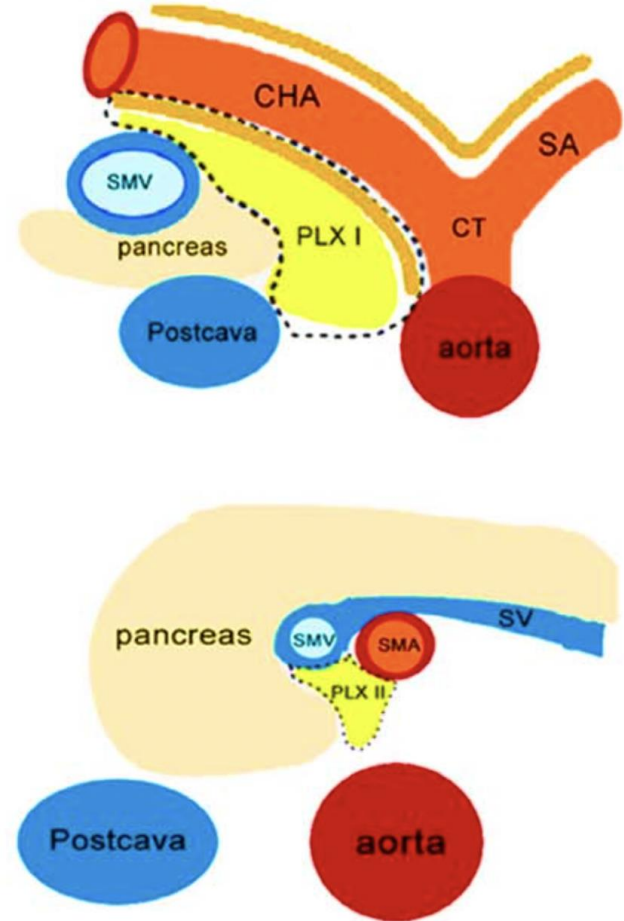
□ 8p

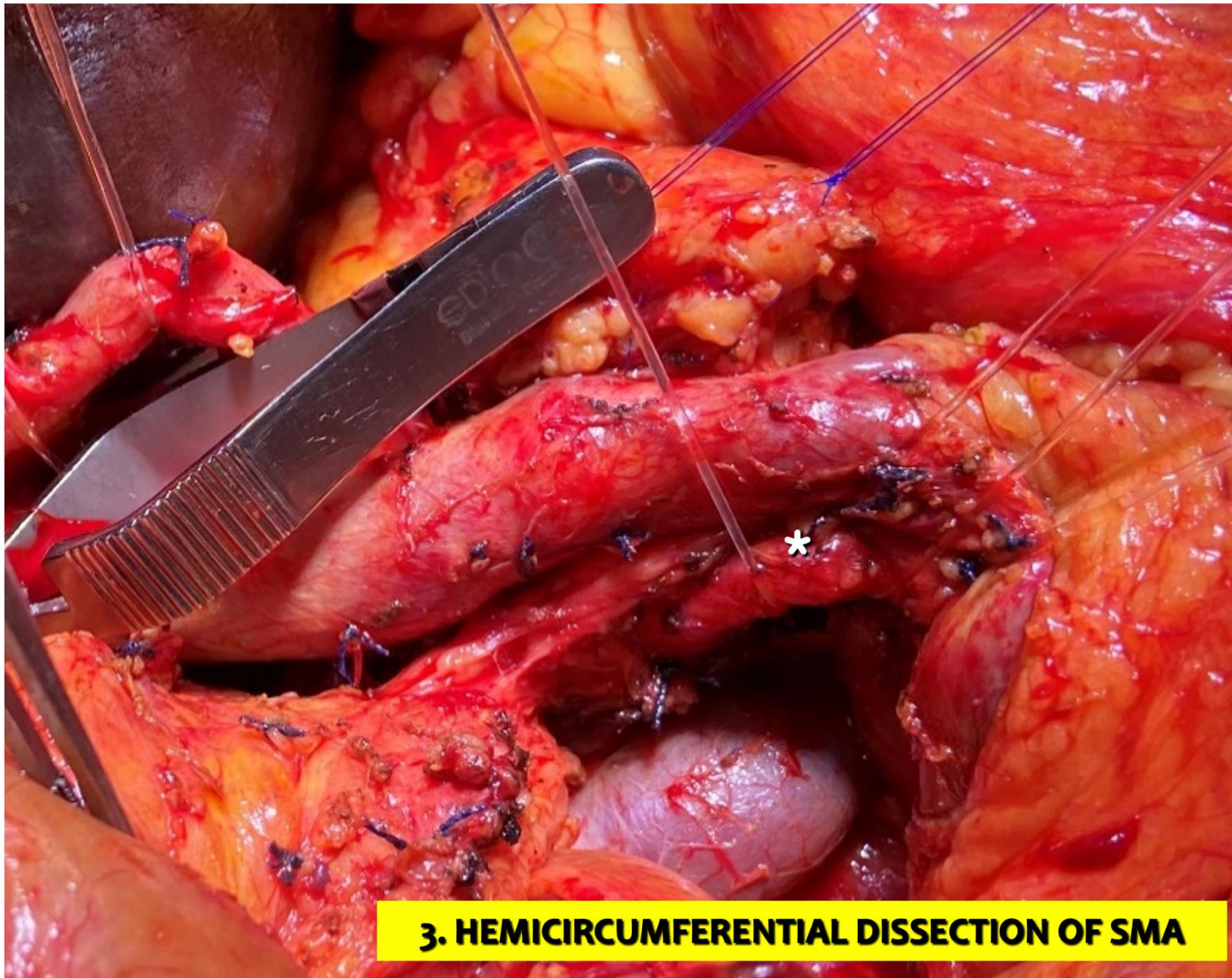




□ Celiac trunk lymph nodes 9

□ 9



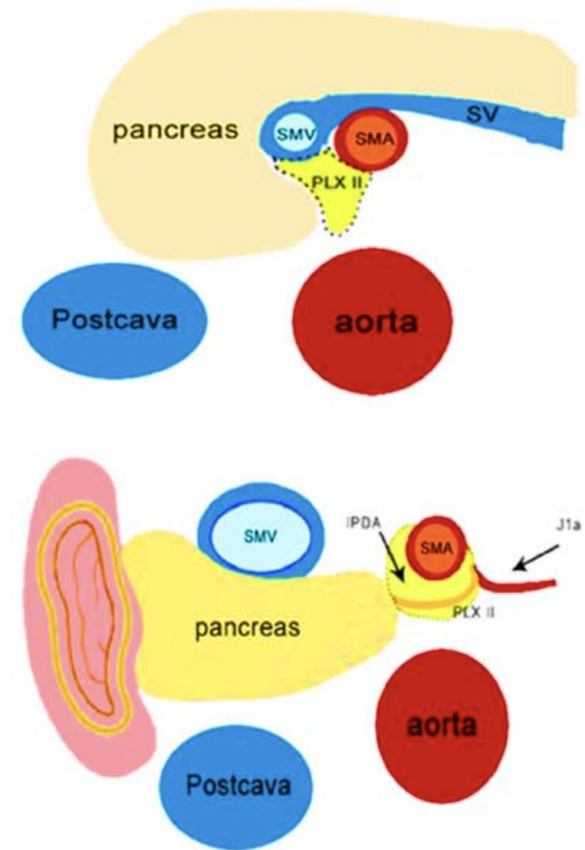
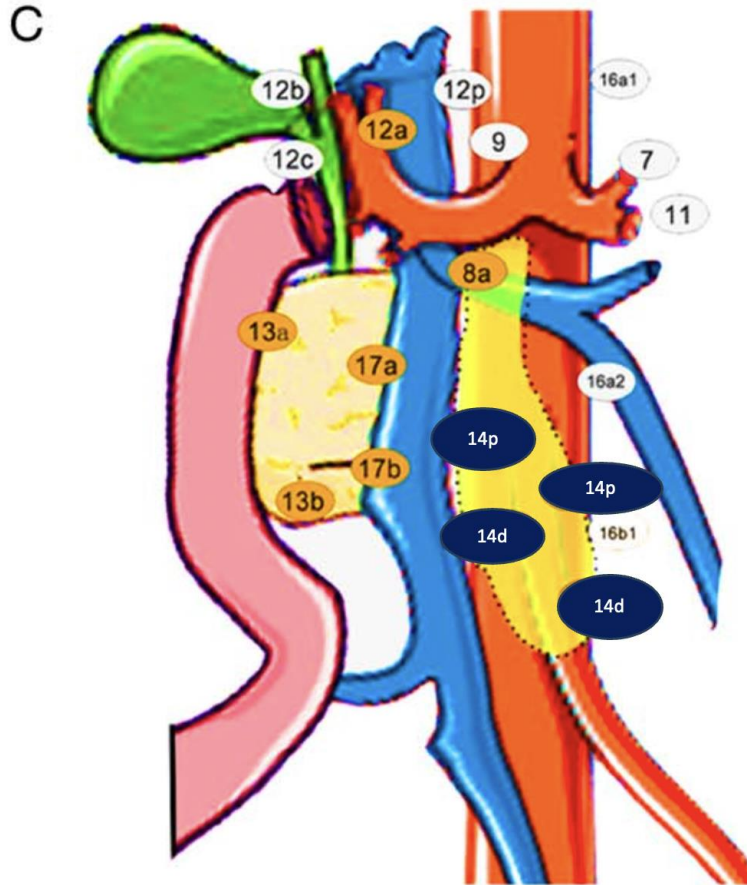


