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# Surgical Services (St Luke's Hospital)


**Emmanouil Zacharakis MD PhD FRCS (Eng)**

*Senior Lecturer*
*Imperial College London*

*Consultant Upper GI/Bariatric & HPB Surgeon*
*St Mary's & Hammersmith Hospitals*


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# Operations performed

- Oesophago-Gastric Surgery
- Bariatric Surgery
- Liver & Pancreatic Surgery
- Colorectal Surgery
- Endocrine Surgery

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# Standards of surgical management

- MultiDisciplinary Team meetings
- Measures of performance
- Radical Lymphadenectomy for GI cancer operations

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# Multidisciplinary meetings

Management decisions are based on consensus view rather than individual opinion

- Surgeons
- Gastroenterologist
- Oncologist
- Interventional radiologist
- Pathologist

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# Multidisciplinary meetings

- Follow management protocols
- Provide a collective decision, allowing the most appropiate management for each patient
- Less prone to human errors
- MDT improves overall clinical staging (cTNM) accuracy when compared with pathological (pTNM) stage for gastro-intestinal cancer

Davies A, et al. Br J Surg 2004; 91:252

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# Measures of surgical performance

- Morbidity of mortality (audit data)
- Investigation of adverse events

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# Oesophago-Gastric Surgery

- Ivor Lewis Oesophagectomy & radical 2-field lymphadenectomy
- Three-stage Oesophagectomy & radical 2 or 3 field lympadenectomy
- Total Gastrectomy & radical D2 lymphadenectomy
- Sub-Total Gastrectomy & radical D2 lympadencetomy
- Extended Total Gatrectomy and lower Oesophagectomy via Thoraco-abdominal approach & radical D2 lymphadencectomy
- Thoracoscopic Three-stage Oesophagectomy (for early carcinoma/benign disease)
- Laparoscopic Total & Sub-Total Gastrectomy (for early carcinoma/benign disease)
- Laparoscopic Sleeve Gastrectomy (for GIST tumors)

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# Oesophago-Gastric Surgery

- **MEDIAN LYMPH NODE COUNT**
- **75 for D2 Gastrectomy**
- **48 for Oesophagectomy with 2 or 3 field Lymphadenectomy**

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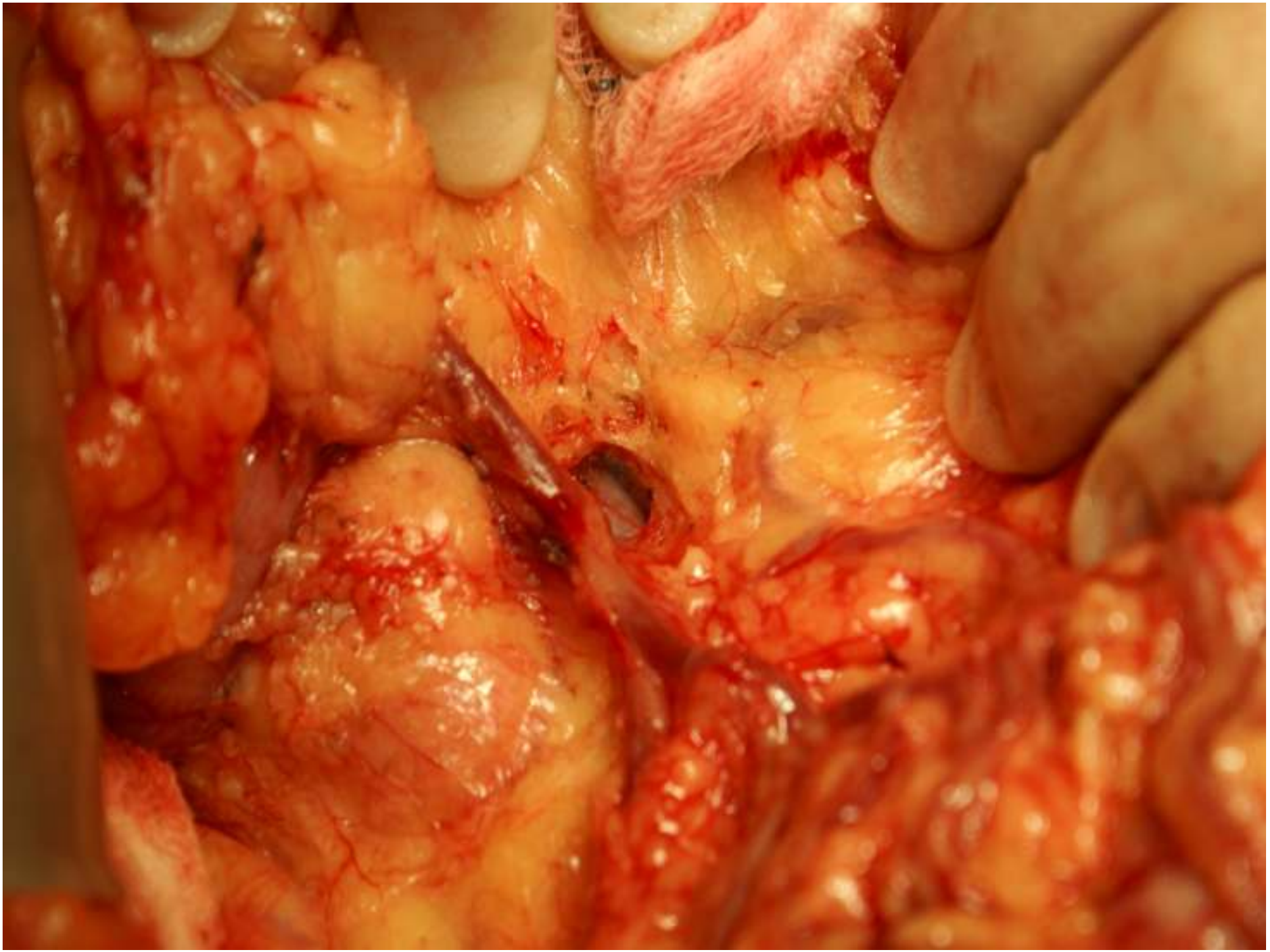
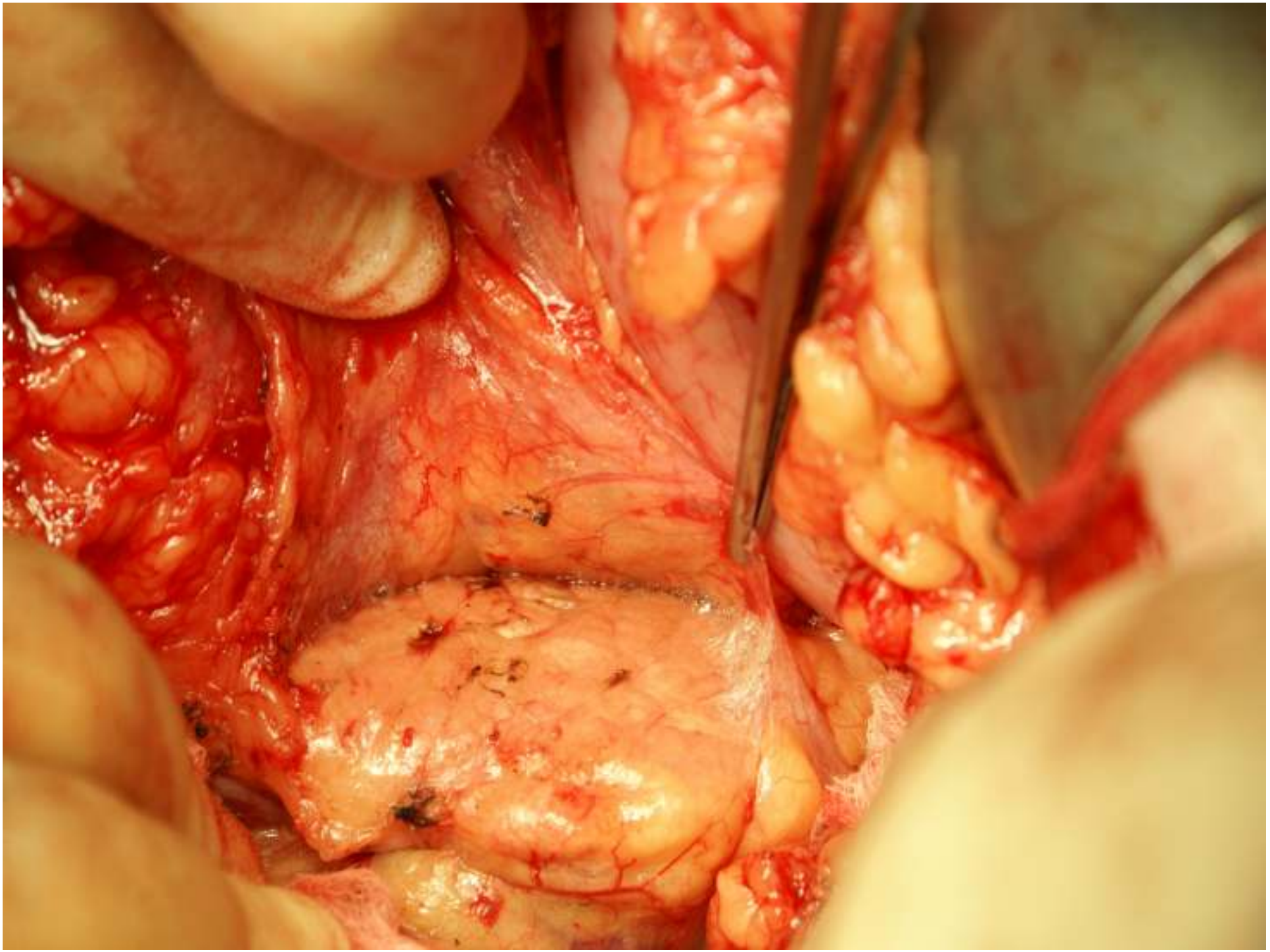
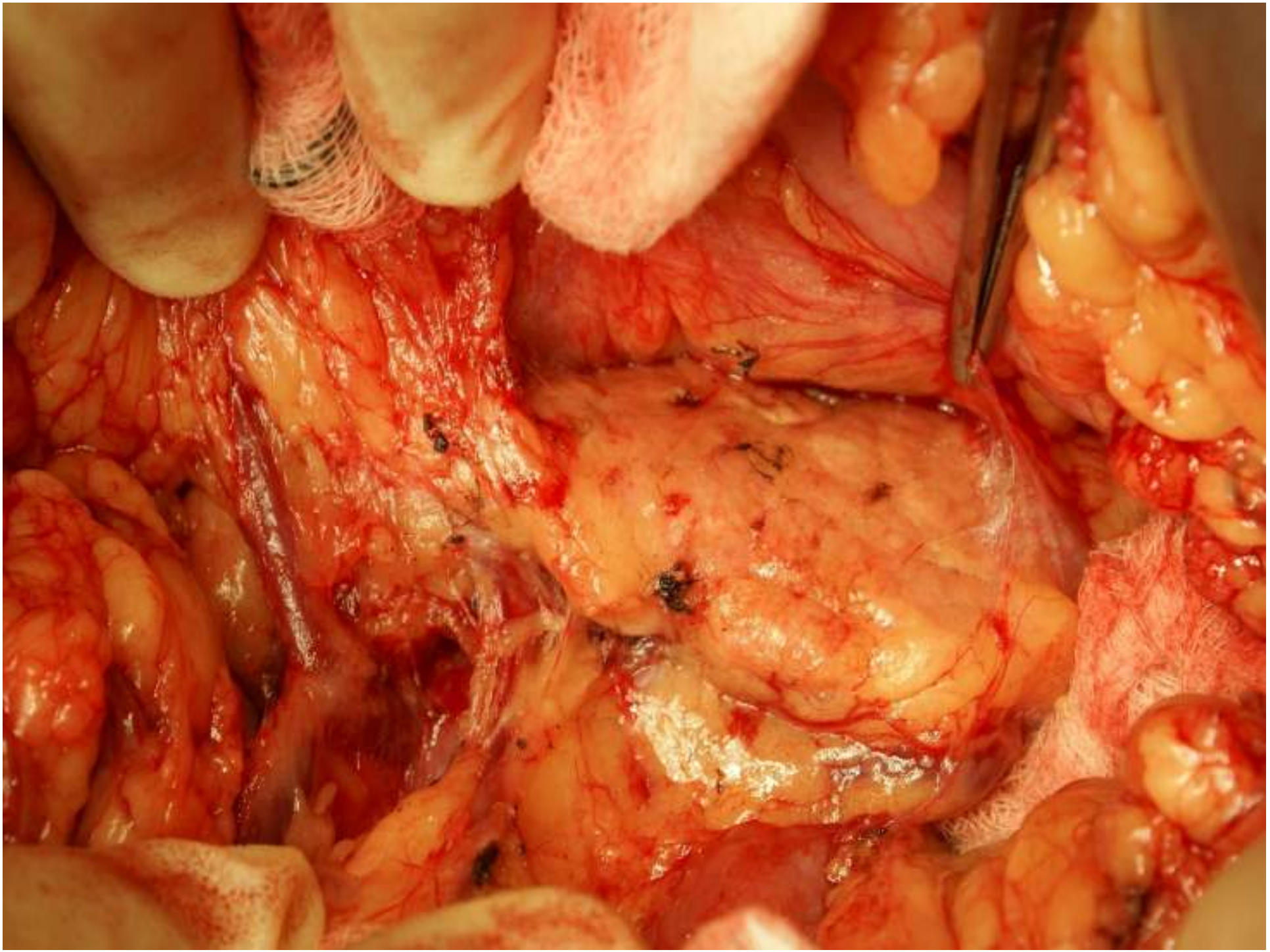
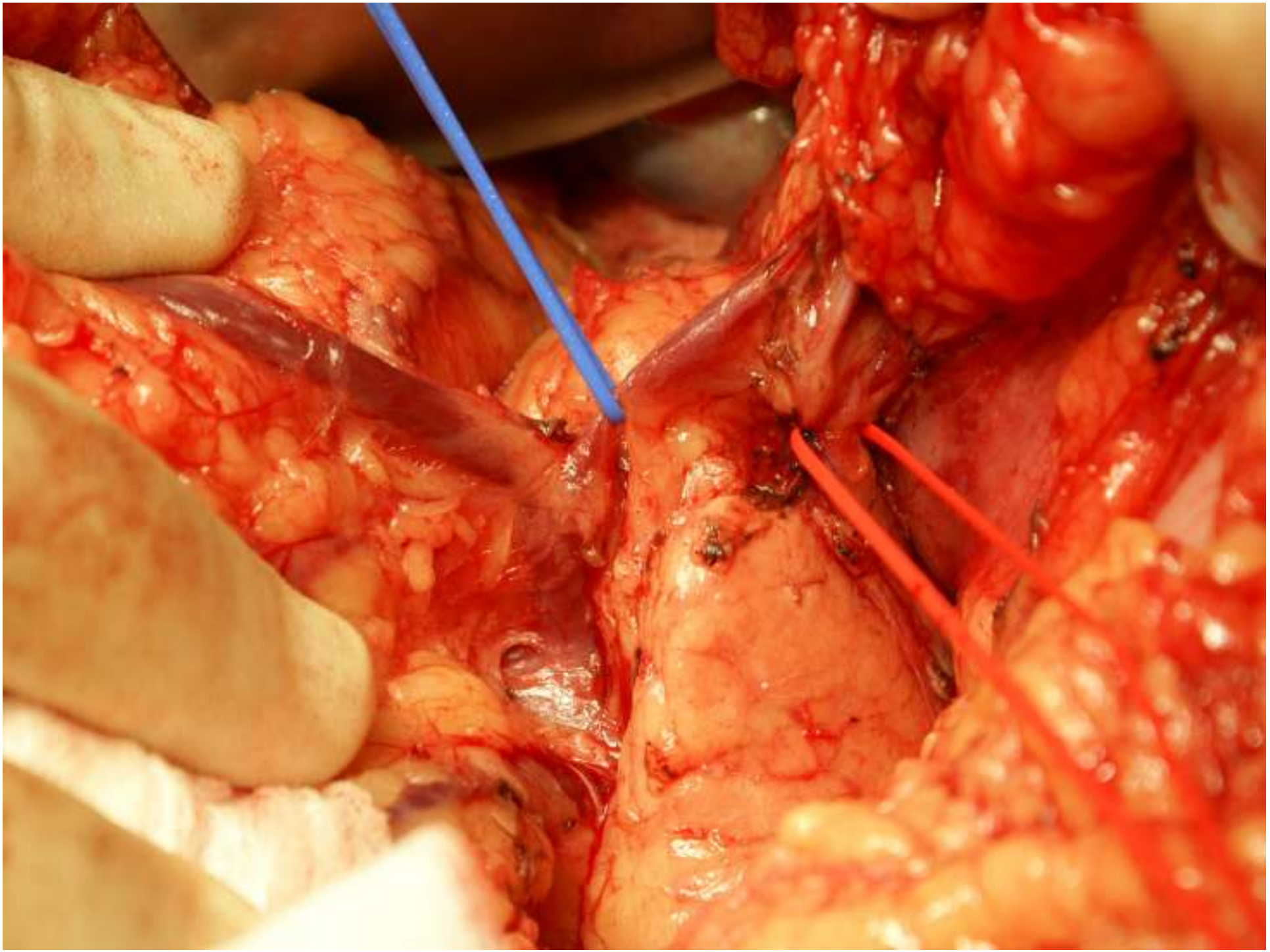
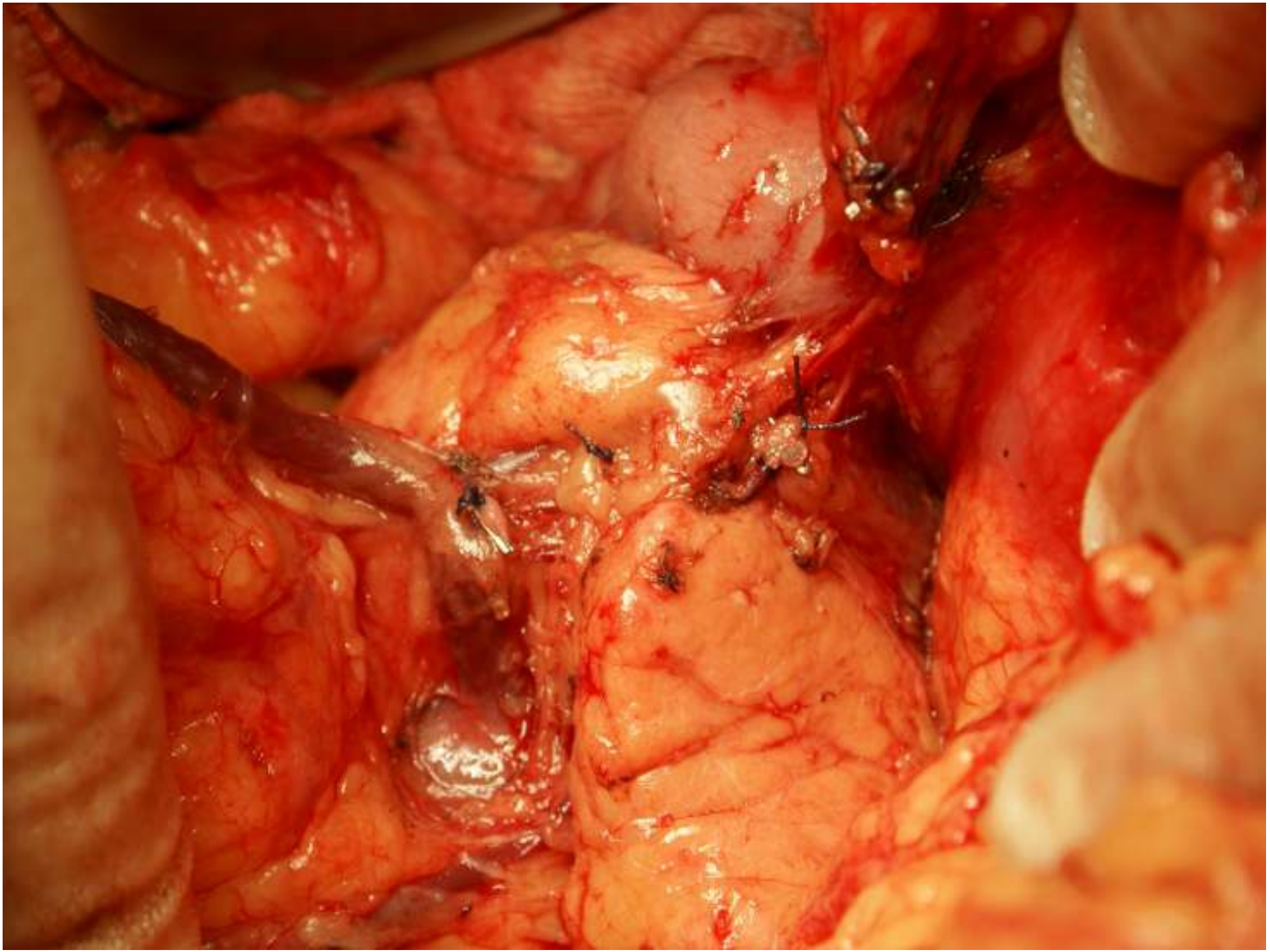
# D2 Gastrectomy











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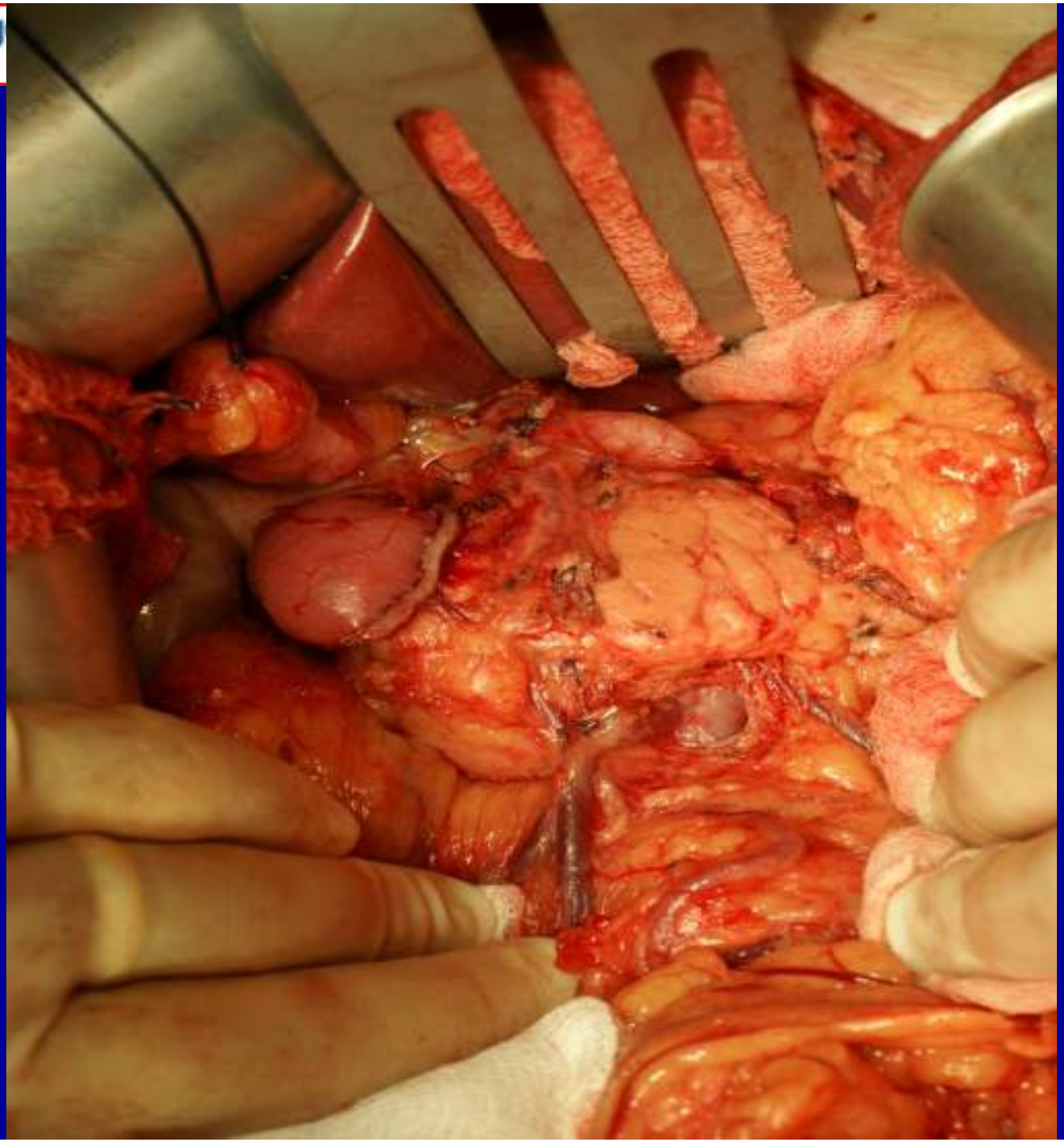