3. HEMICIRCUMFERENTIAL DISSECTION OF SMA

SUPERIOR MESENTERIC ARTERY LYMPH NODES

□14p

□14d

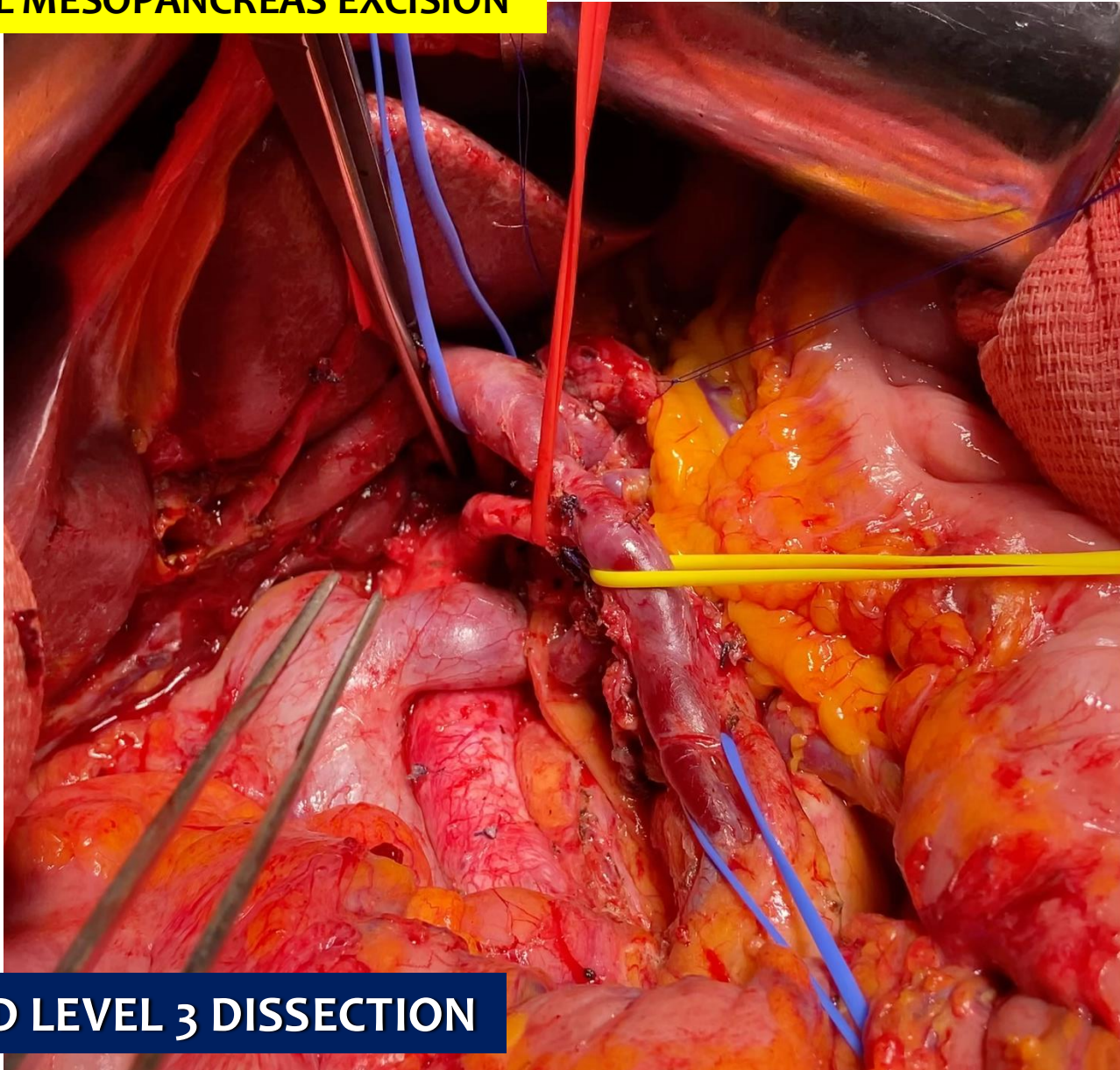


TOTAL MESOPANCREAS EXCISION



EXTENDED LEVEL 3 DISSECTION

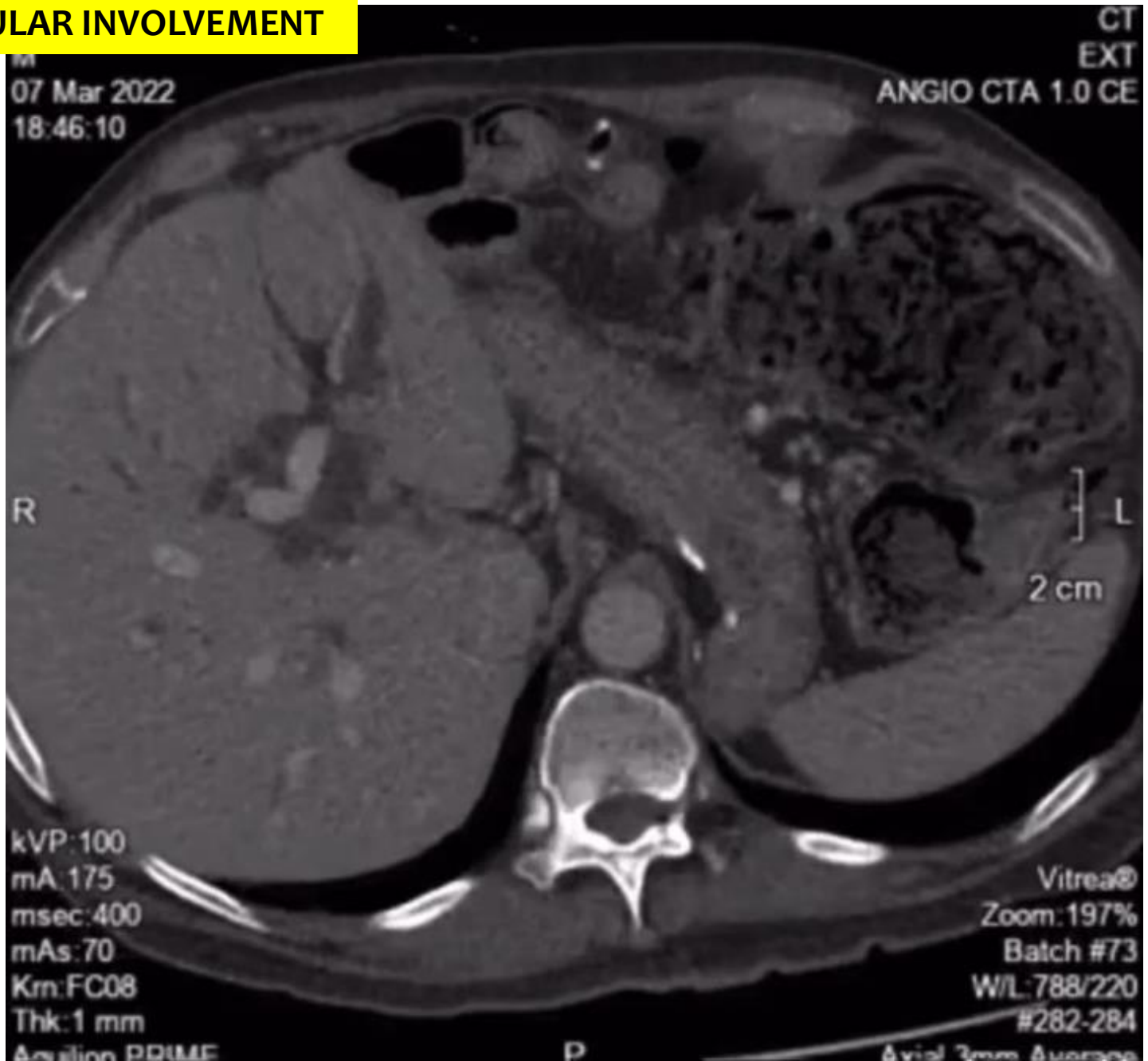
TOTAL MESOPANCREAS EXCISION



EXTENDED LEVEL 3 DISSECTION