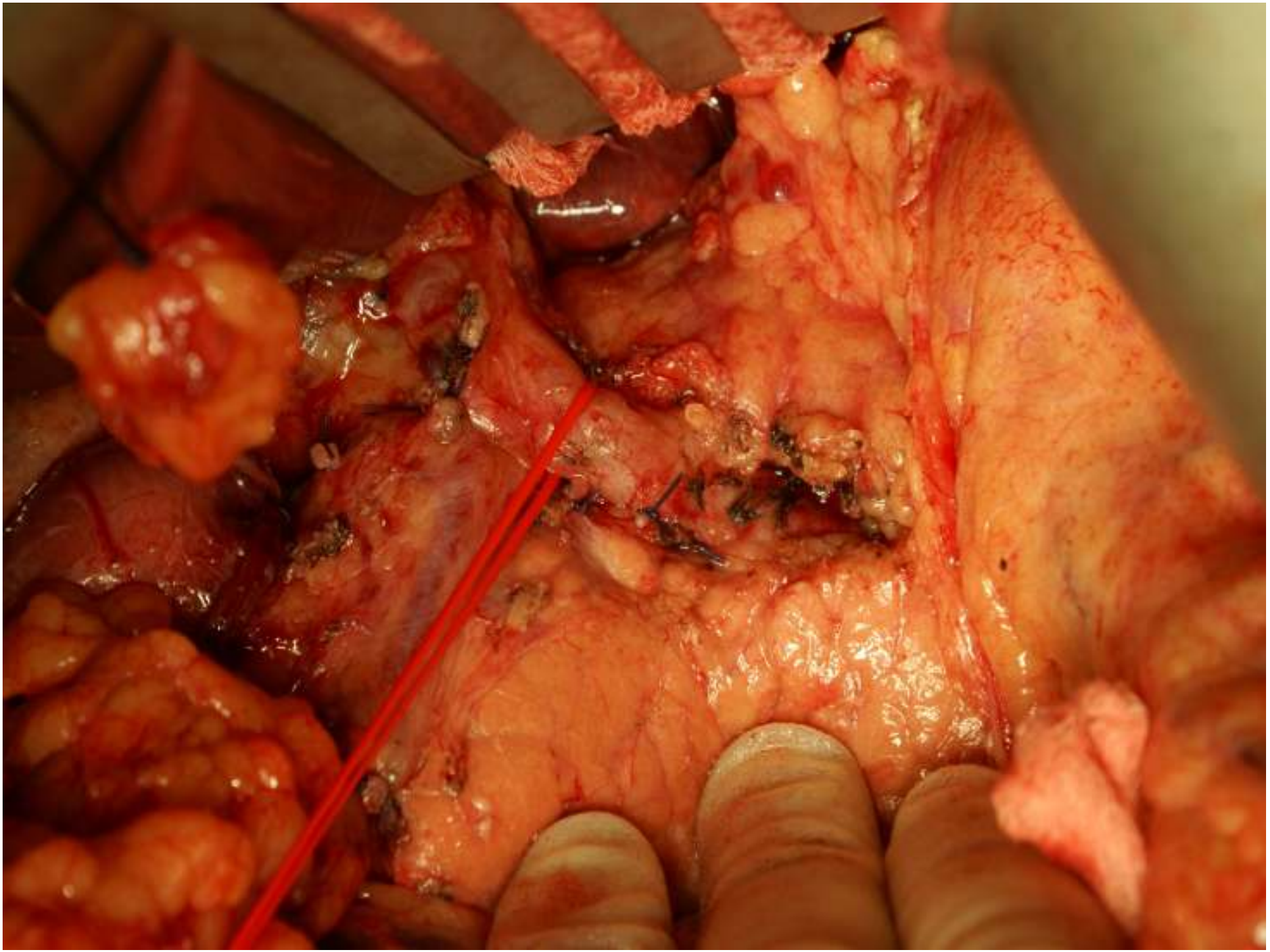

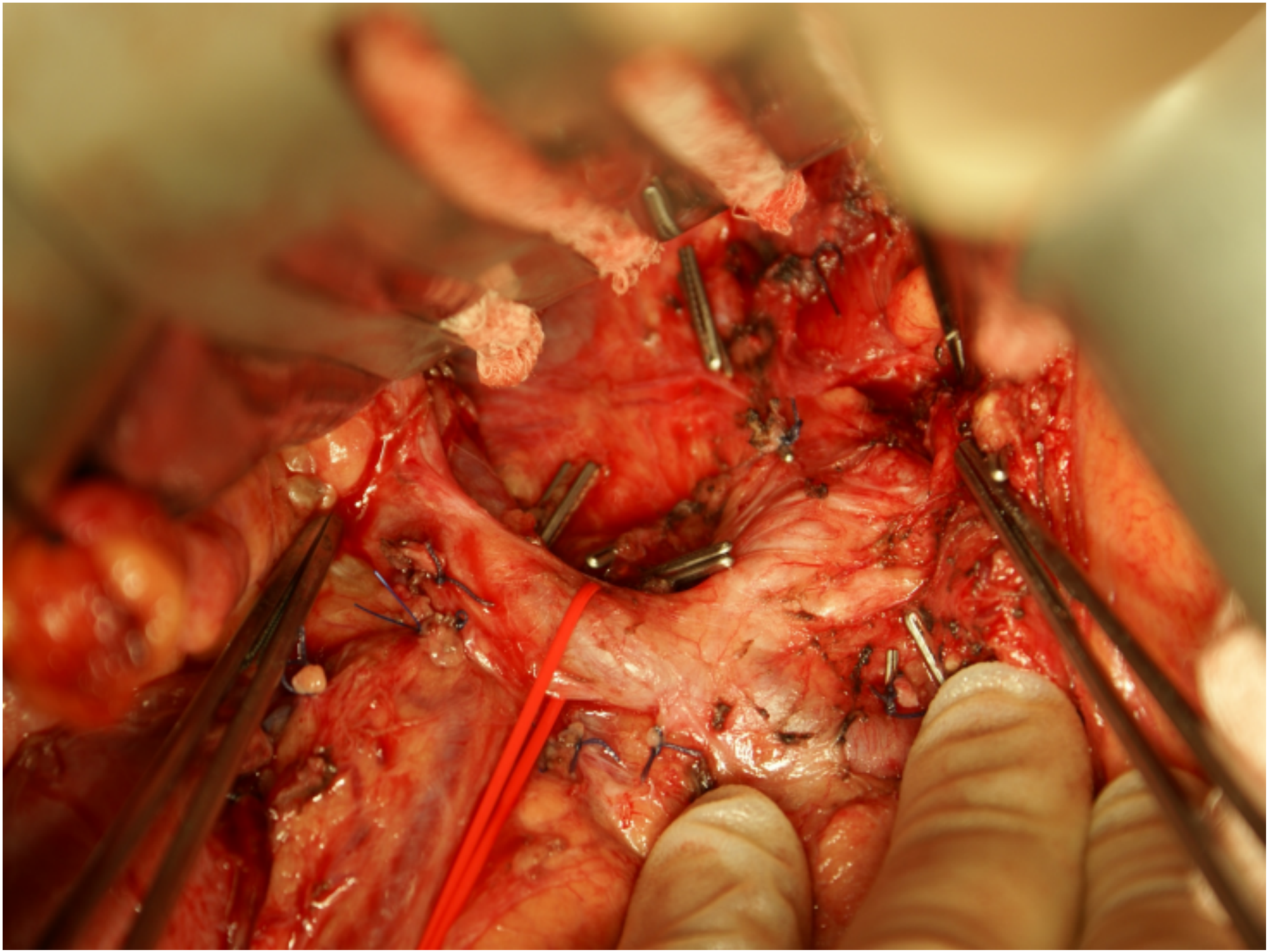

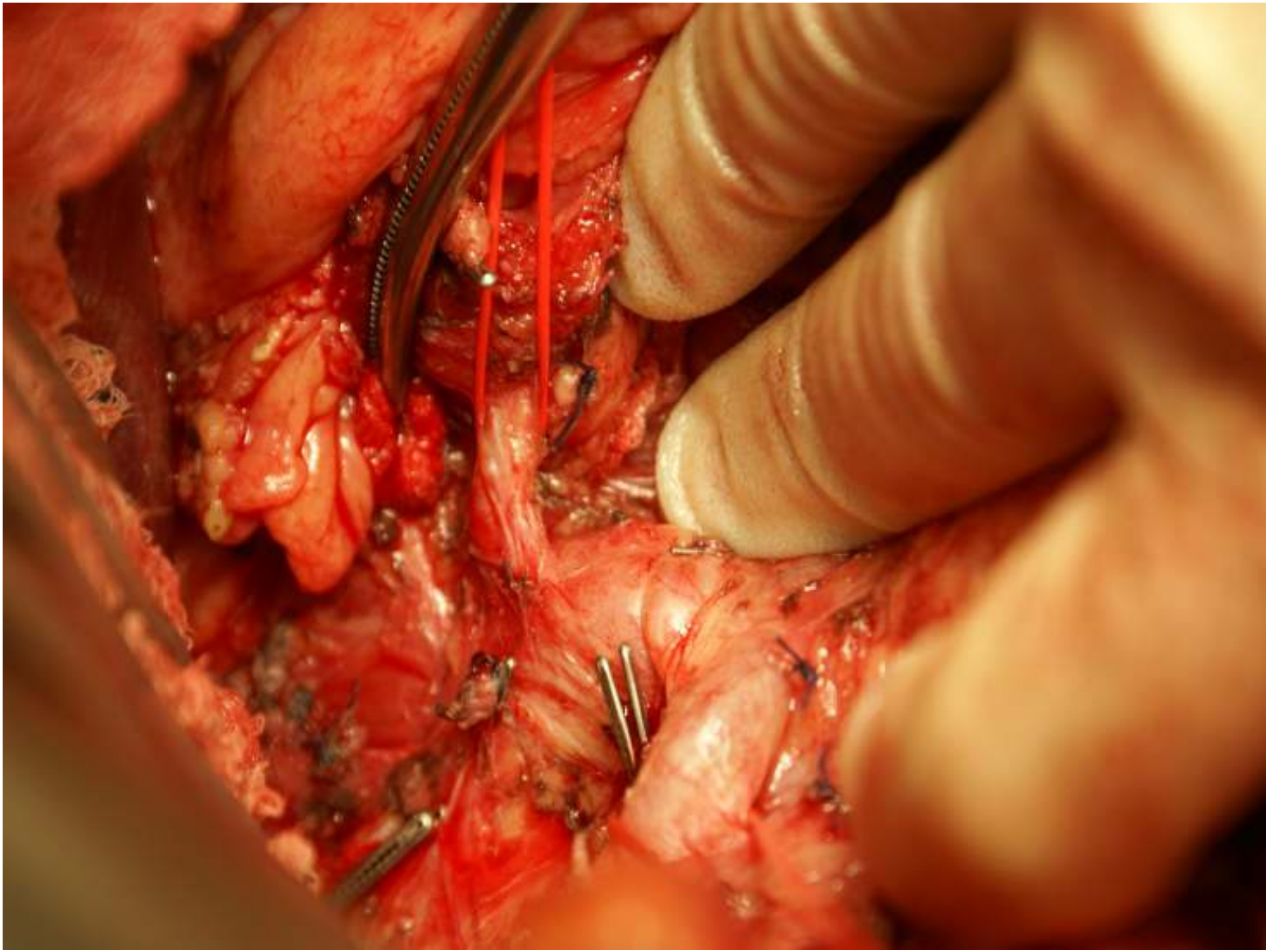

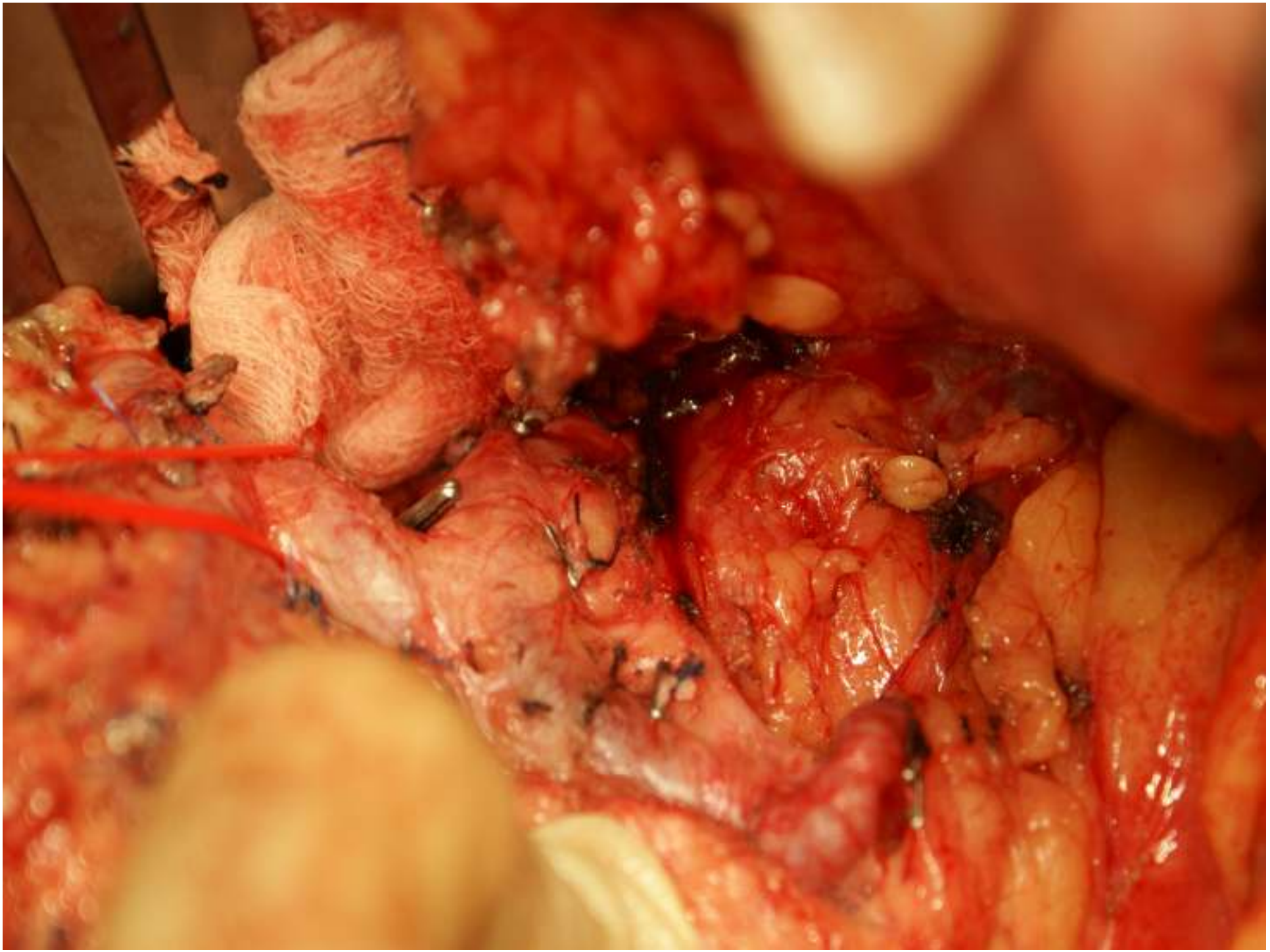

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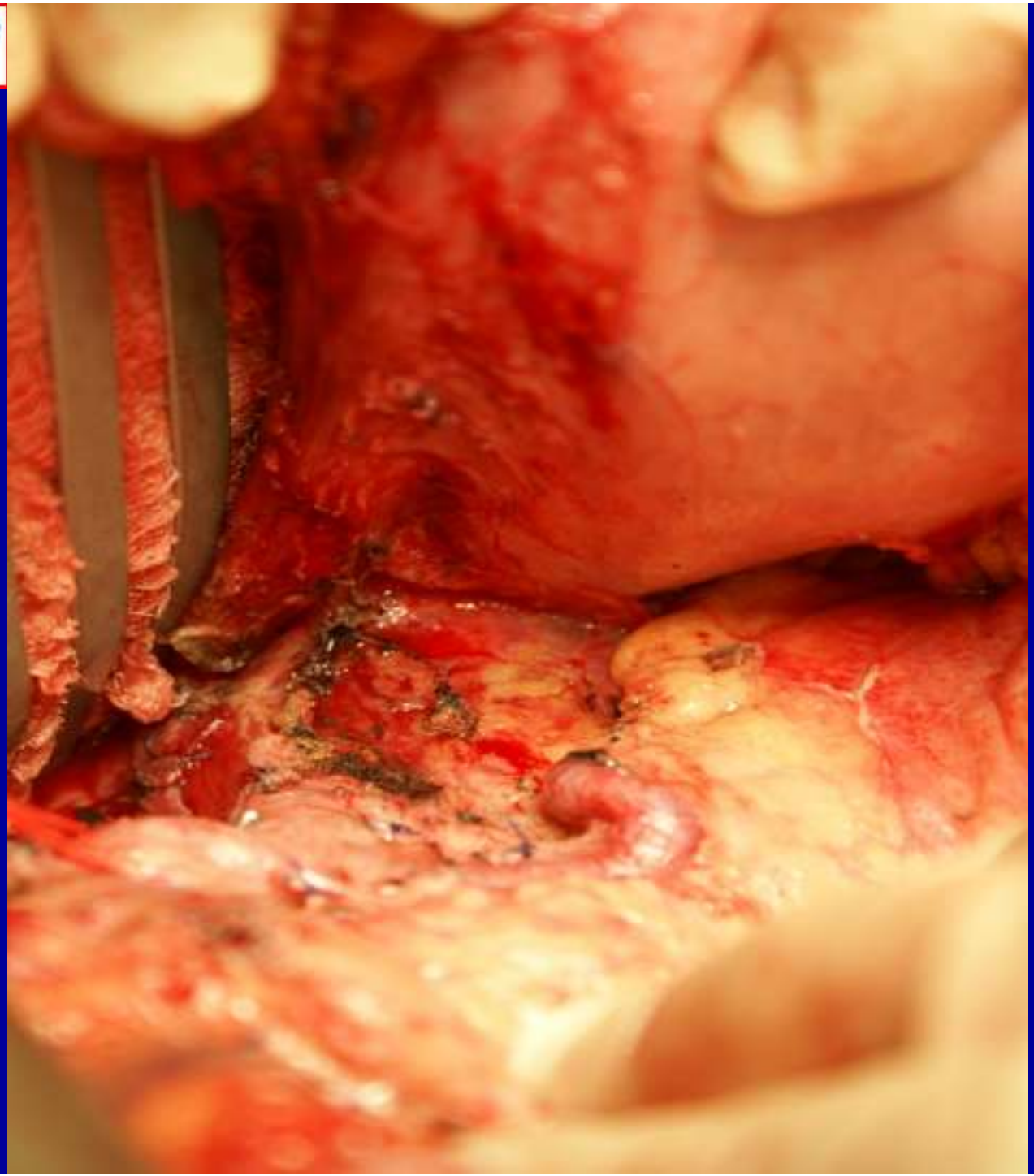