VASCULAR INVOLVEMENT



M
07 Mar 2022
18:46:10

EX
ANGIO CTA 1.0 C

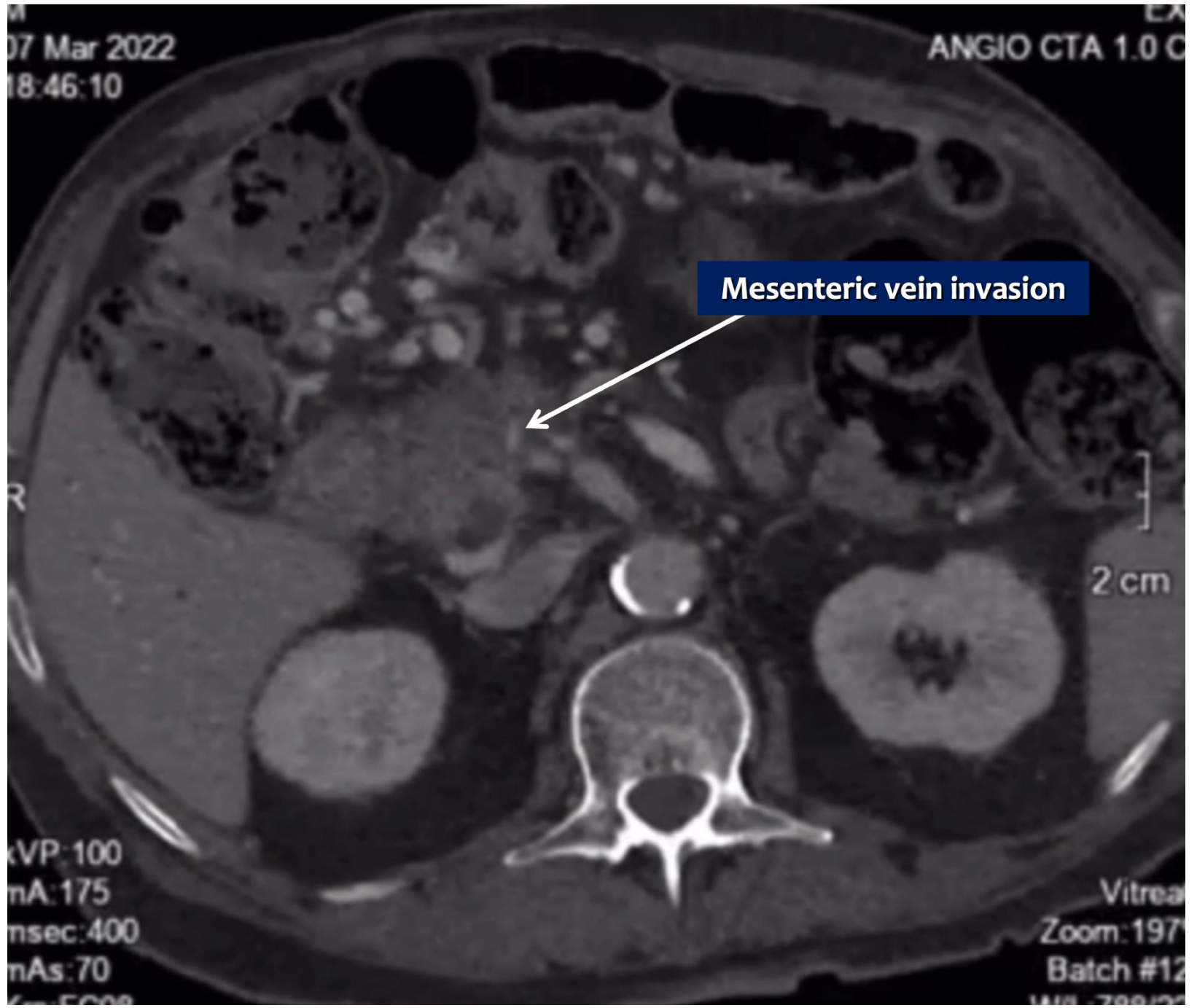
Mesenteric vein invasion

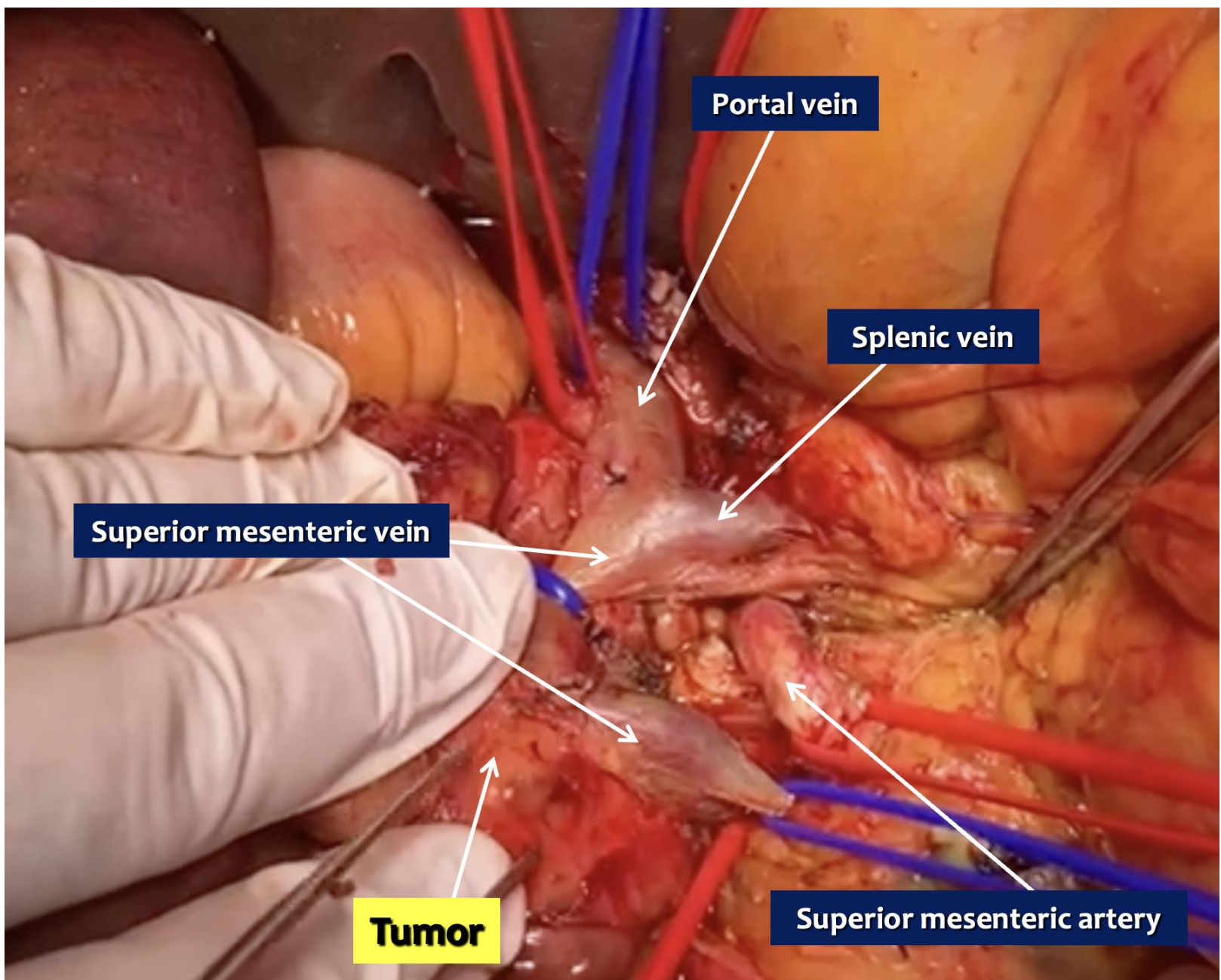


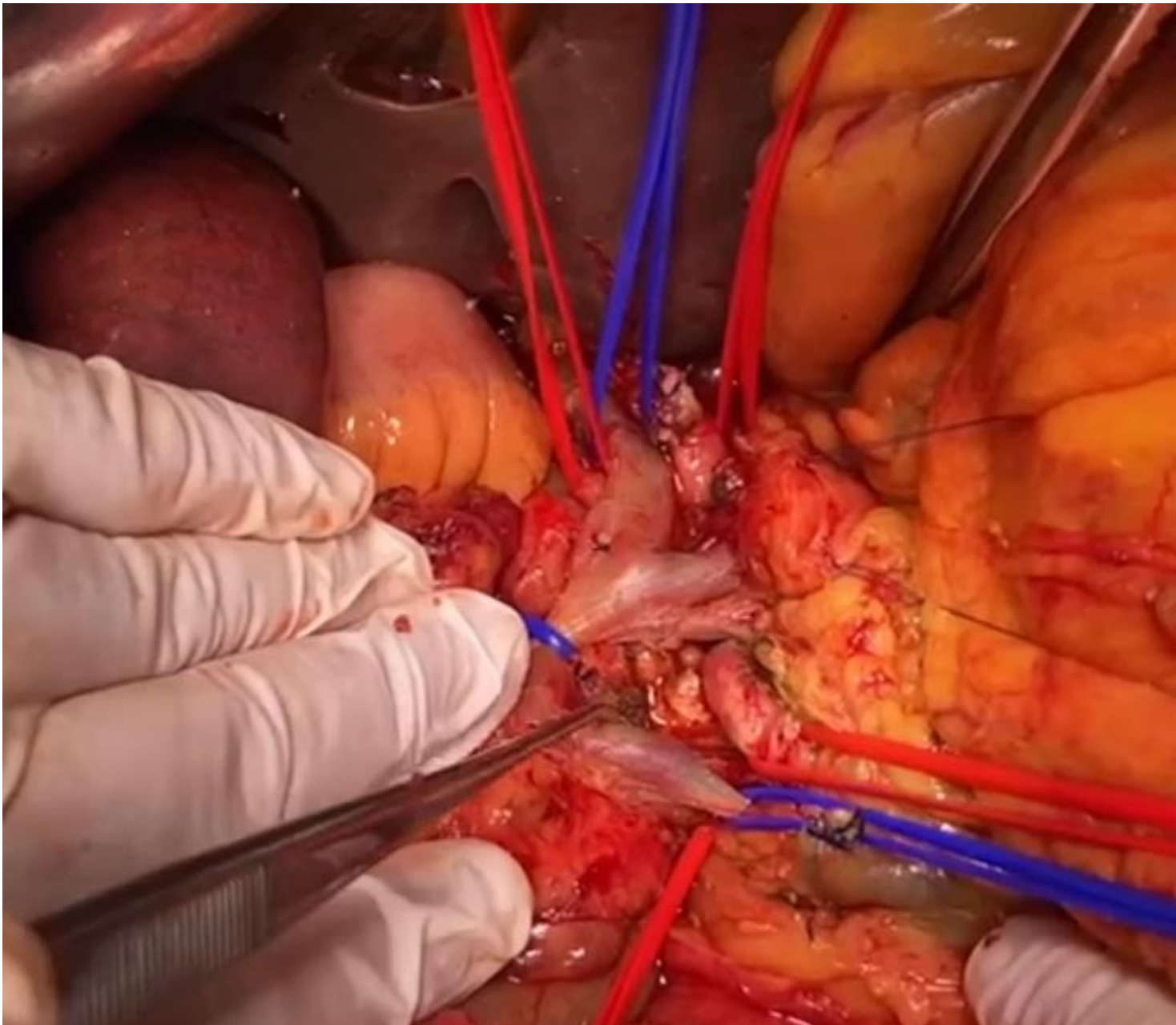
2 cm

kVP: 100
mA: 175
msec: 400
mAs: 70
6m-FC00

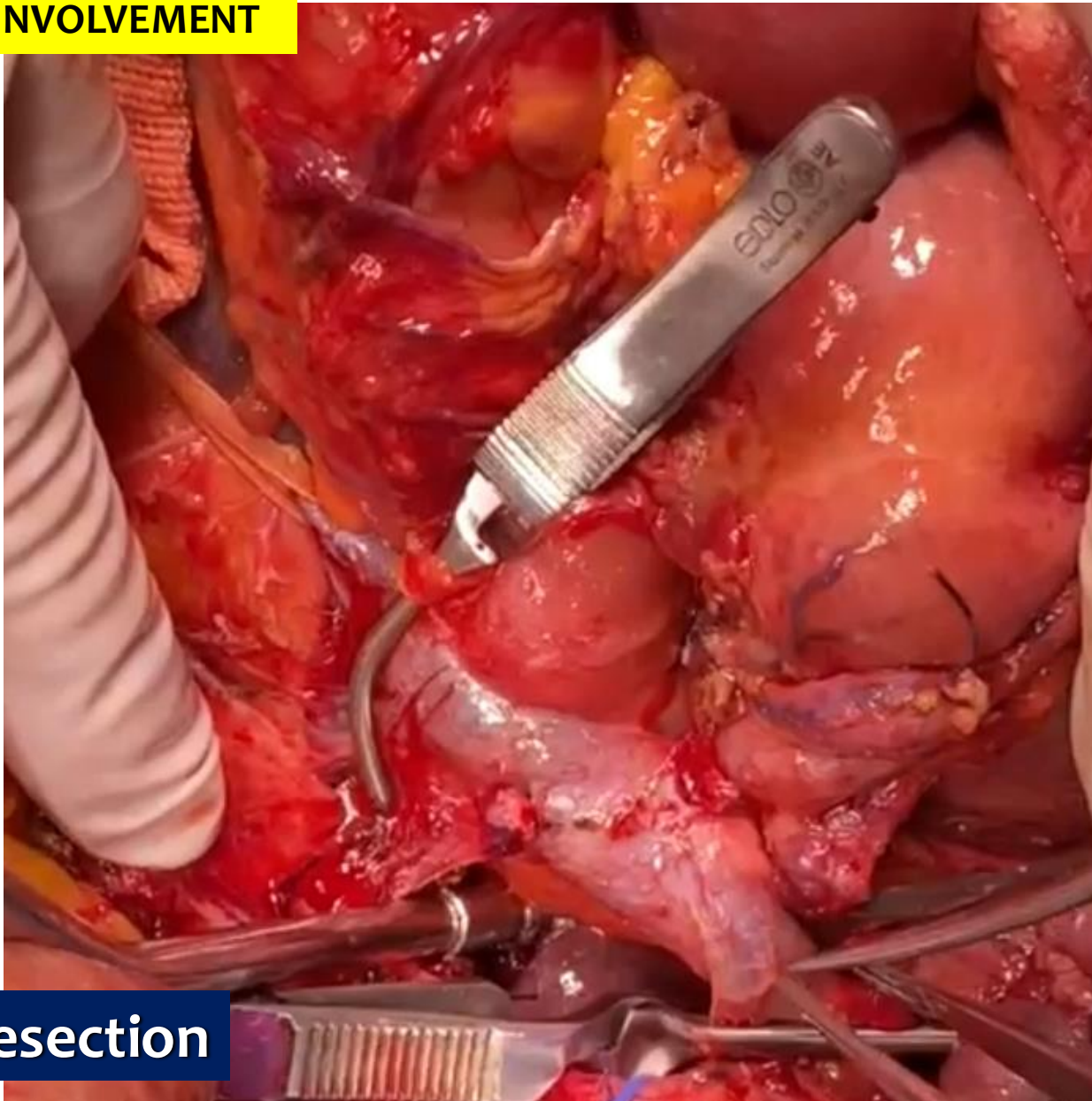
Vitreal
Zoom: 197
Batch #12
MIP: 788/20





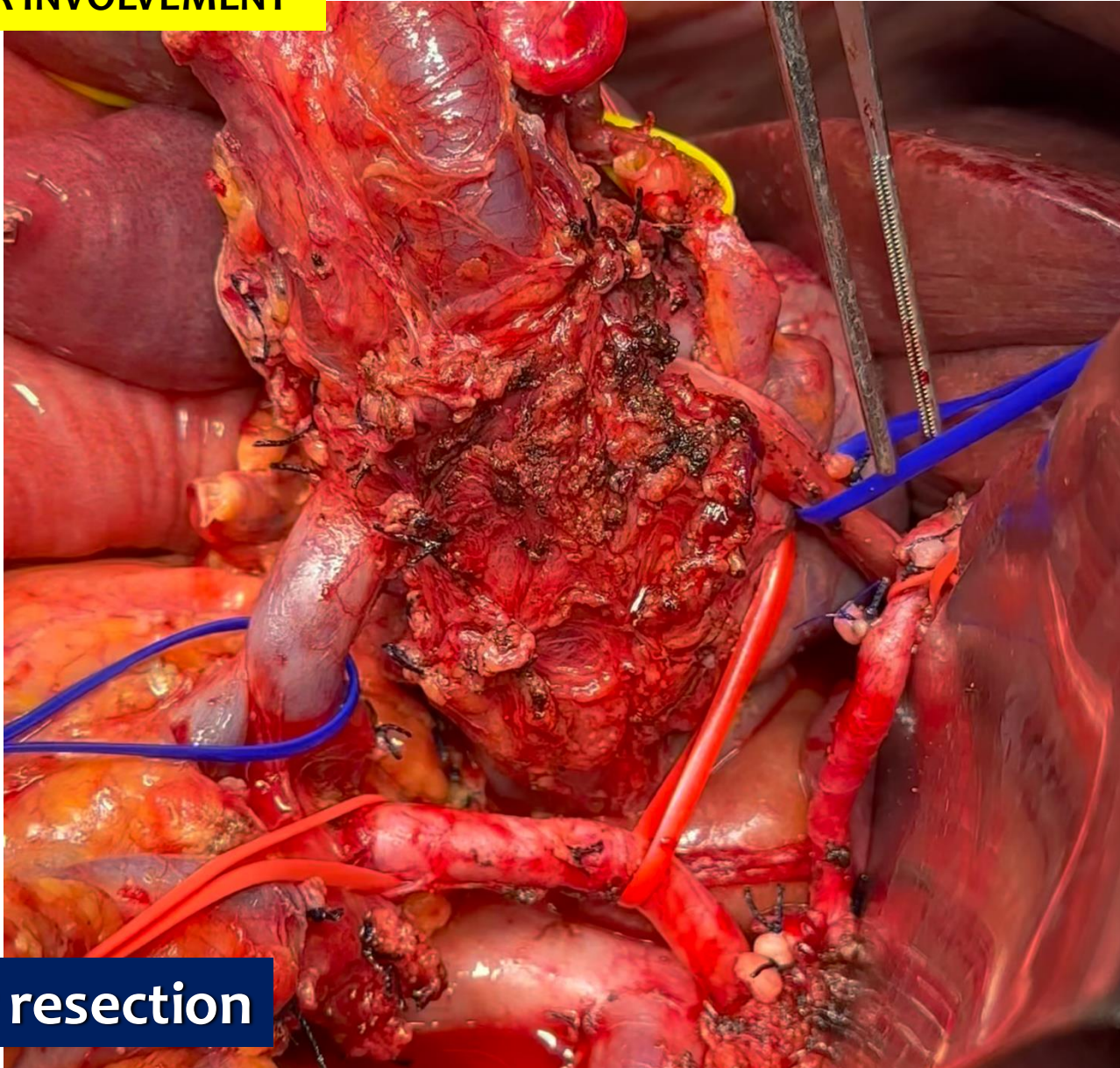


VASCULAR INVOLVEMENT



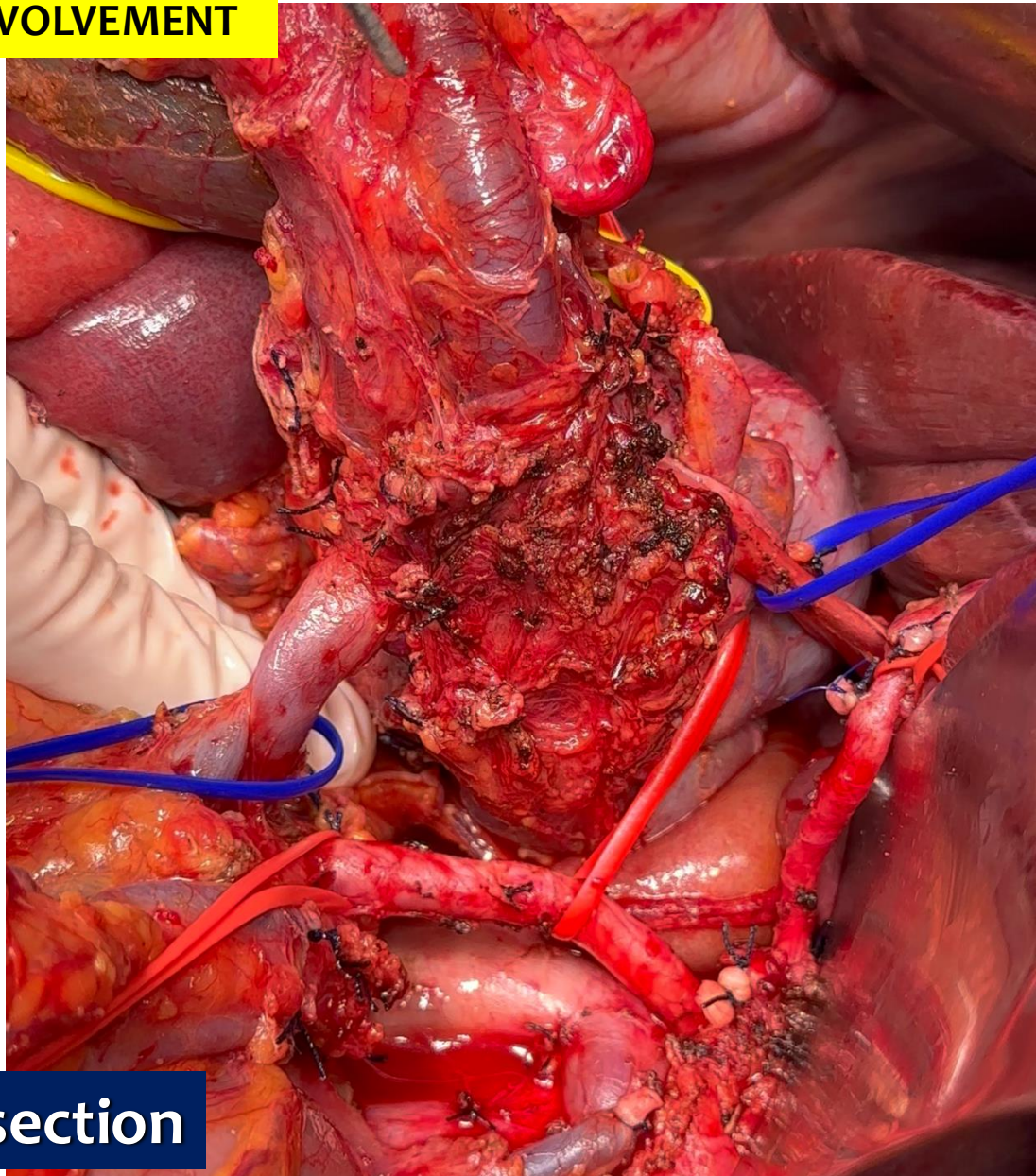
Vascular resection

VASCULAR INVOLVEMENT



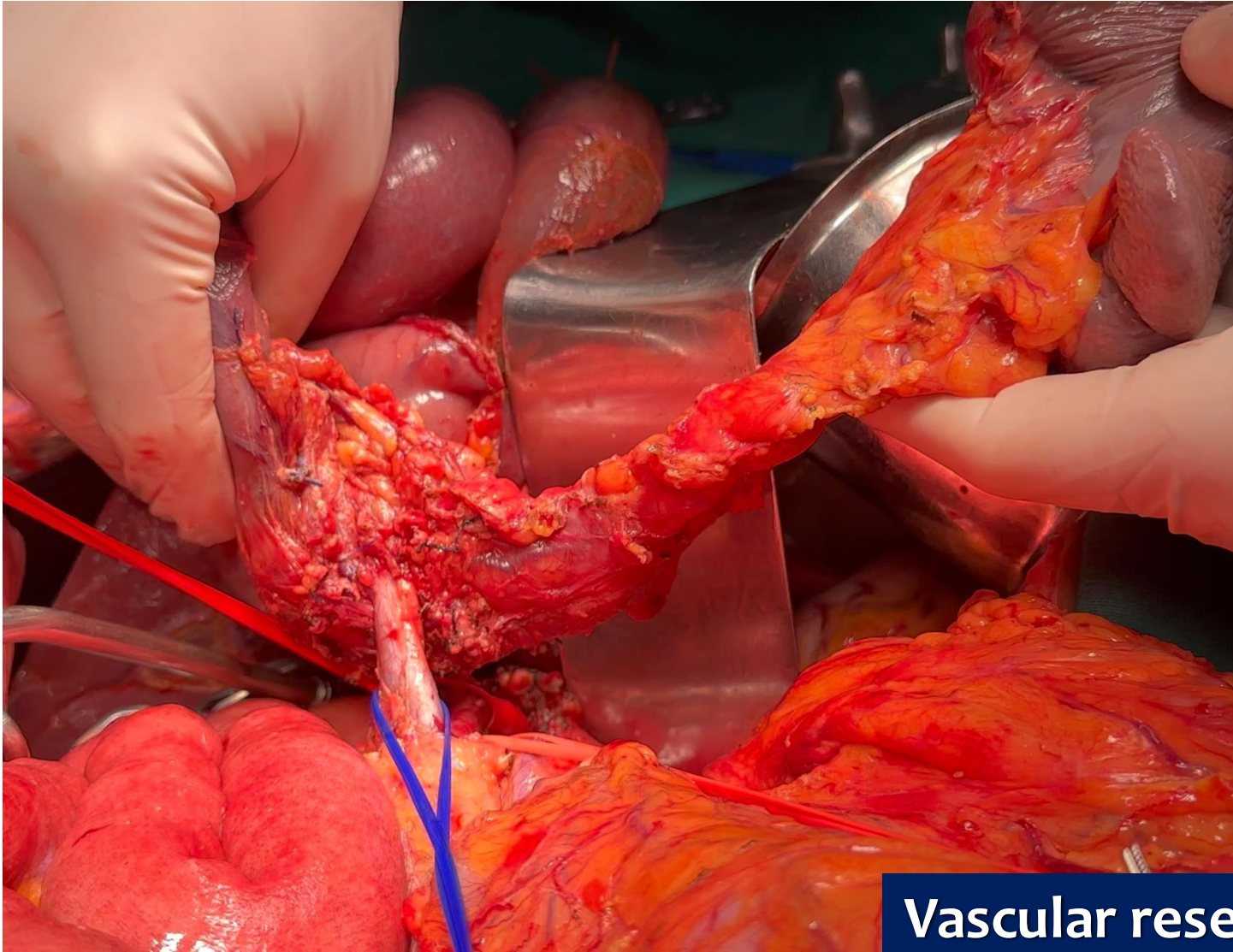
Vascular resection