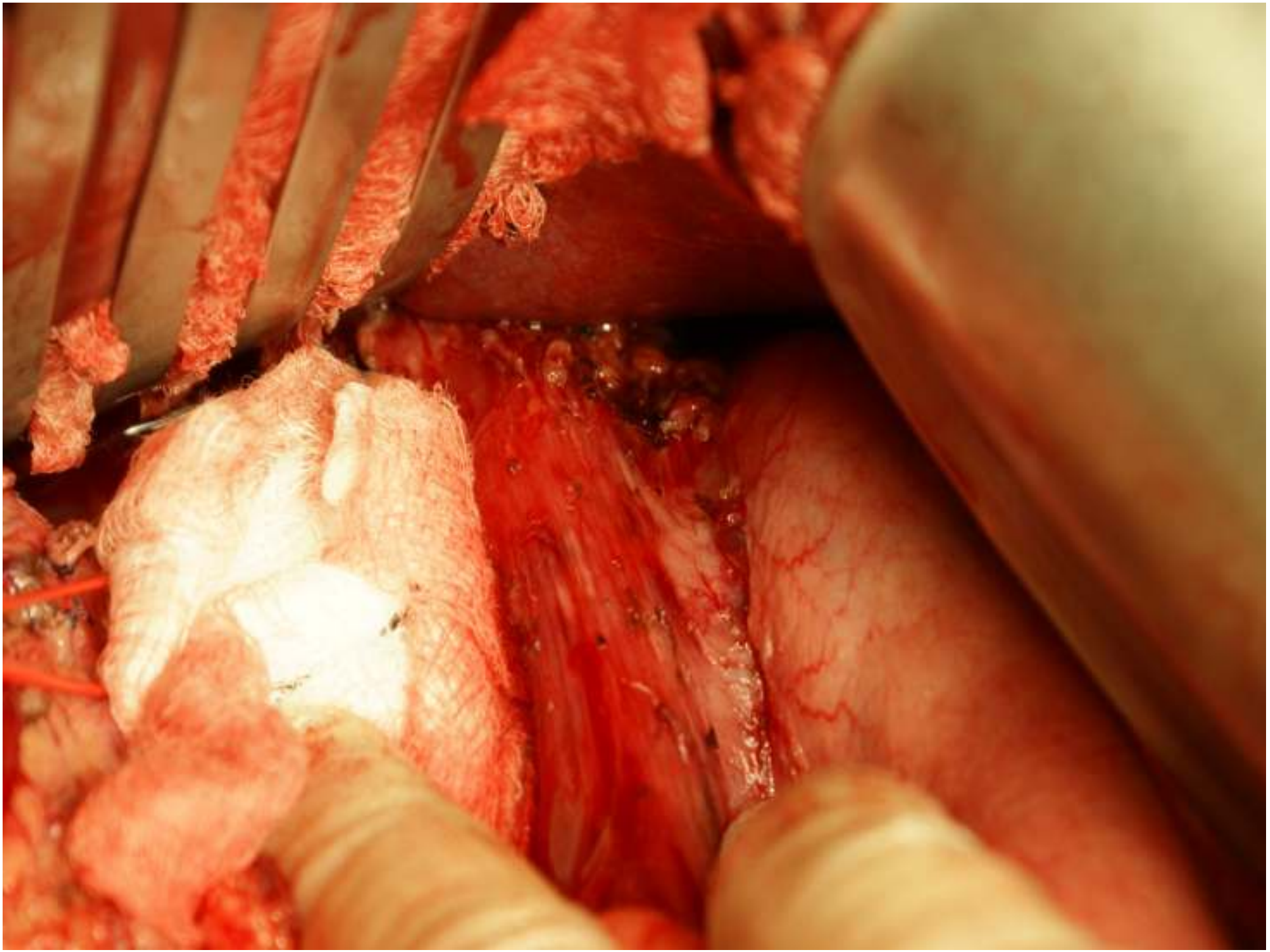

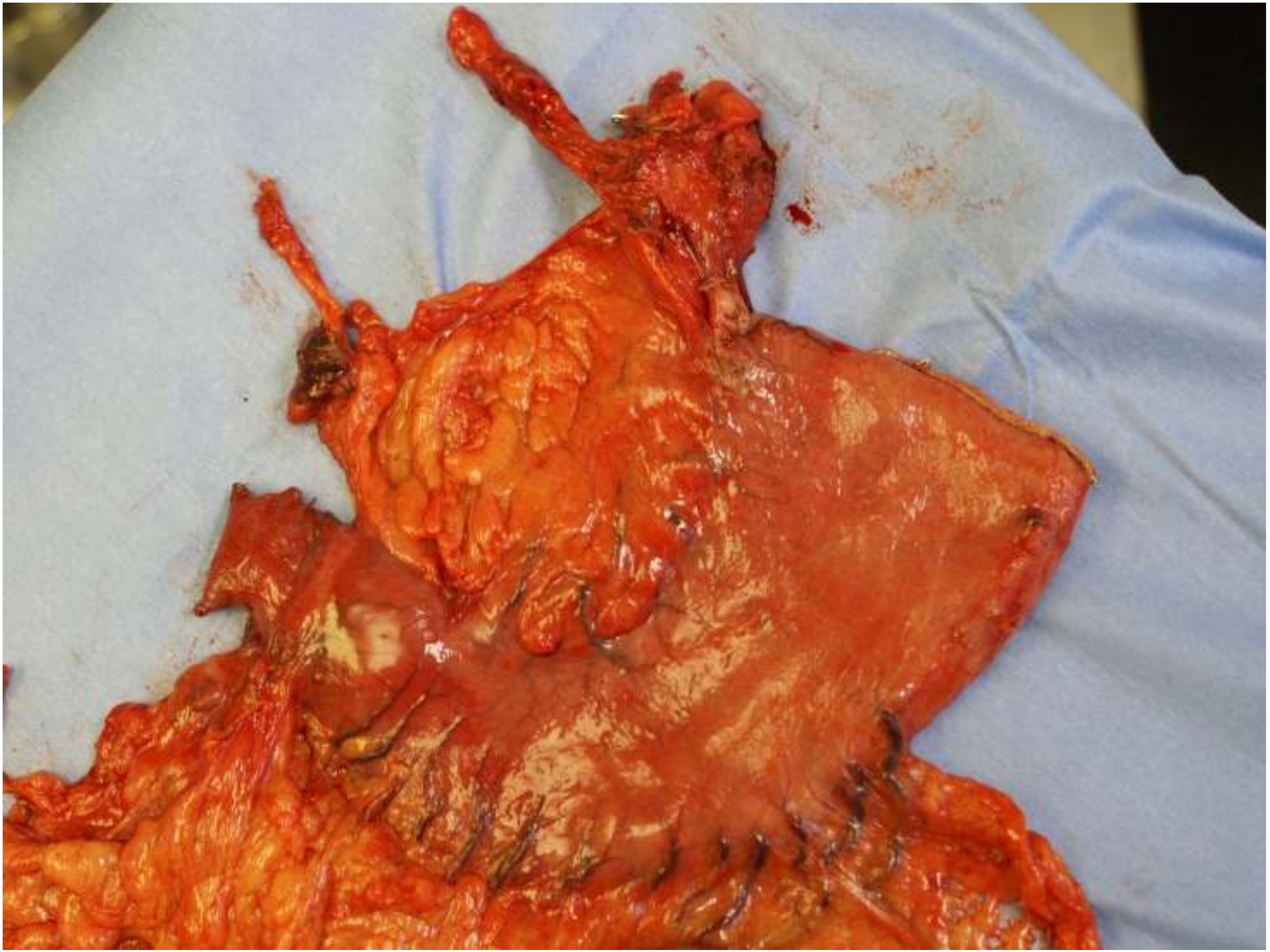

Order Number 11.494390 Date Ordered 06/06/2011 minimise
Service Codes SURG

## Result Report

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ITEM

Report destination PAGE ^N of ^P
St.Mary's Hospital, ICHNT, London W2 1NY CELLULAR PATHOLOGY Tel: 020 7886 1273

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order: Lab No:S,11.0013021.G
unit:SMH ward/dept:No location given on crn:3507926
cons:ZACE surname:SALIM
req Dr: forename:MOHAMMAD
pt cat:NHS dob:12.05.44

---

Clinical Details:
Gastrectomy ca. Frozen section for clearance of margin proximally and distally.

Macro:
A: Specimen contains no specimen details.
A gastrectomy specimen with attached greater and lesser curvature fat. The entire specimen measures 300x210x50mm. The stomach itself measures 170x80x40mm. The lesser curvature measures 140mm and the greater curvature measures 230mm. The lesser curvature fat measures 100x50mm and the greater curvature fat and omentum together measures 300x150mm. On opening the stomach there is a short segment of oesophagus identified measuring 11mm in length. There is an ulcerated tumour present at the lesser curvature just distal to the oesophago-gastric junction. It measures 35x25mm in size. It is 11mm from the proximal resection margin and well away from the distal resection margin. On

Path:JEW /RDG Authorised by:Dr R D Goldin on:06.06.11 Time 17:57

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HISTOPATHOLOGY specimen: on:27.05.11 * | seen by:
RESULT STOMACH RESECTION,LYMPH N |
201105279999
St.Mary's Hospital, ICHNT, London W2 1NY CELLULAR PATHOLOGY Tel: 020 7886-1273

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lab No:13021/11
crn:3507926 surname:SALIM

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slicing, it appears to extend to a depth of 15mm, into the subserosa. Distal to the tumour also along the lesser curvature there is an area of erythema measuring 5x5mm. It is 20mm from the distal end of the tumour. No other mucosal lesions identified. The serosal surface near the tumour is inked black.

A1-A2 Frozen section
A3 Proximal resection margin

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crn:3507926 lab No:13021/11
surname:SALIM

A. There is a moderately differentiated adenocarcinoma of intestinal type, arising from the gastric mucosa, and infiltrating into the subserosa. There is focal mucin production, and a moderate host lymphocytic response is seen. There is also extensive lymphovascular and perineural invasion seen.

The tumour focally extends to the serosal surface. The proximal and distal resection margins are free of tumour.

The adjacent gastric mucosa shows high grade dysplasia. The rest of the gastric mucosa shows glandular atrophy and congestion, but no intestinal metaplasia is seen. The oesophageal mucosa shows squamous epithelium with no evidence of Barrett's oesophagus.

A total of 91 lymph nodes were retrieved, 14 of which showed metastatic tumour.

B. Sections show fibroadipose tissue only.

C. Sections show fibroadipose tissue only.

D. One lymph node with no evidence of malignancy (0/1).

Path:Dr Jayson Wang \Dr R D Goldin Date authorized:06.06.11

HISTOPATHOLOGY RESULT | specimen: STOMACH RESECTION,LYMPH N | on:27.05.11 | seen by:

201105279999
St.Mary's Hospital, ICHNT, London W2 1NY CELLULAR PATHOLOGY Tel: 020 7886-1273

crn:3507926 lab No:13021/11
surname:SALIM

E. Three lymph nodes with no evidence of malignancy (0/3).

F. Three lymph nodes, one of which contains metastatic tumour (1/3).

CONCLUSION:
MODERATELY DIFFERENTIATED ADENOCARCINOMA (INTESTINAL TYPE). 15/98
INVADES TO THE SEROSA (pT4a). VASCULAR AND PERINEURAL INVASION.
LYMPH NODES INVOLVED (pN3a). EXTENDS TO <1MM FROM THE SEROSAL SURFACE.

TNM 7TH EDITION: pT4a pN3a pMX R0.

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Report destination Mr E.Zacharakis Page 1 of 2
St.Mary's Hospital, Praed Street,London , W2 1NY PATHOLOGY Tel: 020 7886 1260

Order: Lab No:S,10.0003796.X
Unit:SMH ward/dept:Intensive Care ICU SMH crn:3492736
Cons:Mr E.Zacharakis surname:HEPPAN
req Dr[illegible] forename:JAMES
pt cat:NHS GP JENNER JENUR JENHAS dob:26.03.30

Clinical details:
Total gastrectomy Tumour invading mesocolon (marked by 4cm stitch).

Macro:

A: Pot labelled "D2 GASTRECTOMY"
A total gastrectomy specimen (150mm along the lesser curve and 270mm along the greater curve) with greater omentum (200mm max.) and lesser curve adipose tissue (80mm max.). There is a portion of attached transverse mesocolon (55mm x 30mm x 20mm) adherent to the posterior aspect of the stomach and marked with a suture.

A fungating tumour (80mm max) is present, centred on the posterior wall of the stomach but extending onto the lesser and greater curves. The tumour is 65mm away from the proximal resection margin and 50mm from the distal resection margin. The tumour infiltrates through the wall of the stomach and abuts the serosal surface, particularly in the area where the transverse mesocolon is adherent.

A1-A44 F99 in each lymph nodes from the lesser curve
A42-A80 lymph nodes from the greater curve A81 F1 Proximal resection margin A82 F1 Distal resection margin A83 F1 Normal mucosa from the proximal part of the stomach A84 F1 Normal mucosa from the distal part of the stomach A85-A86 F1 in each tumour + mesocolon A87 F1 Tumour with adjacent stomach mucosa A86,A89,A90 F1 in each tumour with deepest penetration into the wall A91-A93 F99 in each ?lymph nodes from the lesser curve

B: Pot labelled "LYMPH NODE"
A fibrofatty piece of tissue (10mm x 7mm x 4mm). B1 F1 Levels AE

C: Pot labelled "LYMPH NODE"
A piece of fibrofatty tissue (4mm x 4mm x 3mm). C1 F1 Levels AE

Micro:

A: TOTAL GASTRECTOMY

TUMOUR
Poorly differentiated intestinal type adenocarcinoma which is arising on a background of chronic gastritis with intestinal metaplasia and multifocal high grade dysplasia. Extensive inflammation is noted with abscess formation at the advancing margin of the tumour.

SPREAD
The tumour invades through the full thickness of the muscularis propria and onto the posterior serosal surface, focally superficially

Path:DM2 /JL2 Authorised by:Dr J Lloyd on:22.02.10 Time 12:11

HISTOPATHOLOGY specimen: on:15.02.10 * | seen by:
RESULT STOMACH RESECTION,LYMPH N |

crn:3492736 lab No:3796/10
surname:HERMAN

invading into the adherent transverse mesocolon.

There is lymphovascular invasion.

All of the fat from the lesser and greater curves was embedded. A total of 142 lymph nodes were found, some of which show acute lymphadenitis. There is no metastatic malignancy.

EXCISION
The proximal and distal margins show normal oesophageal and duodenal mucosa respectively. The transverse mesocolon margin is also negative.

B+C: Both samples are fibrofatty tissue with no evidence of malignancy. No lymph node is present.

Conclusion
Total gastrectomy: Poorly differentiated adenocarcinoma, intestinal type.
0/142 nodes
pT4 N0 R0

(TNM7 = pT4b N0 R0)

Path:Dr Dorendra Mai\Dr J Lloyd Date authorized:22.02.10

| HISTOPATHOLOGY RESULT | specimen: STOMACH RESECTION,LYMPH N | on:15.02.10 | seen by: |
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# Extended Total Gastrectomy & Lower Oesophagectomy with D2 Lymphadenectomy via thoraco-abdominal approach

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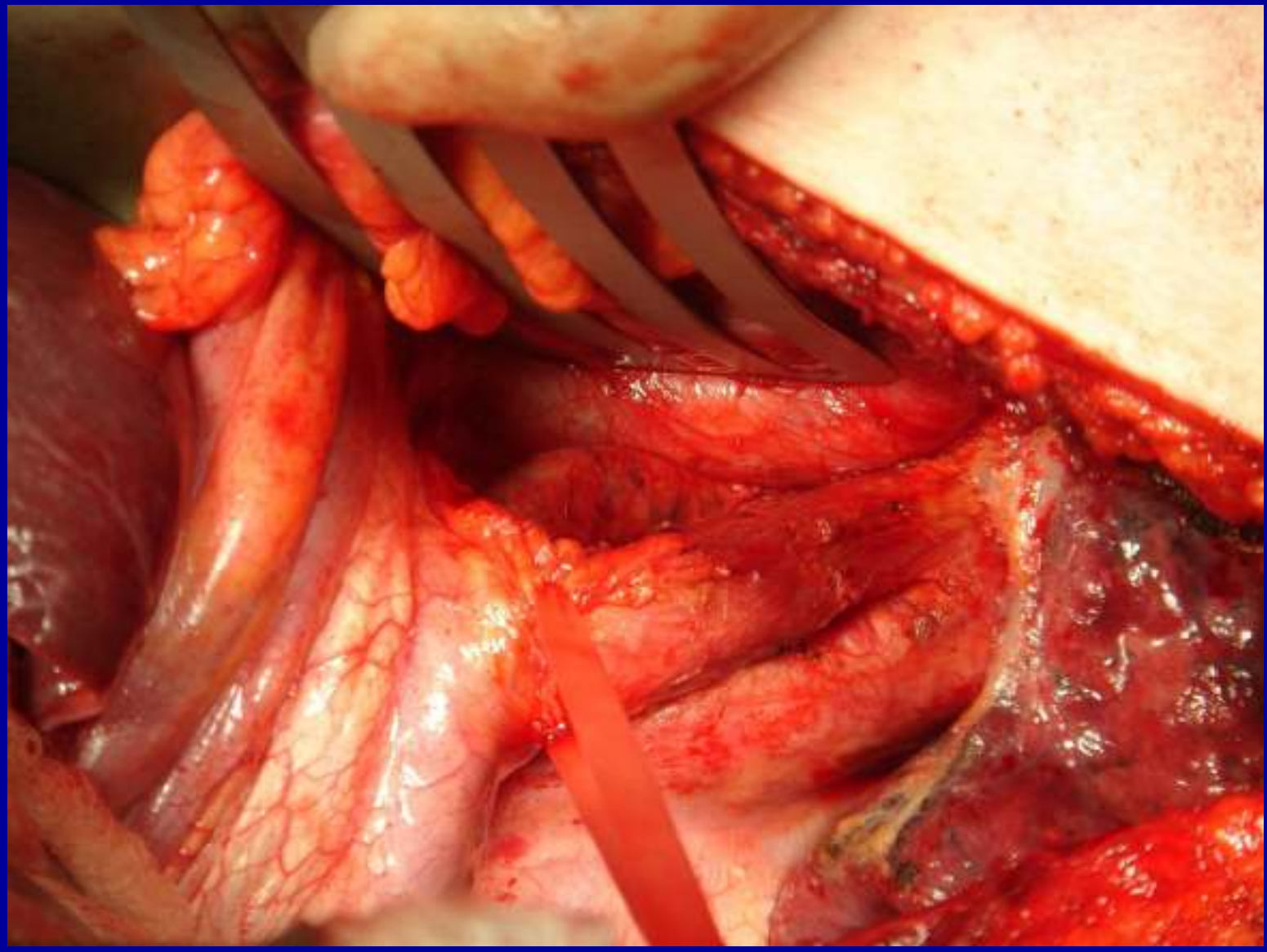

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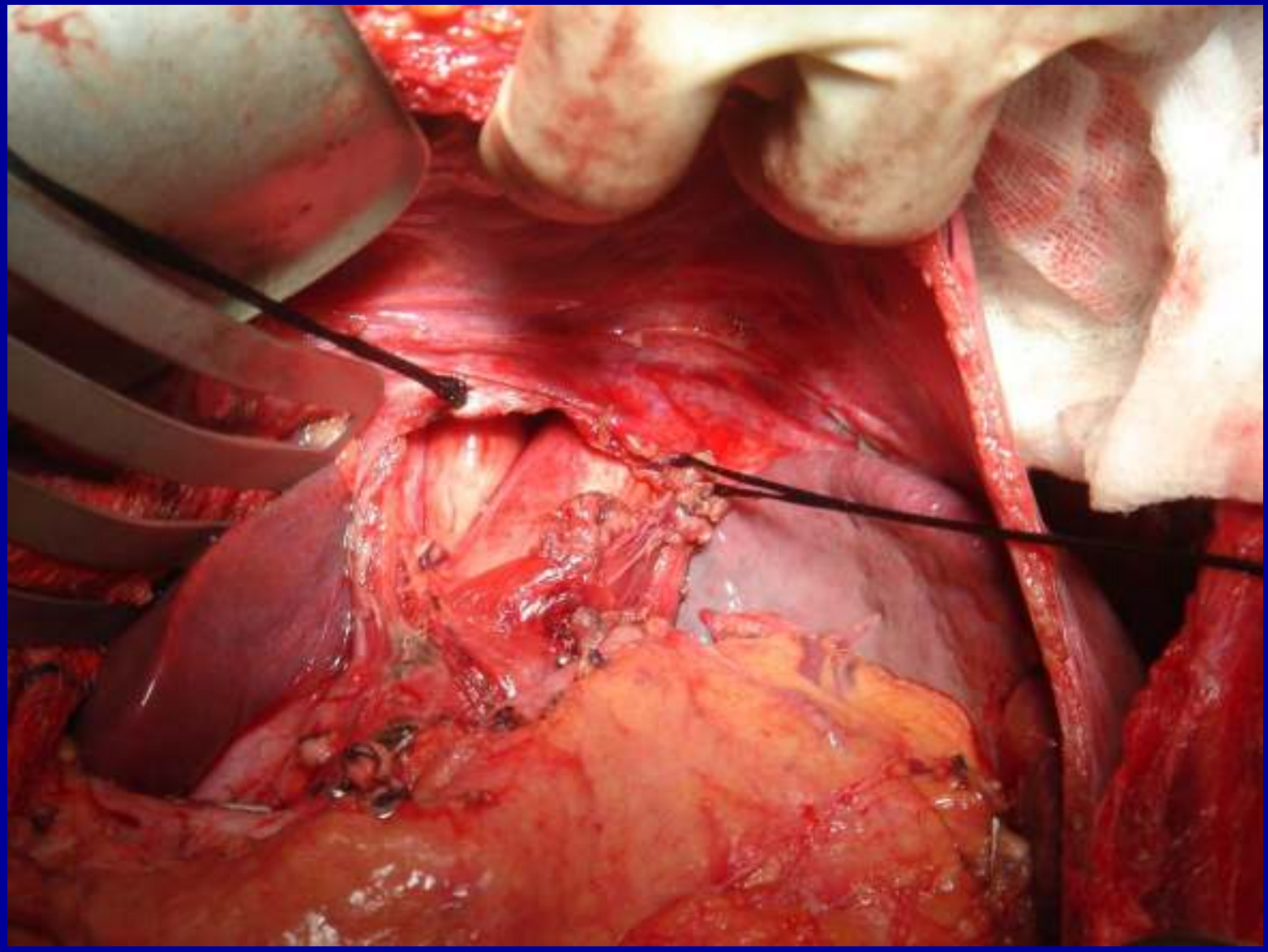

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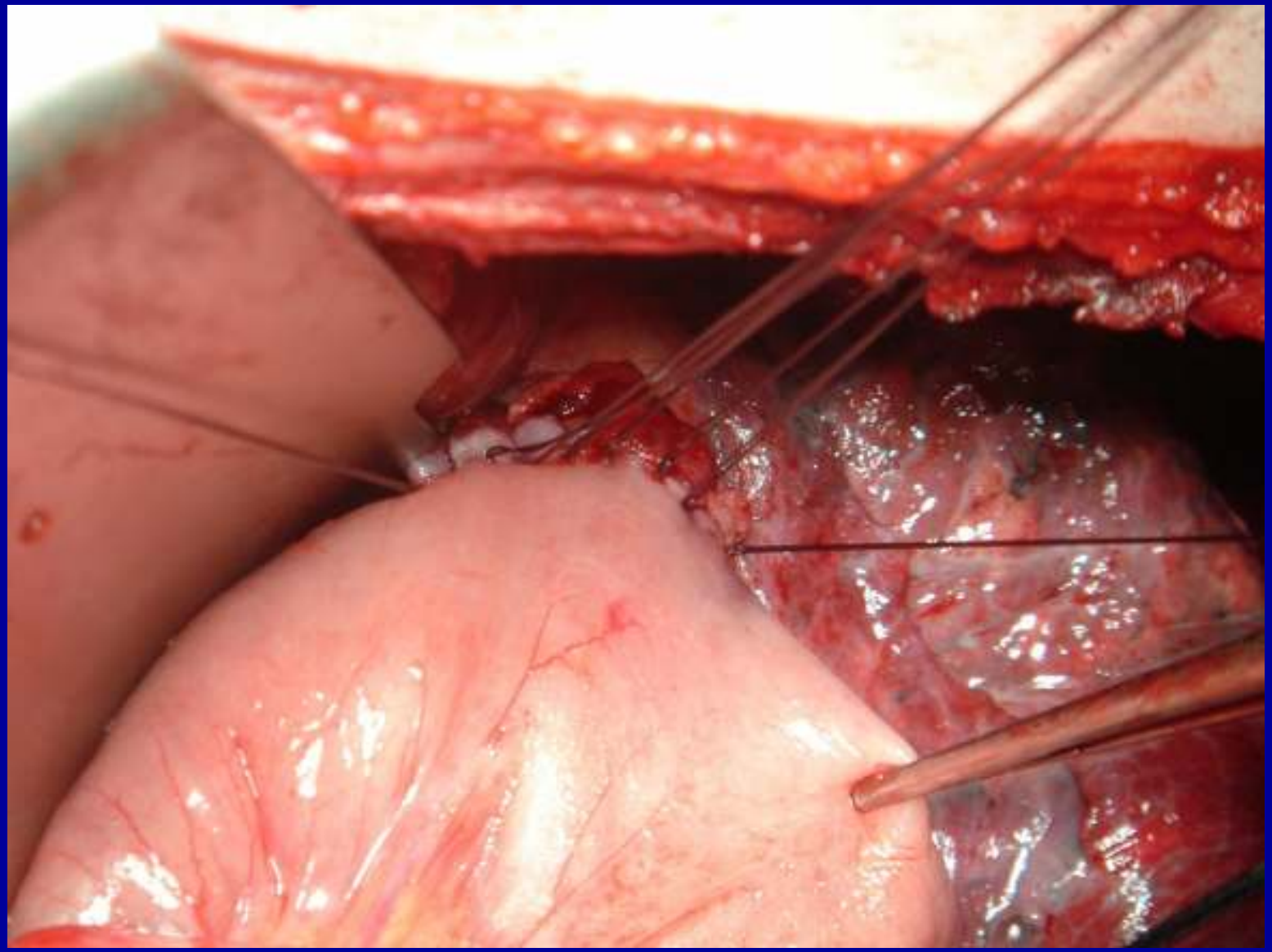

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# Ivor-Lewis Oesophagectomy with 2 field Lymphadenectomy