VASCULAR INVOLVEMENT



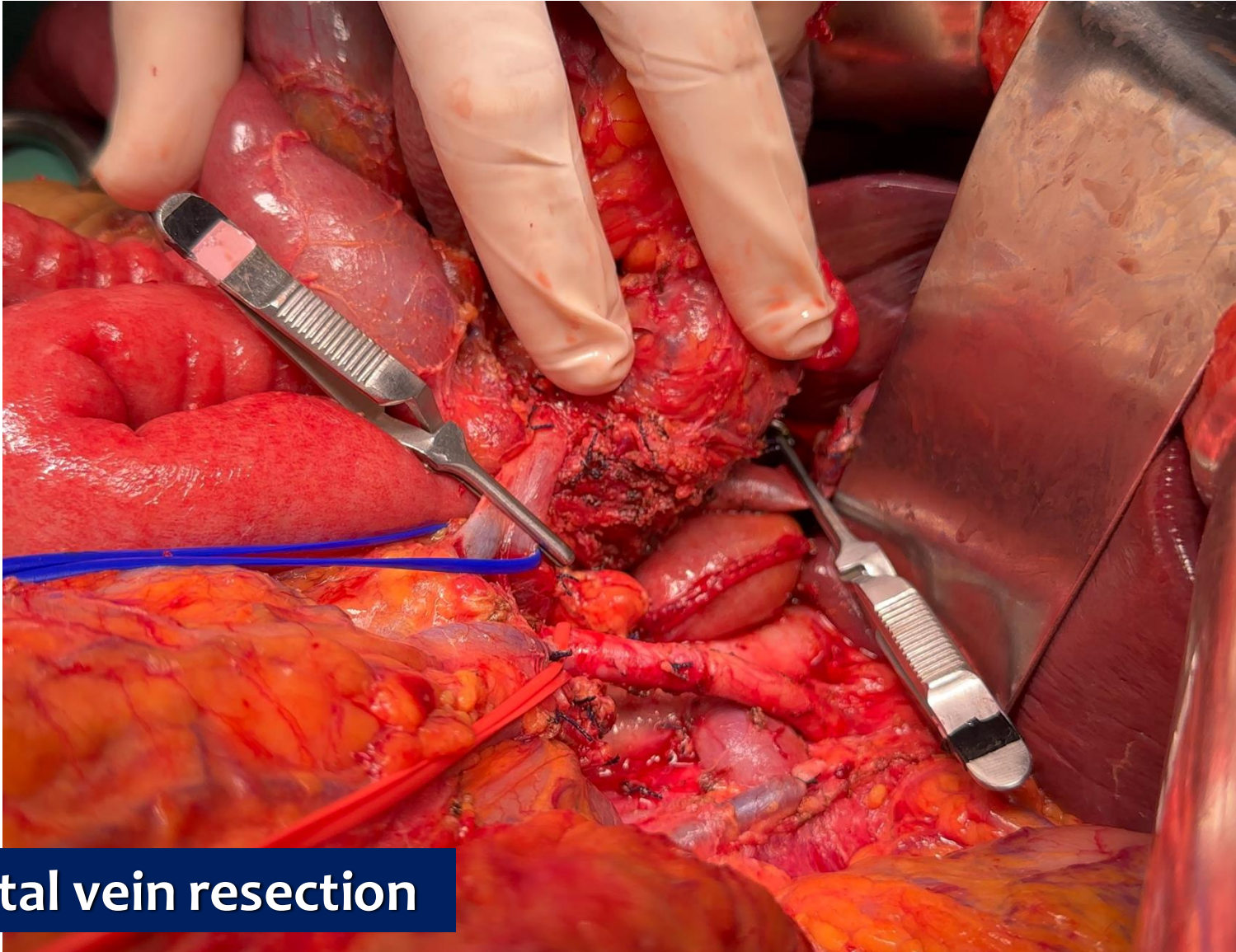
Vascular resection

VASCULAR INVOLVEMENT



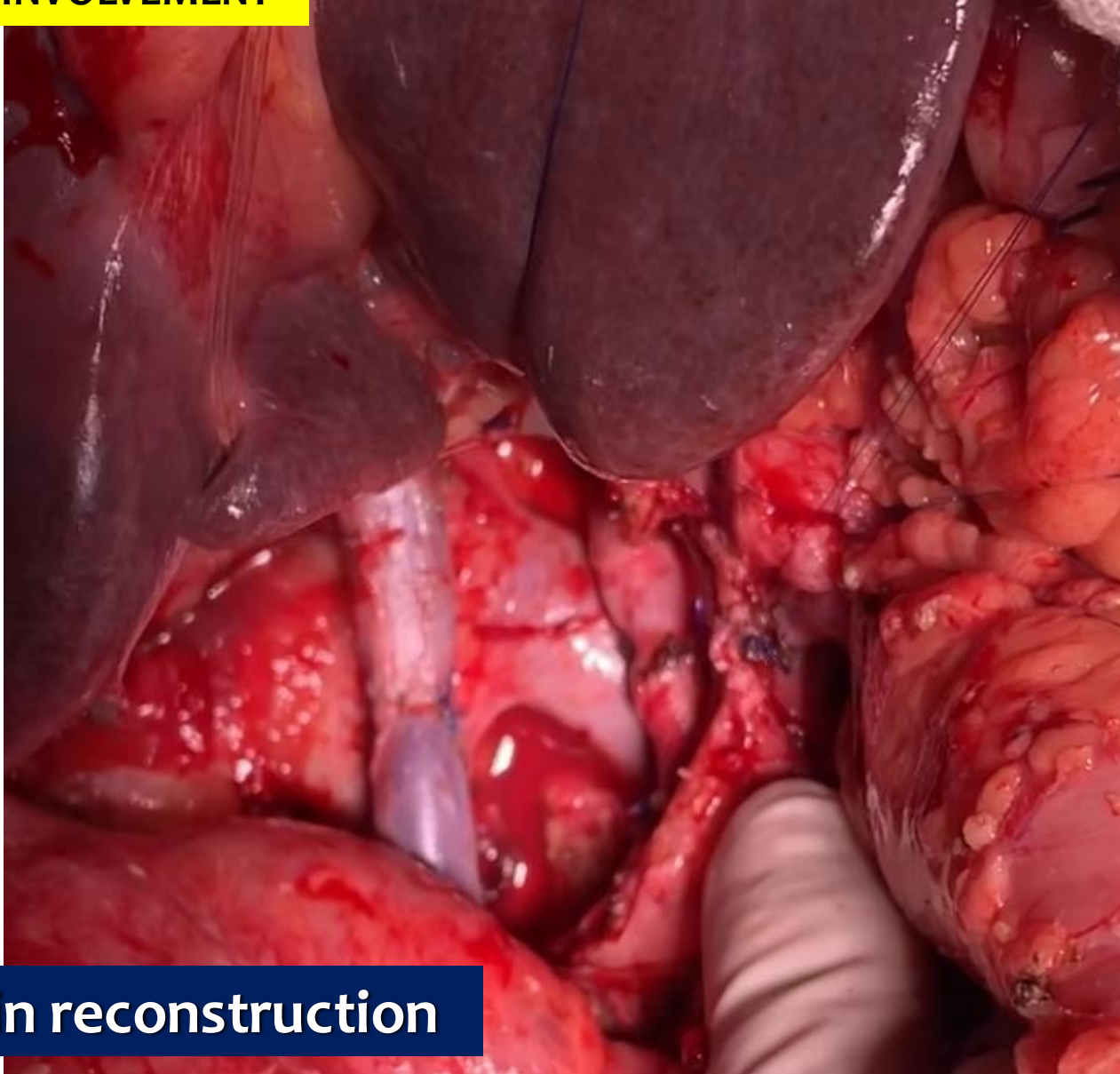
Vascular resection

VASCULAR INVOLVEMENT



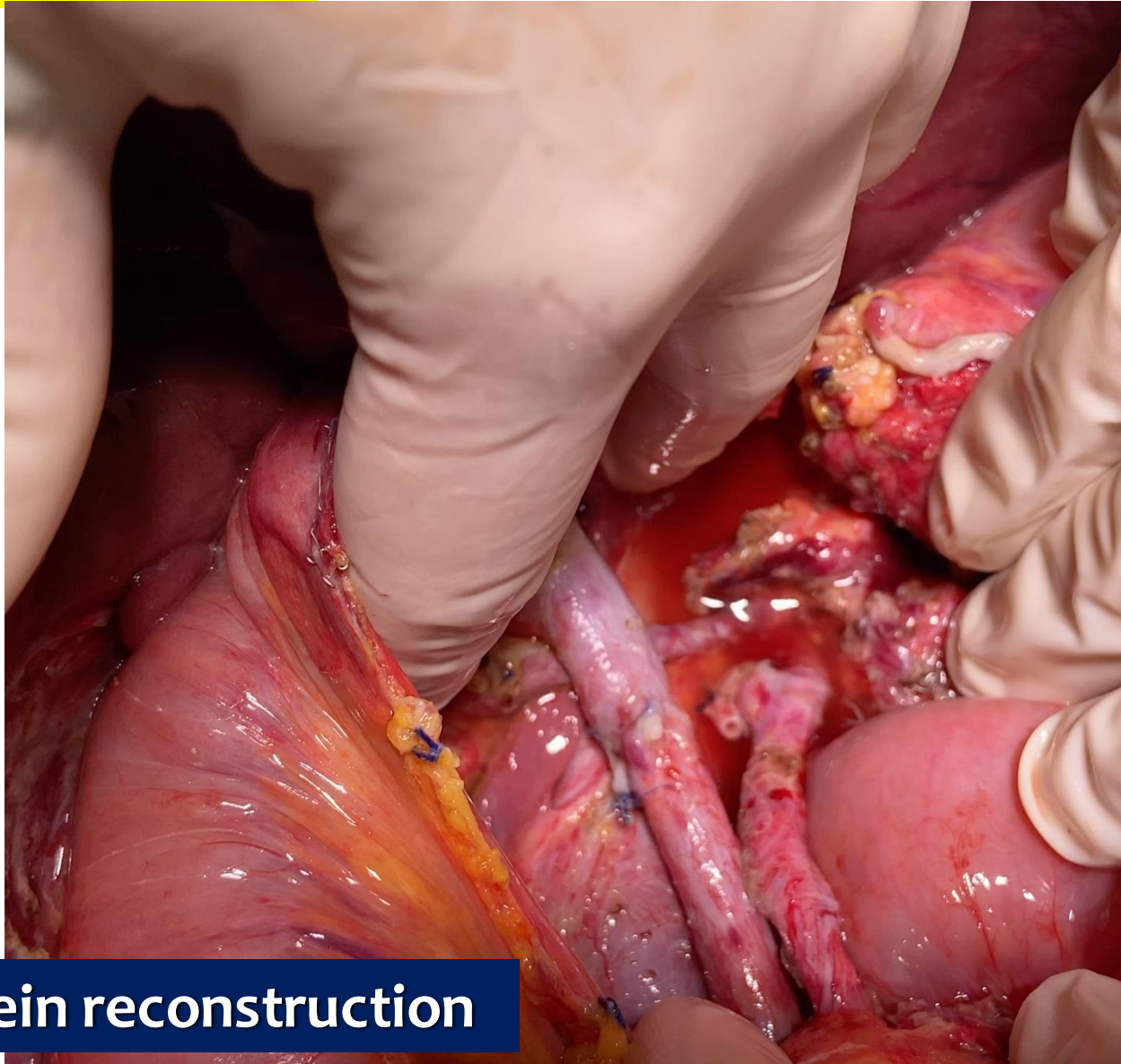
Portal vein resection

VASCULAR INVOLVEMENT



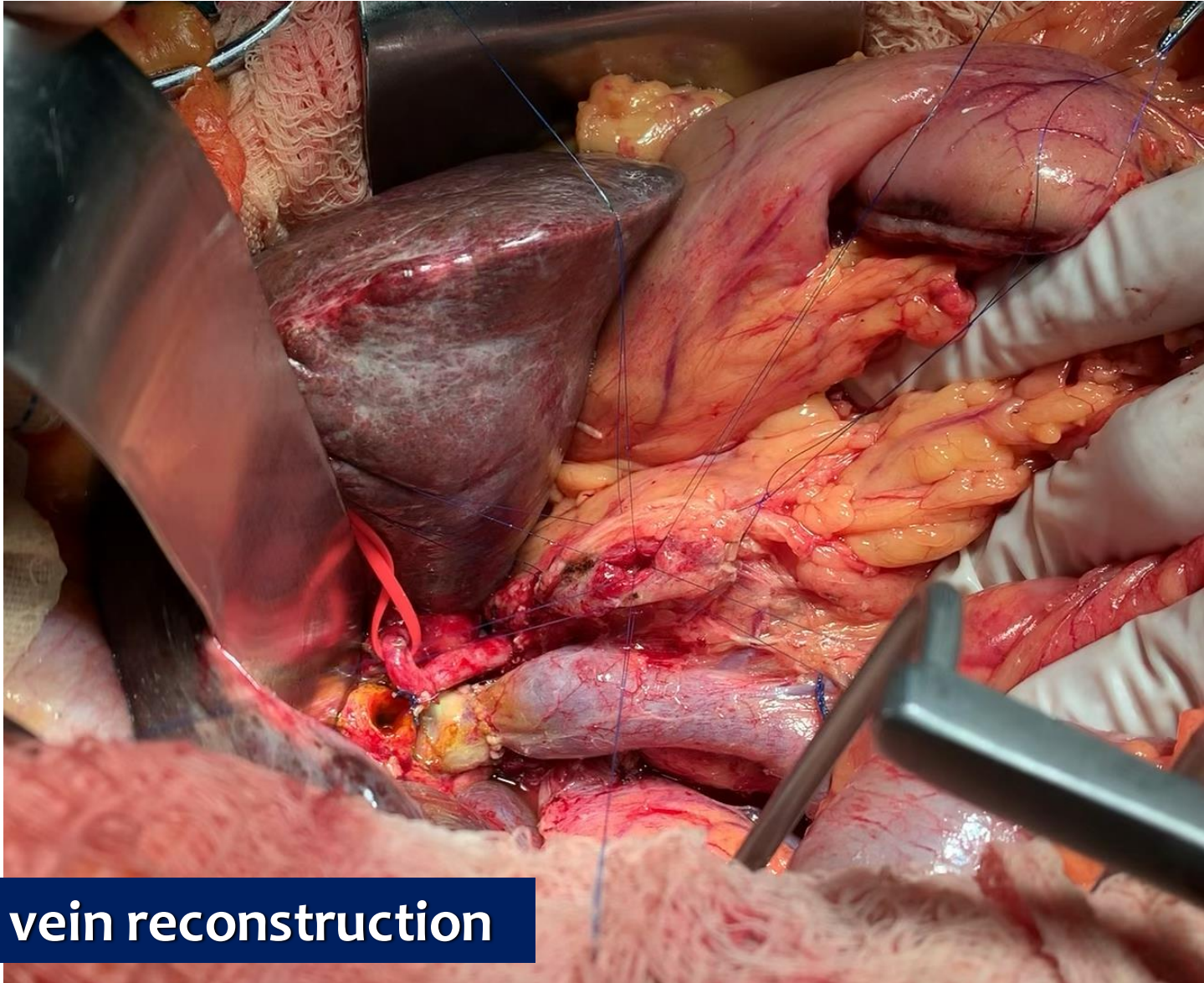
Portal vein reconstruction

VASCULAR INVOLVEMENT



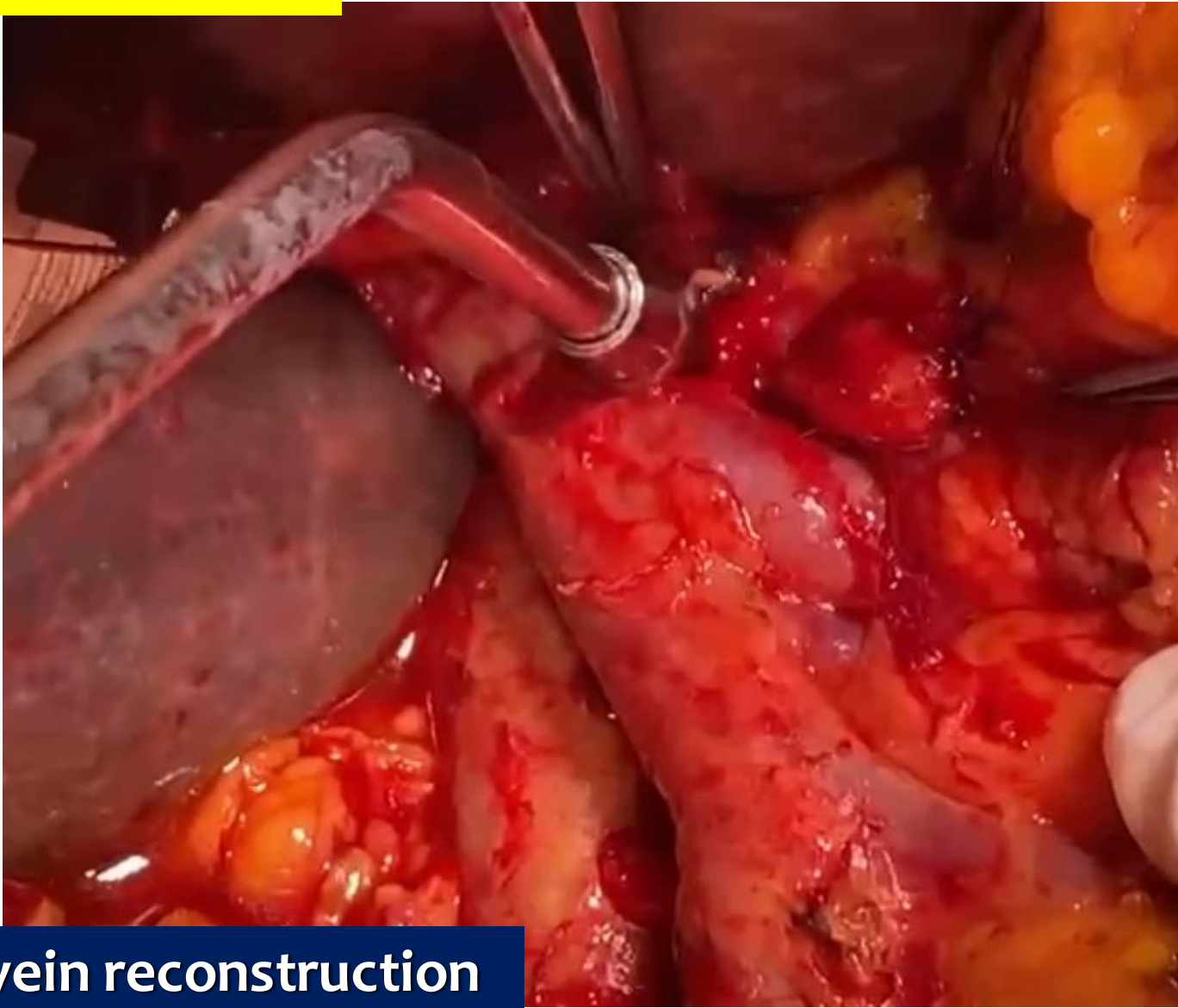
Portal vein reconstruction

VASCULAR INVOLVEMENT



Portal vein reconstruction

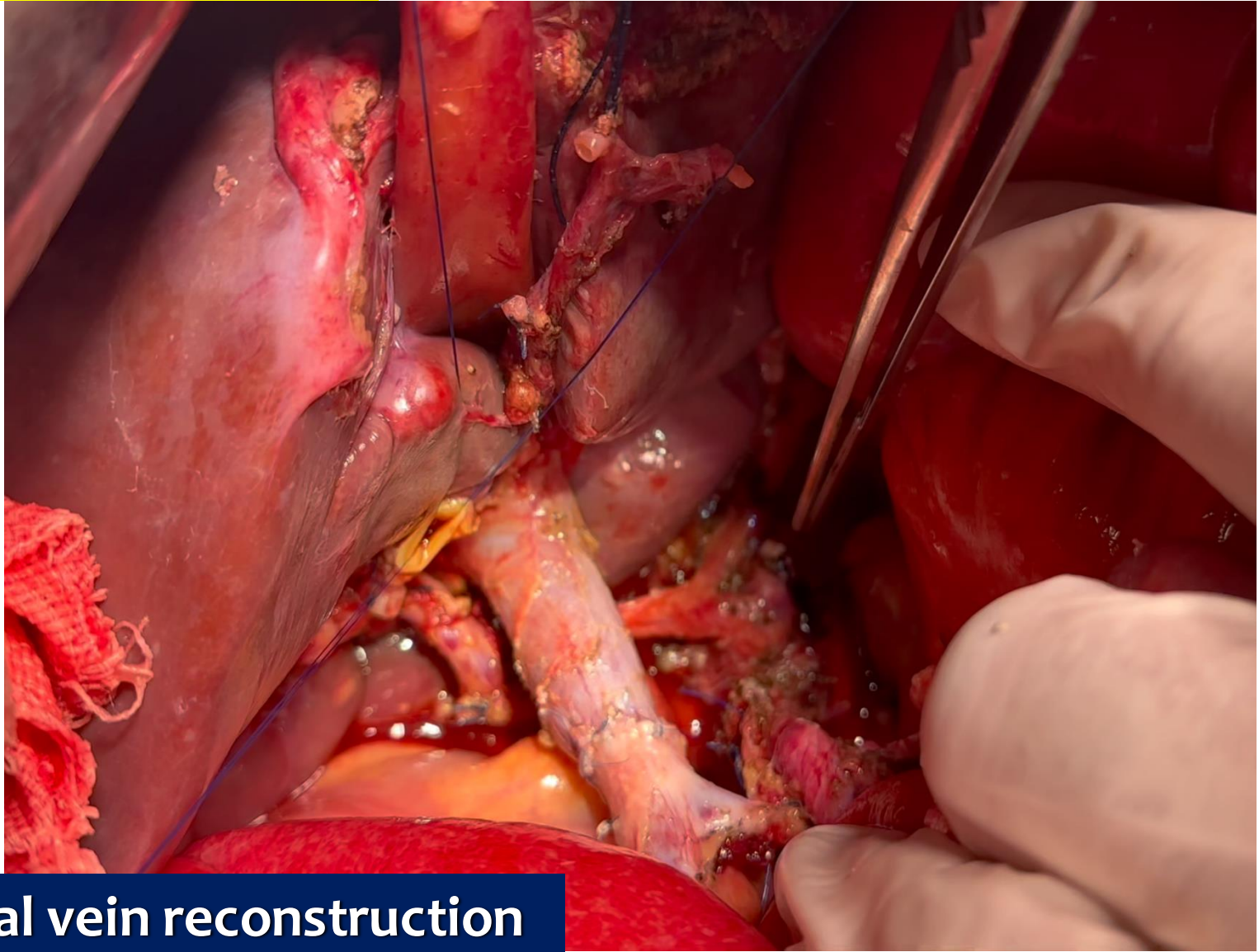
VASCULAR INVOLVEMENT



Portal vein reconstruction