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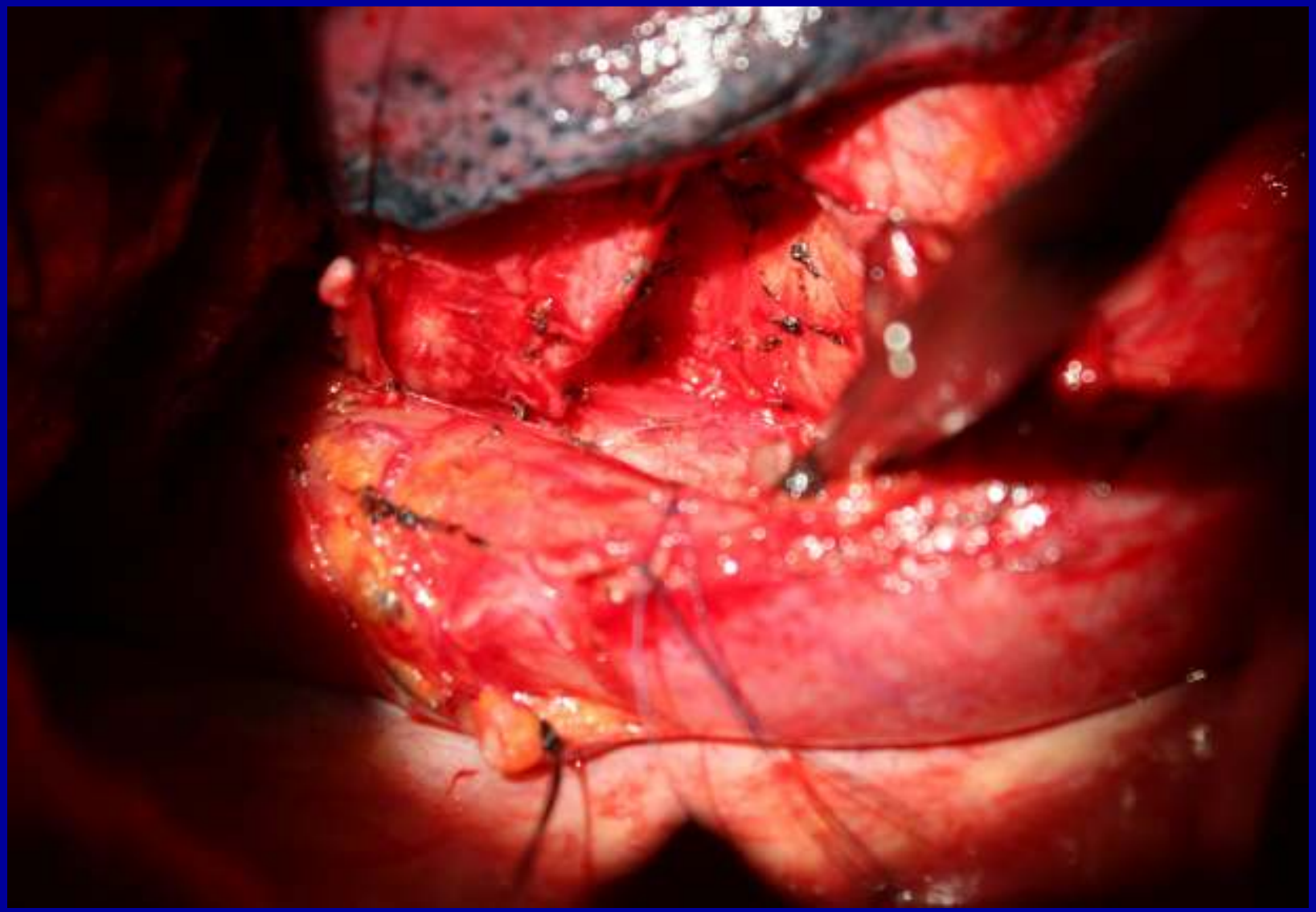

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Report destination Mr E.Zacharakis
St.Mary's Hospital, Praed Street,London , W2 1NY PATHOLOGY Tel: 020 7886 1260



Order: 120367065A/1
unit:SMH ward/dept:Intensive Care ICU SMH Lab No:S,12.0008061.P
cons:Mr E.Zacharakis crn:SM452926
req Dr:Sameh Mikhail surname:GLANTON
pt cat:NHS GP CHUNG C forename:ANTHONY
dob:08.08.44

Clinical details:
Ivor Lewis oesophagectomy for intramucosa cancer on top of Barrett's.

Macro:
A: Pot labelled with patients details only
Specimen is composed of oesophagus and proximal stomach. The oesophagus measures 50mm in length with a diameter of 16mm. The proximal stomach measures 90mm along the resection margin to a maximum depth of 35mm. A large amount of paraoesophagel and lesser curve fatty tissue is attached containing multiple lymph nodes. On opening the gastric mucosa appears predominantly normal. Two small ?ulcers are seen approximately 15mm from the gastro-oesophageal mucosal margin. On serially slicing the oesophagus no papillary or focal lesions are seen. Circumferential resection margin is inked green. On the serosal surface of the stomach ?greater curve, fundus, there is a scarred white area. On slicing no infiltrative lesion is and there is no corresponding mucosal lesion. This area is inked black.

A1 Proximal oesophageal resection margin
A2-A8 Serial transverse sections of oesophagus from proximal to gastro-oesophageal junction
A9 Representative section from the gastro-oesophageal junction
A10 Two lesions noted macroscopically in the stomach mucosa close to the gastro-oesophageal junction
A11&A12 Representative sections from serosal scarred area noted macroscopically
A13 Distal gastric resection margin
-A28 Para-oesophageal fatty tissue ?lymph nodes
A29-A32 One large lymph node divided into four sections
A33-A36 One large lesser curve lymph node divided into four pieces
A37&A38 One lymph node bisected
A39-A75 Lesser curve fatty tissue ?lymph nodes
A76 One large lesser curve lymph node bisected
Not all embedded
Tissue remains

B: Pot labelled "TISSUE FROM SPLENIC ARTERY"
Specimen is composed of multiple fragments of fatty and haemorrhagic tissue measuring in aggregate 30mm x 25mm x up to 10mm. Specimen is embedded as received.

B1&B2 Entire specimen
All embedded
No tissue remains

C: Pot labelled "PARACARDIAL TISSUE"
Specimen is composed of two fragments of haemorrhagic and fibrofatty

Path:RDG /RDG Authorised by:Prof R D Goldin on:02.04.12 Time 20:27

HISTOPATHOLOGY RESULT
specimen: OESOPHAGEAL RESECTION,SOF
on:28.03.12 2
seen by:

crn:SM452926 lab No:8061/12
surname:GLANTON

tissue measuring in aggregate 15mm x 15mm x 5mm. Specimen is embedded as received thats two in one.

C1 Entire specimen
All embedded
Tissue remains

D: Pot labelled "RIGHT GASTRIC"
Specimen is composed of a lobule of fatty tissue measuring 60mm x 60mm x 15mm. On slicing tissue contains multiple lymph nodes.

D1 One lymph node bisected
D2-D6 Rest of tissue ?small lymph node

All embedded
No tissue remains

E: Pot labelled "NO. 2"
Specimen is composed of four fragments of haemorrhagic and blackened ?lymph nodes each with maximum dimensions ranging from 7mm to 15mm.

E1 All specimens as received

All embedded
No tissue remains

MICRO
Arising from an area of columnar lined oesophagus is s segment (approximately 4cms in length) which shows changes ranging from high grade dysplasia to intramucosal carcinoma. There is a focus of which tumour extends just through the muscularis externa. There is no vascular or perineural invasion. The mucosa away from this segment is normal.

One of the 63 lymph nodes examined contains tumour. The regional lymph nodes contain non-caseating granulomas. Special stains for acid fast bacilli are negative. Although these features are consistent with sarcoid other causes should be excluded clinically.

Conclusion: A oesophageal adenocarcinoma which is completely excised (R0).
TNM 7th Edition: T1, N1.

Path:Prof R D Goldin\Prof R D Goldin Date authorized:02.04.12

HISTOPATHOLOGY RESULT | specimen: OESOPHAGEAL RESECTION,SOF | on:28.03.12 | seen by:

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# Oesophago-Gastric Surgery

- Laparoscopic Heller's myotomy (for achalasia)
- Laparoscopic Nissen Fundoplication
- Laparoscopic Hiatal/Intra-thoracic Hernia Repair
- Laparoscopic/open Splenectomy

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# Bariatric Surgery

- Laparoscopic Gastric bypass
- Laparoscopic Sleeve Gastrectomy
- Redo Surgery

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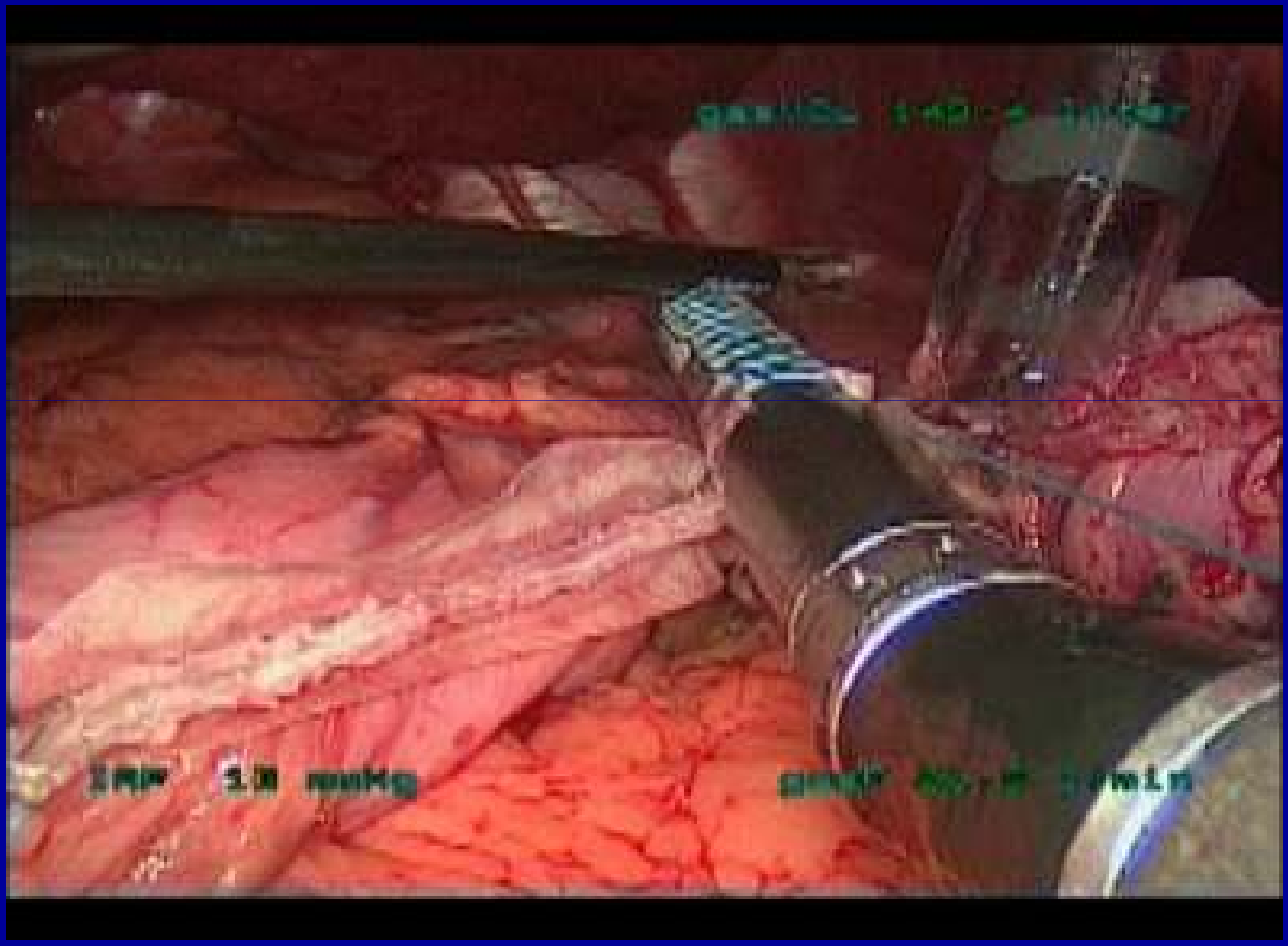

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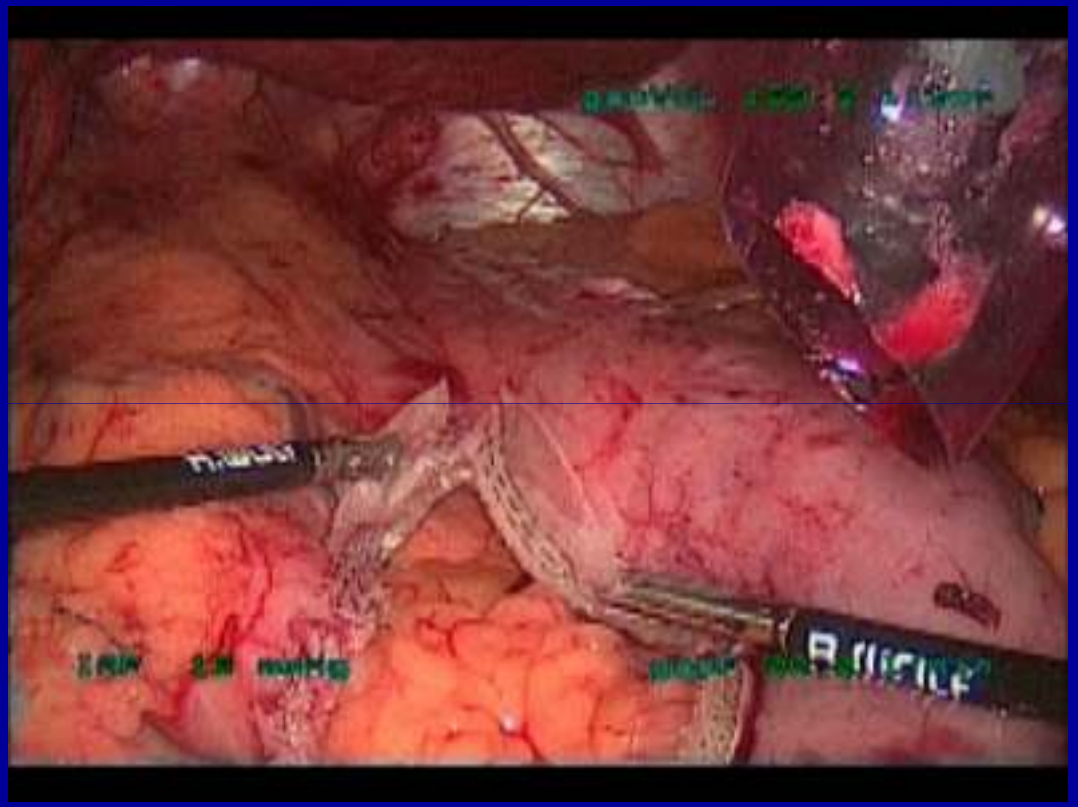