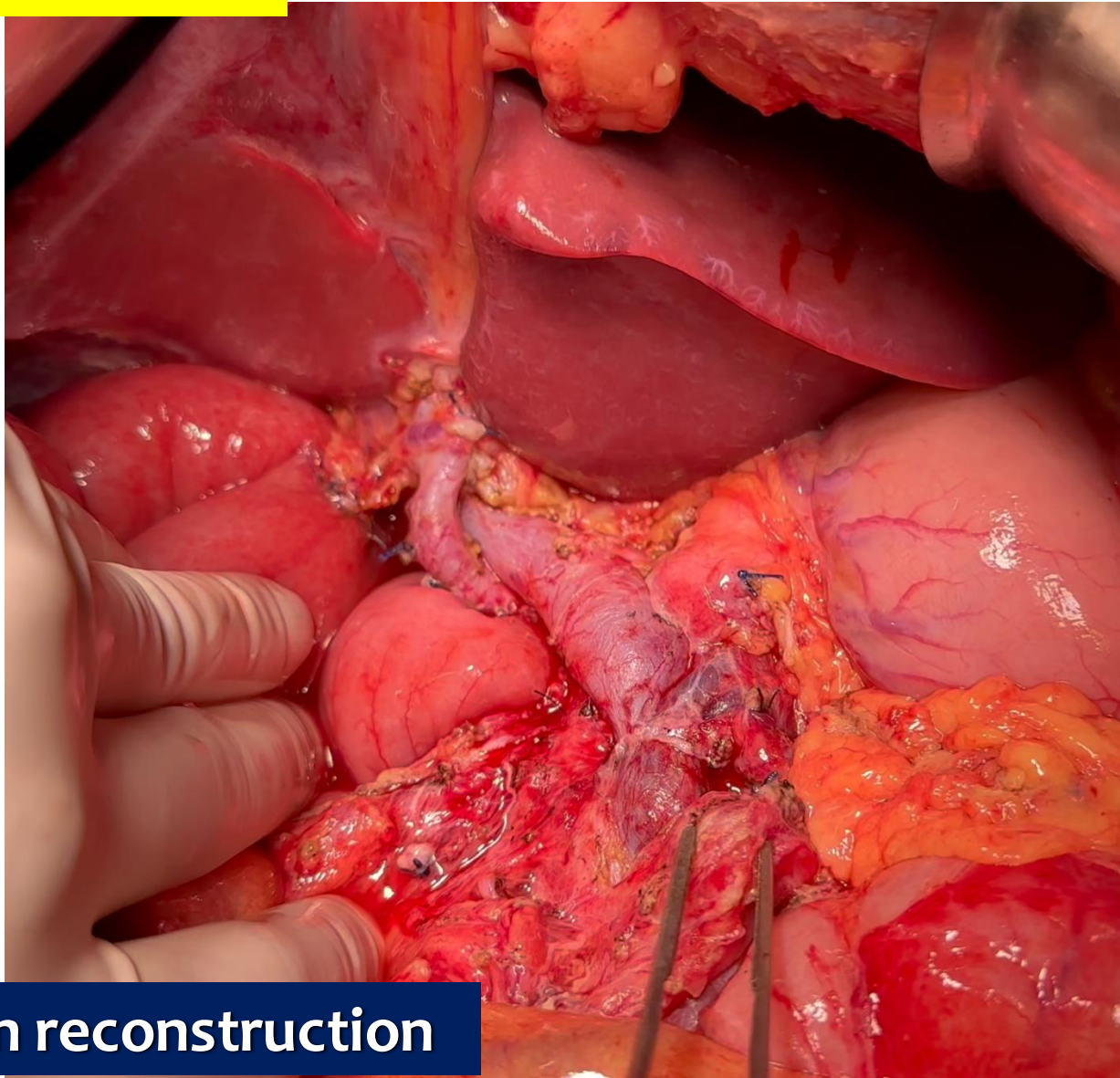


VASCULAR INVOLVEMENT



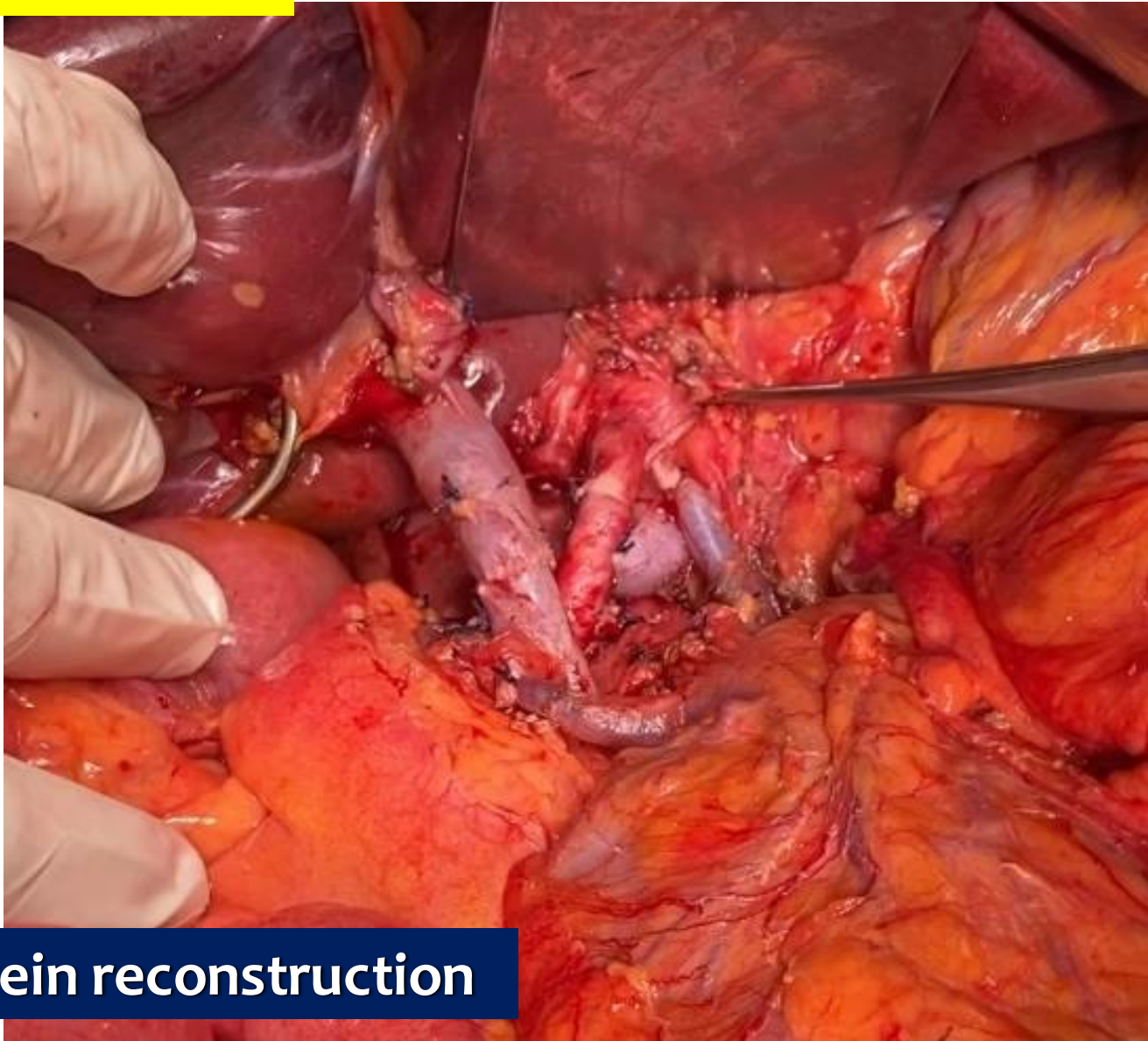
Portal vein reconstruction

VASCULAR INVOLVEMENT



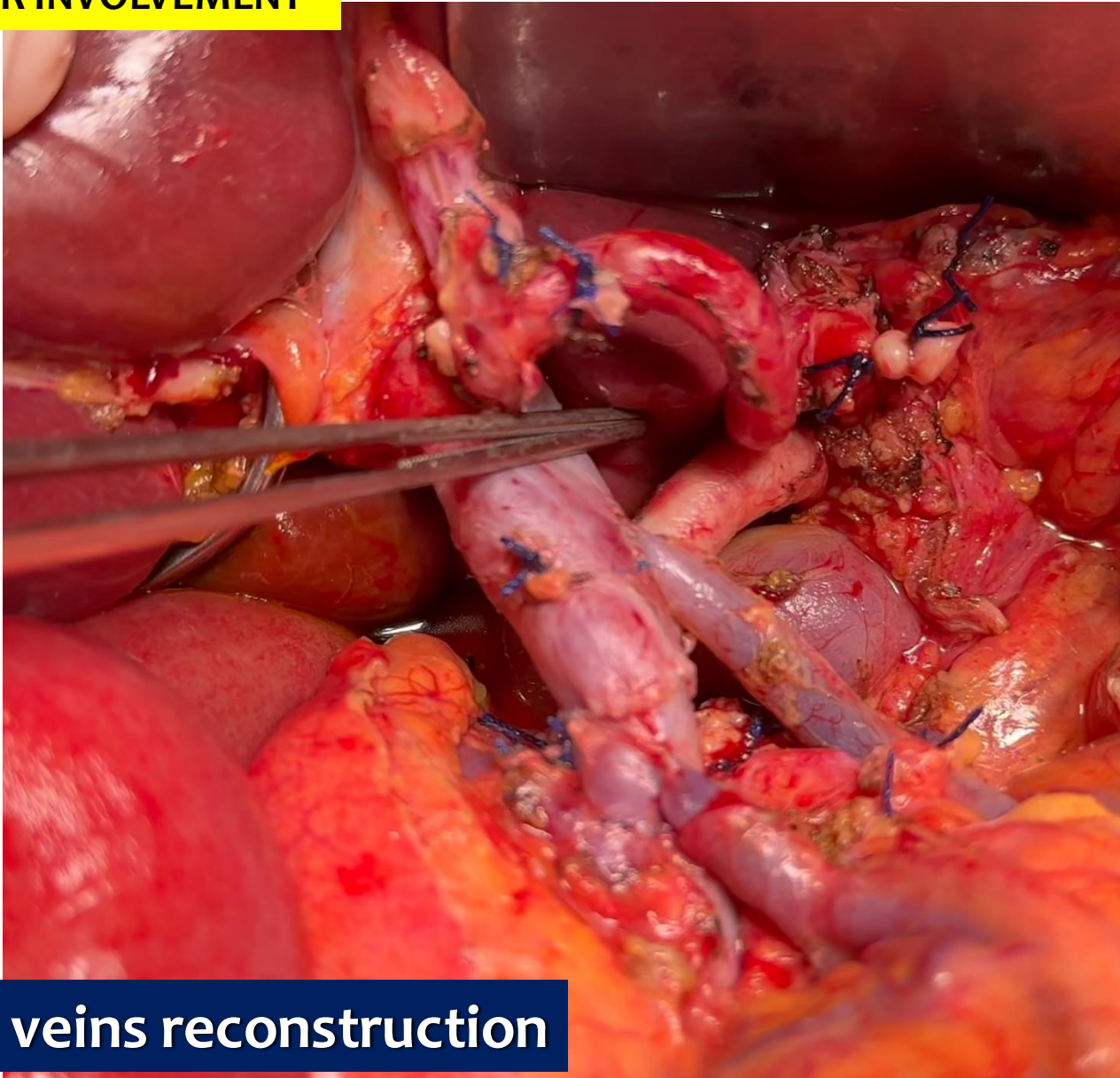
Portal vein reconstruction

VASCULAR INVOLVEMENT



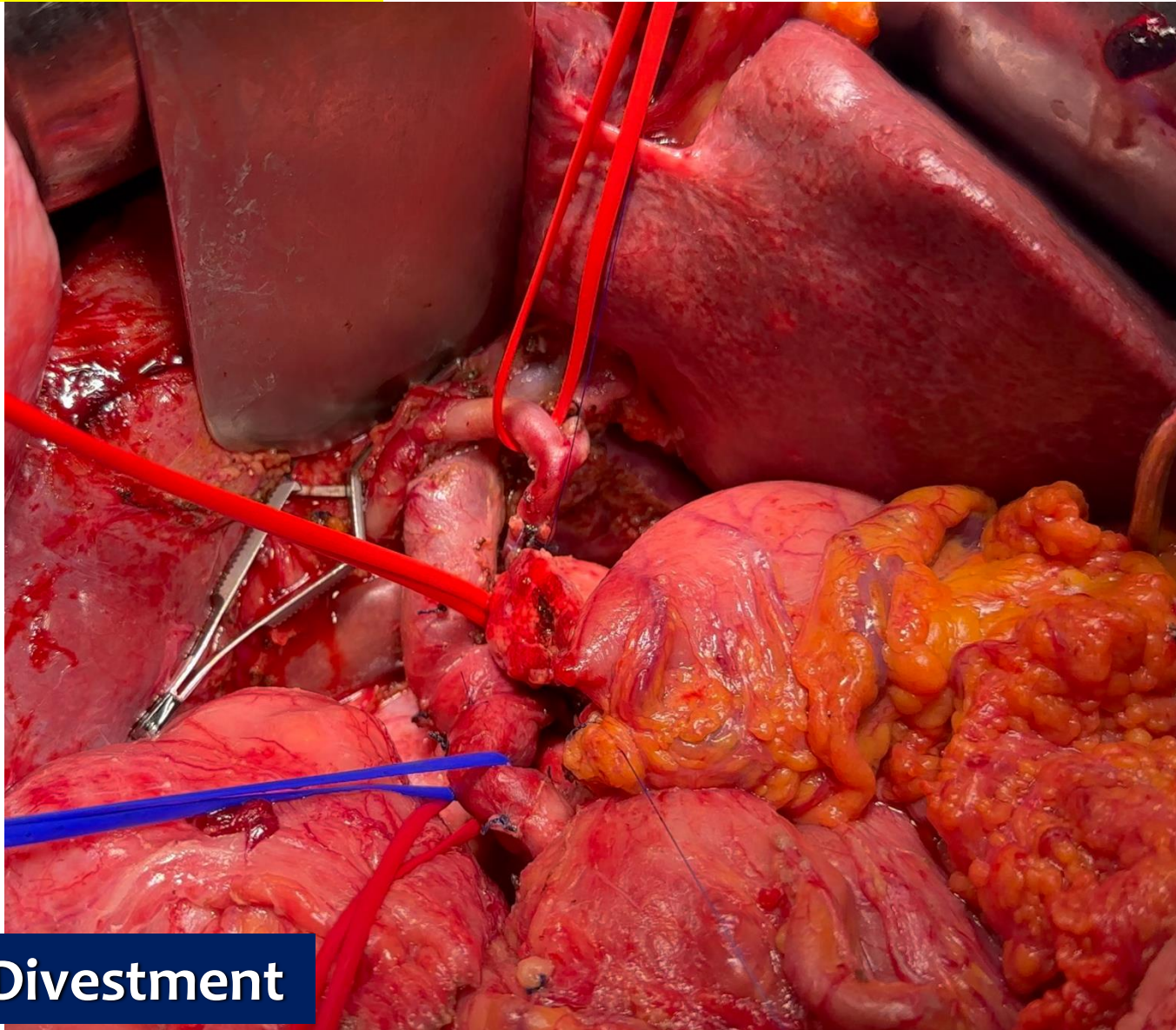
Portal vein reconstruction

VASCULAR INVOLVEMENT



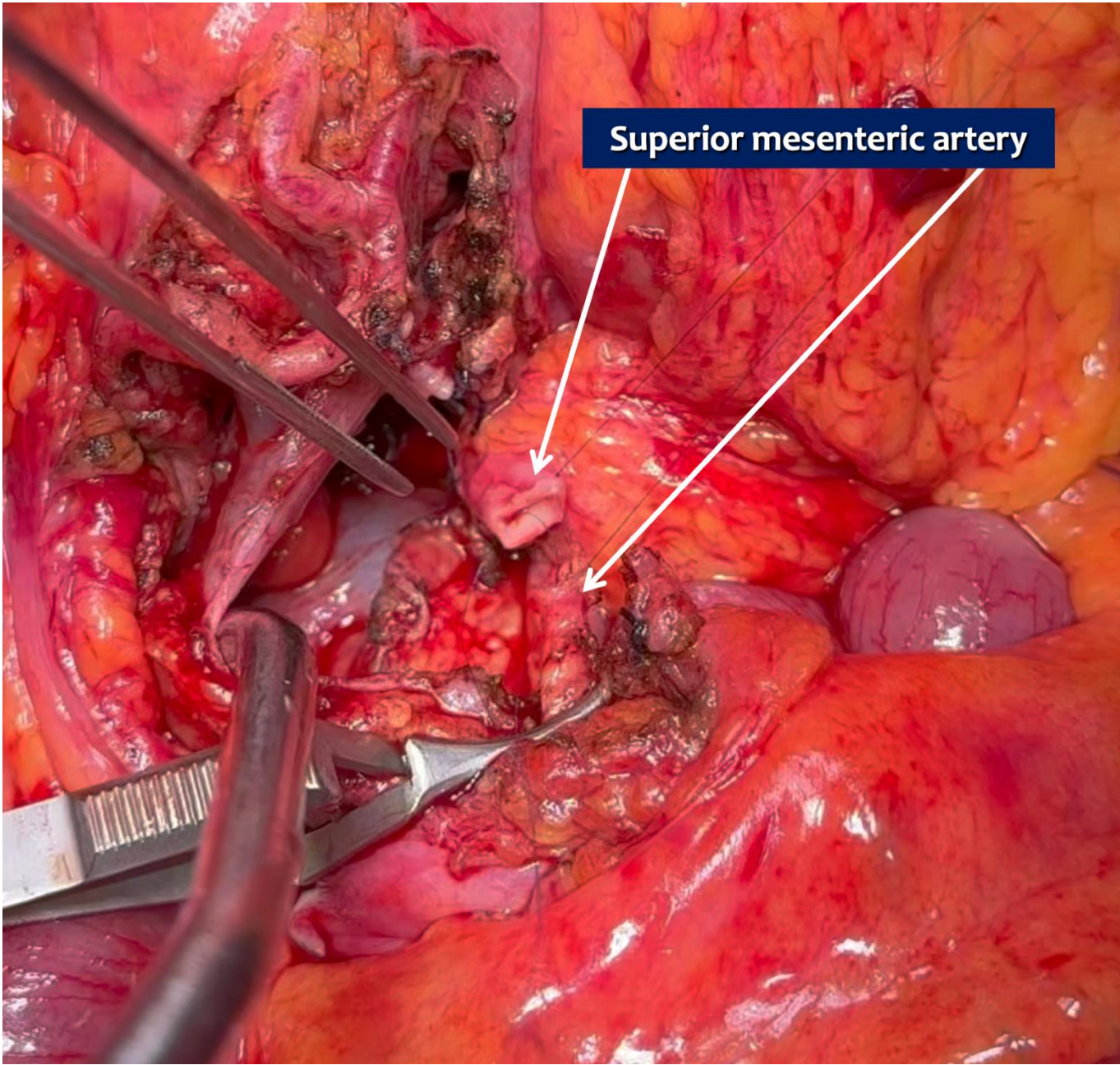
Jejunal veins reconstruction

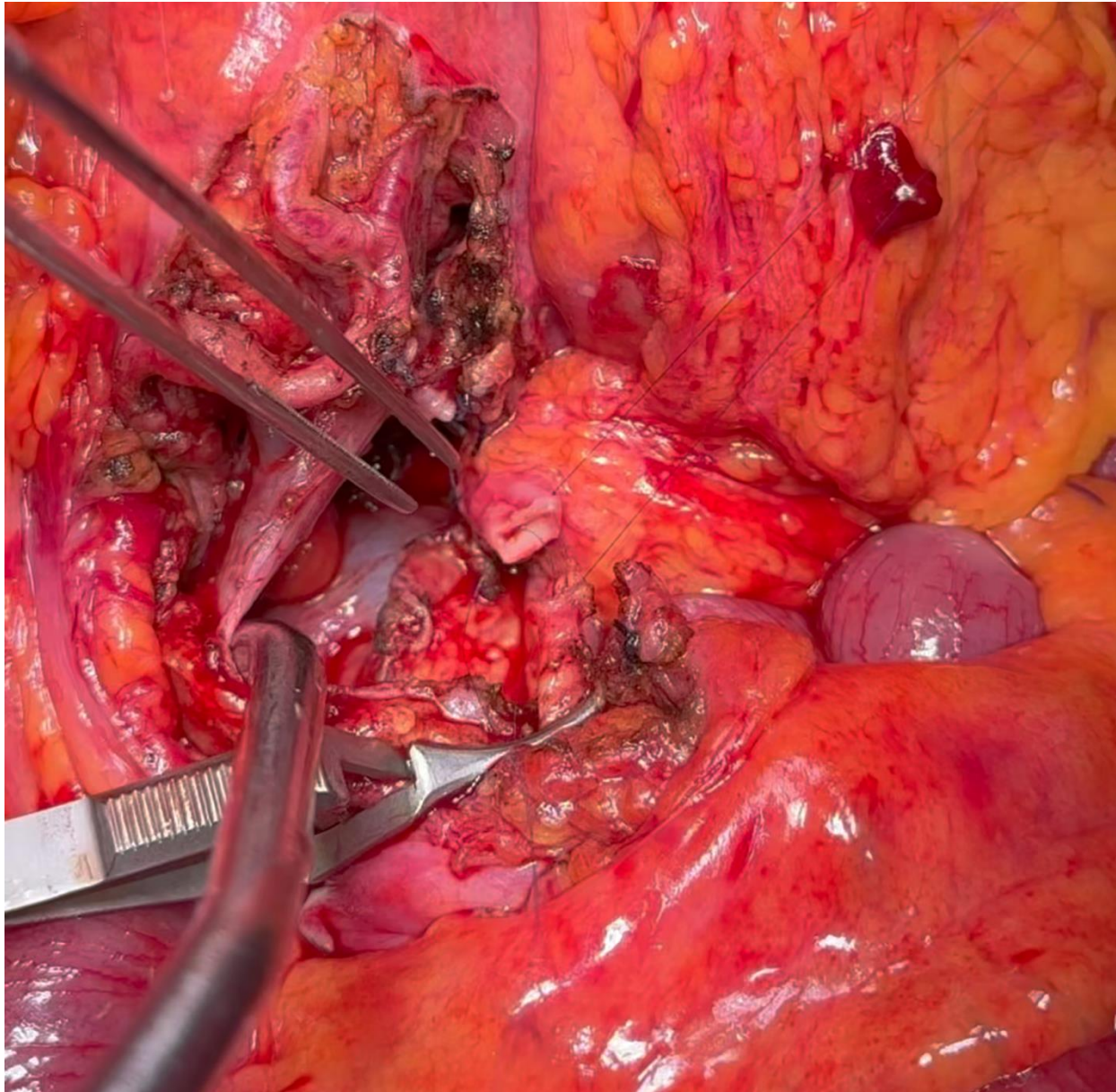
VASCULAR INVOLVEMENT



SMA Divestment











Lençóis Maranhenses

Thanks!



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