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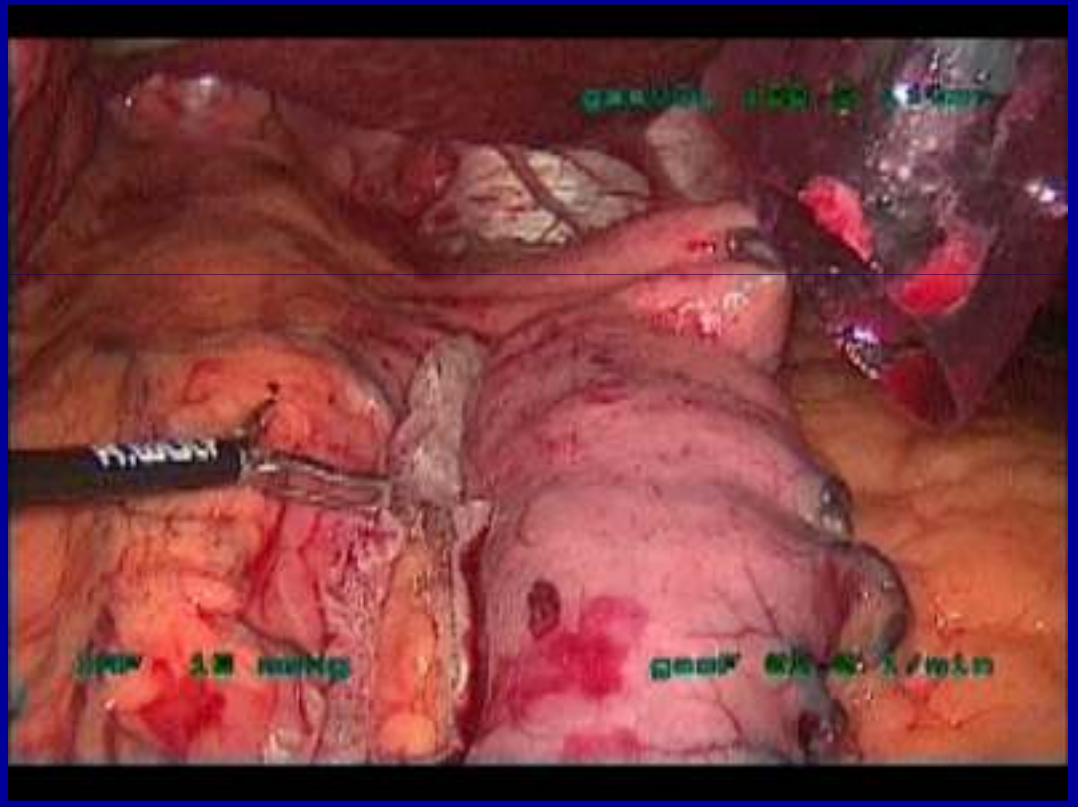

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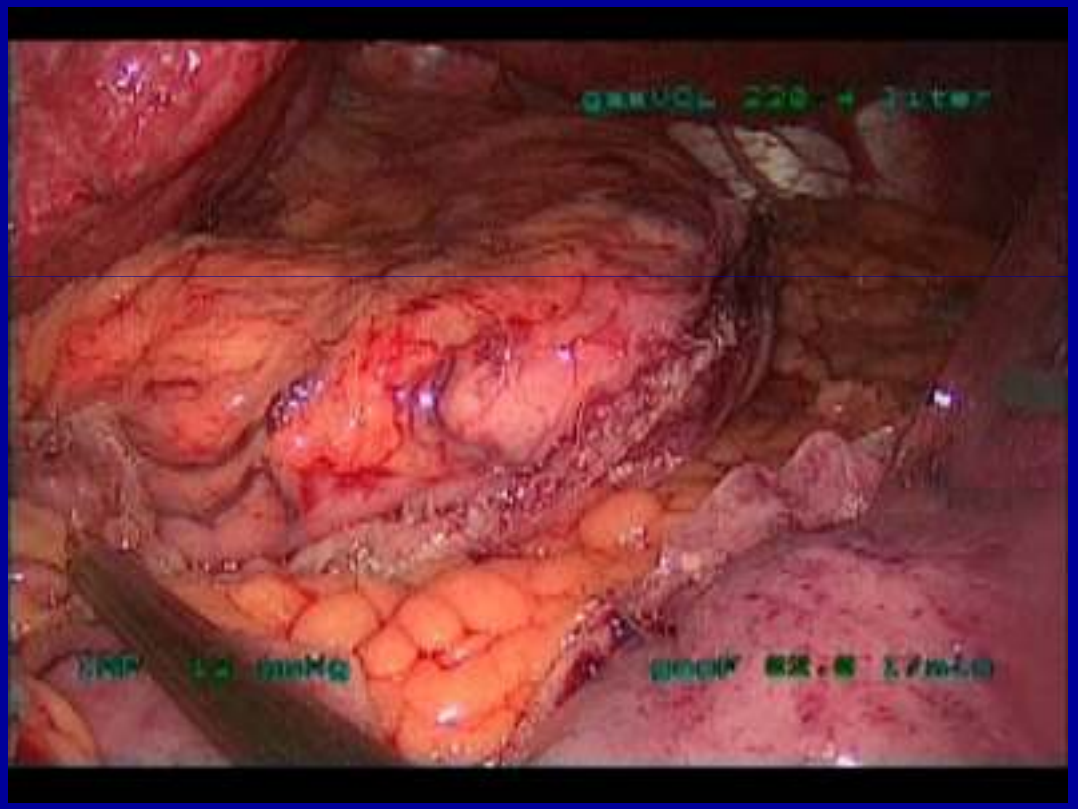

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# Liver & Pancreatic Surgery

- Pancreatico-duodenectomy (Whipples procedure)
- Laparoscopic/open distal pancreatectomy
- Right/Left hepatectomy
- Laparoscopic/open left lateral hepatectomy
- Laparoscopic/open wedge liver resections
- Laparoscopic/open RF Ablation

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# Left Hepatectomy

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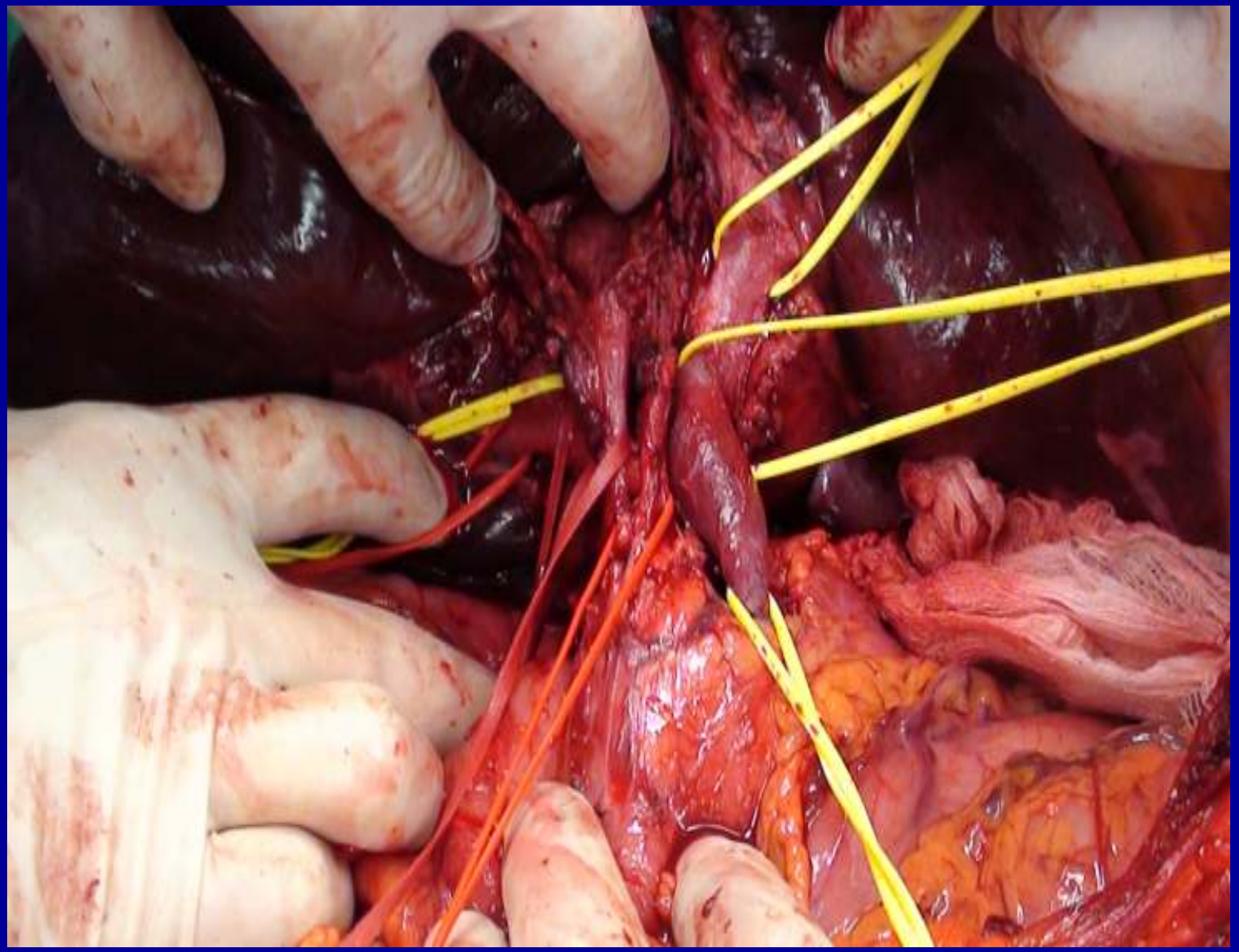

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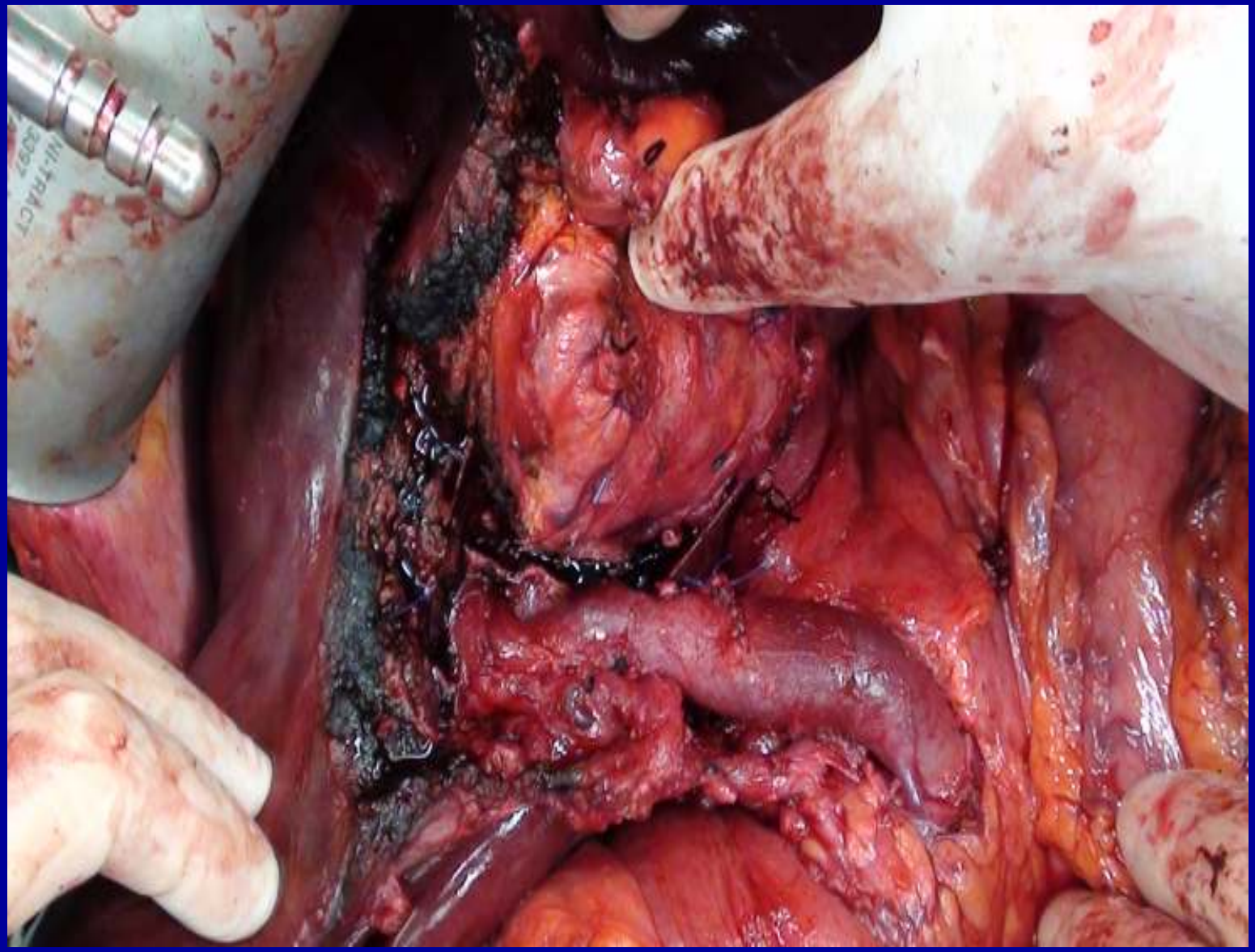

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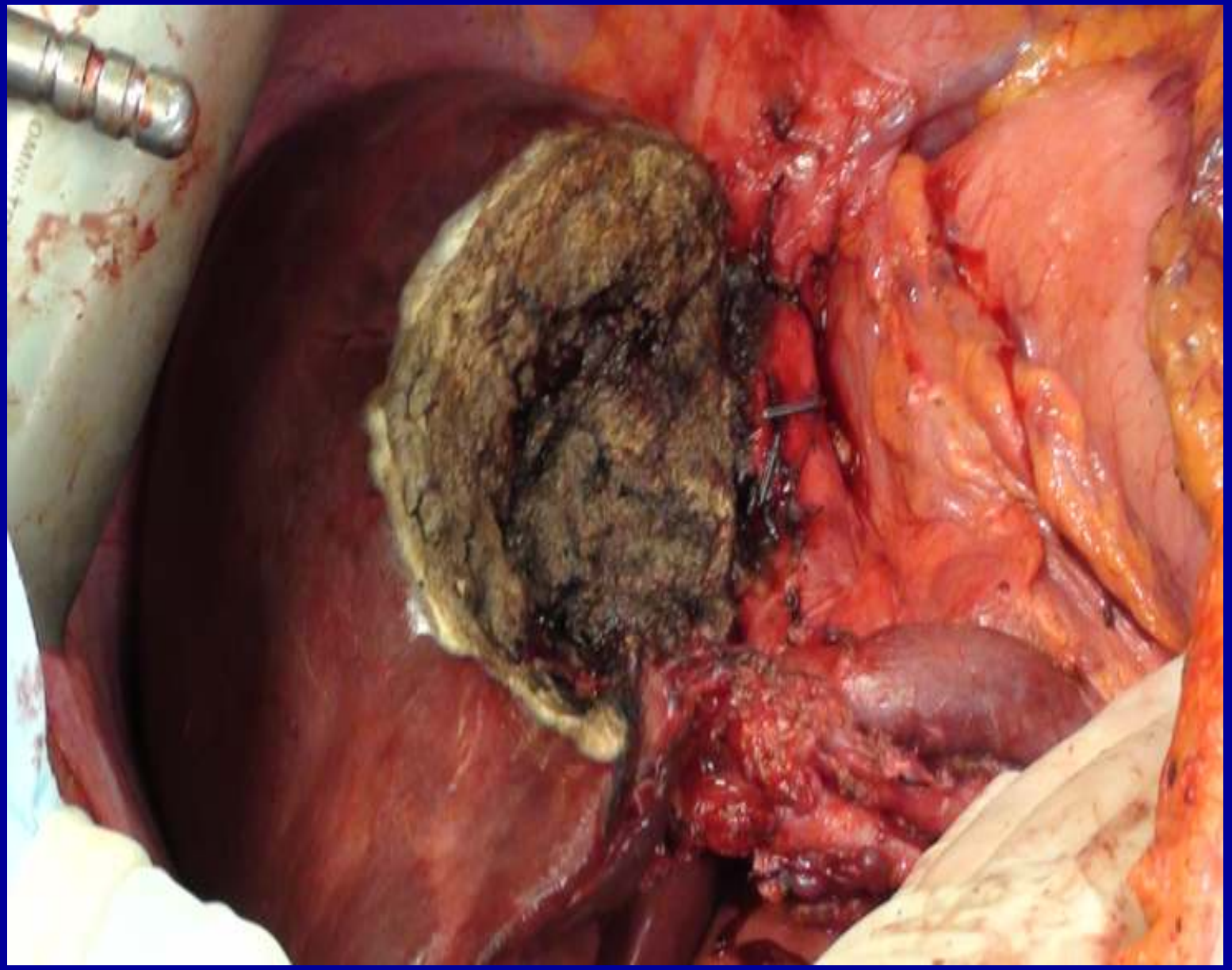

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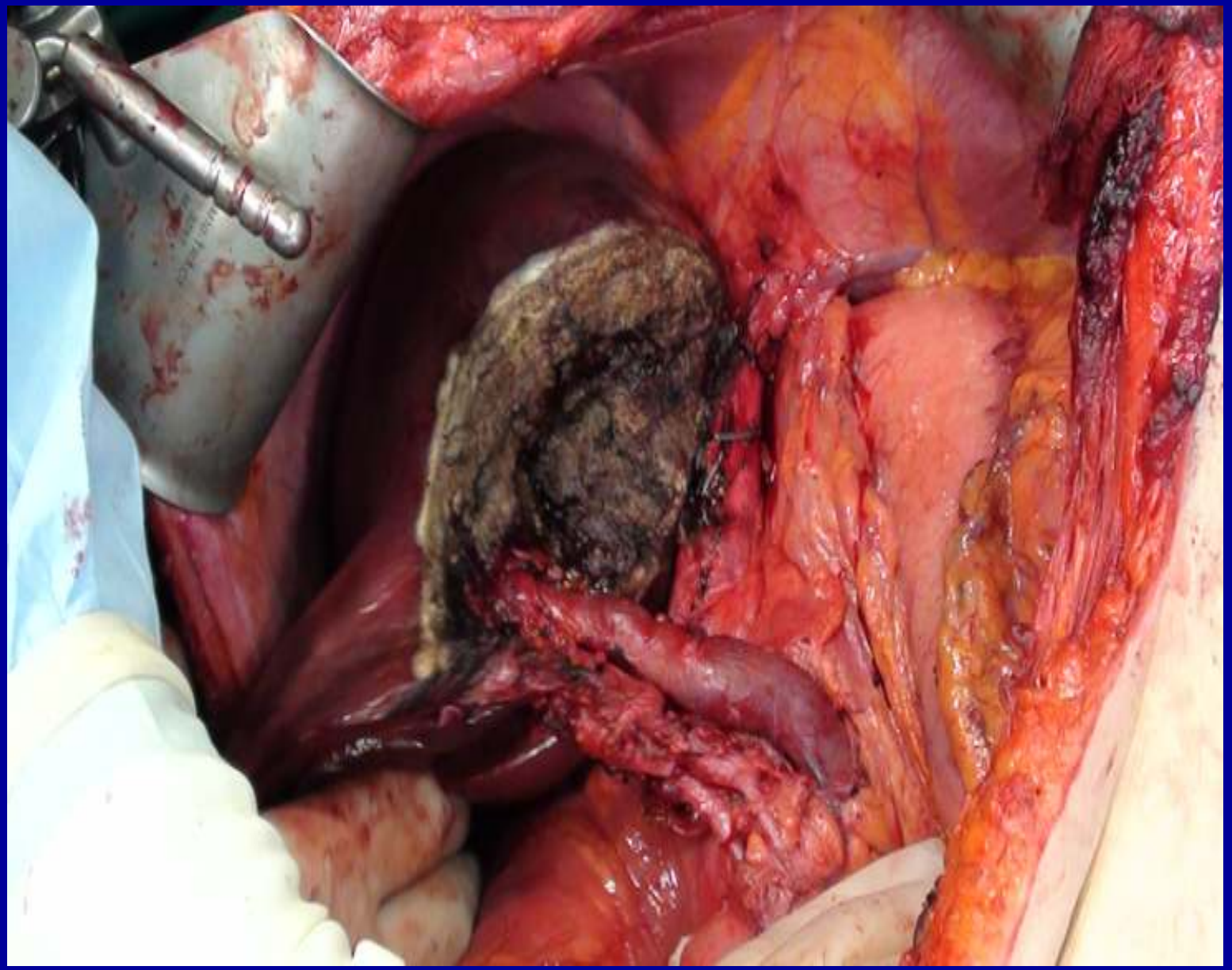

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# Colorectal Surgery

- Laparoscopic/open Colectomies
- Laparoscopic/open Anterior resection of the rectum
- Laparoscopic/open Abdominoperineal resection of the rectum

- Total colectomy & ileoanal anastomosis with J-pouch formation (for UC)

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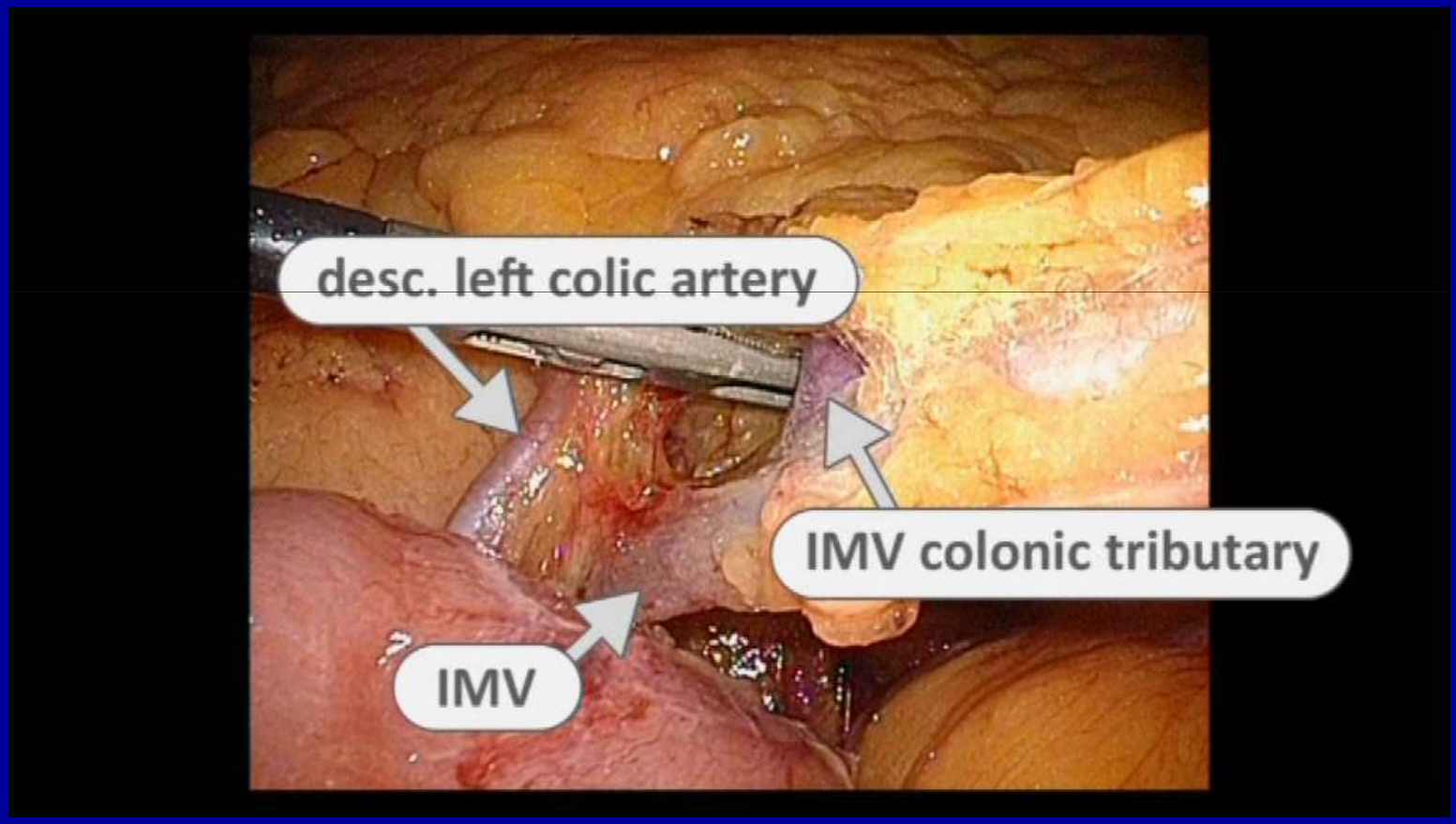

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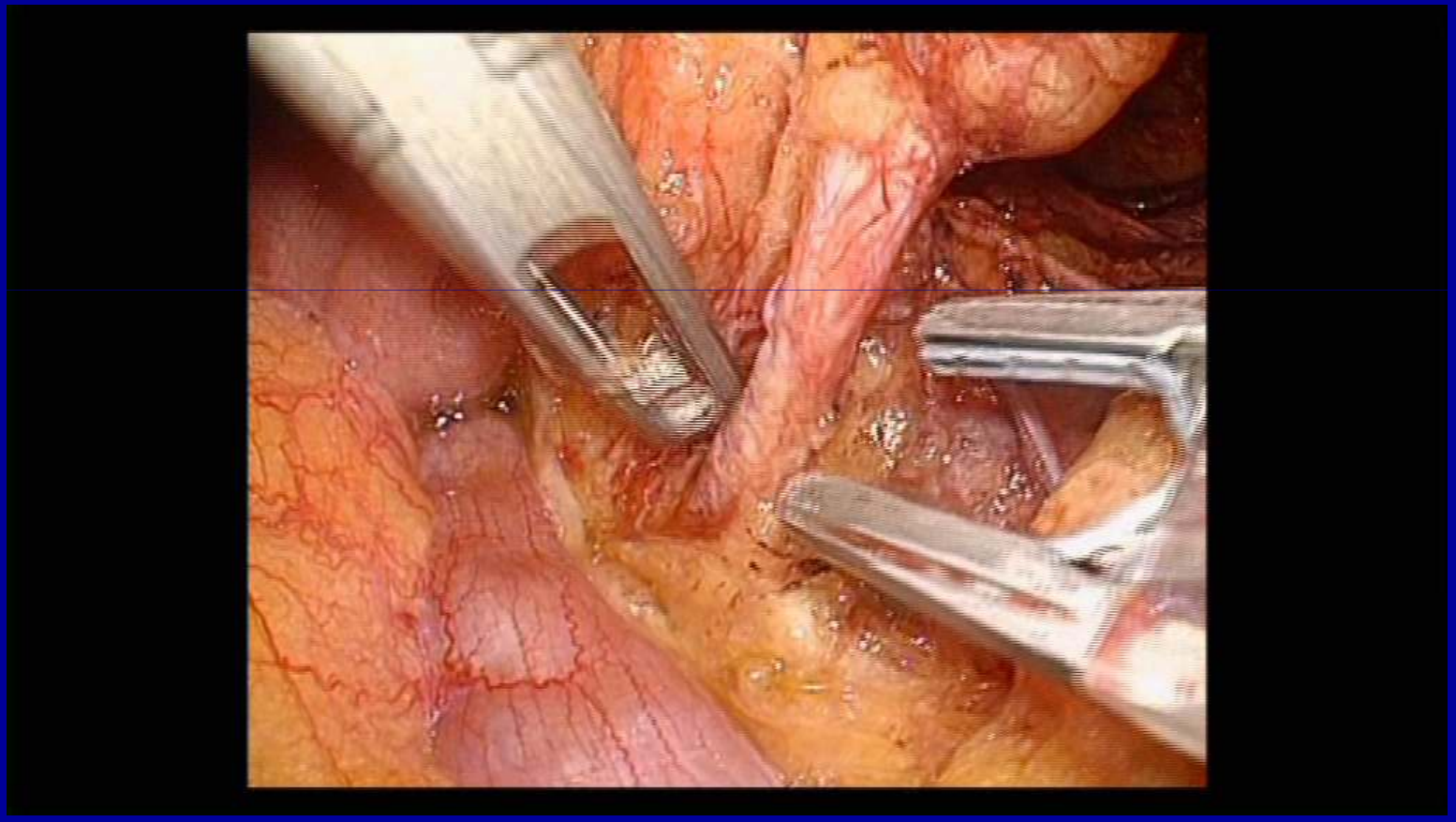

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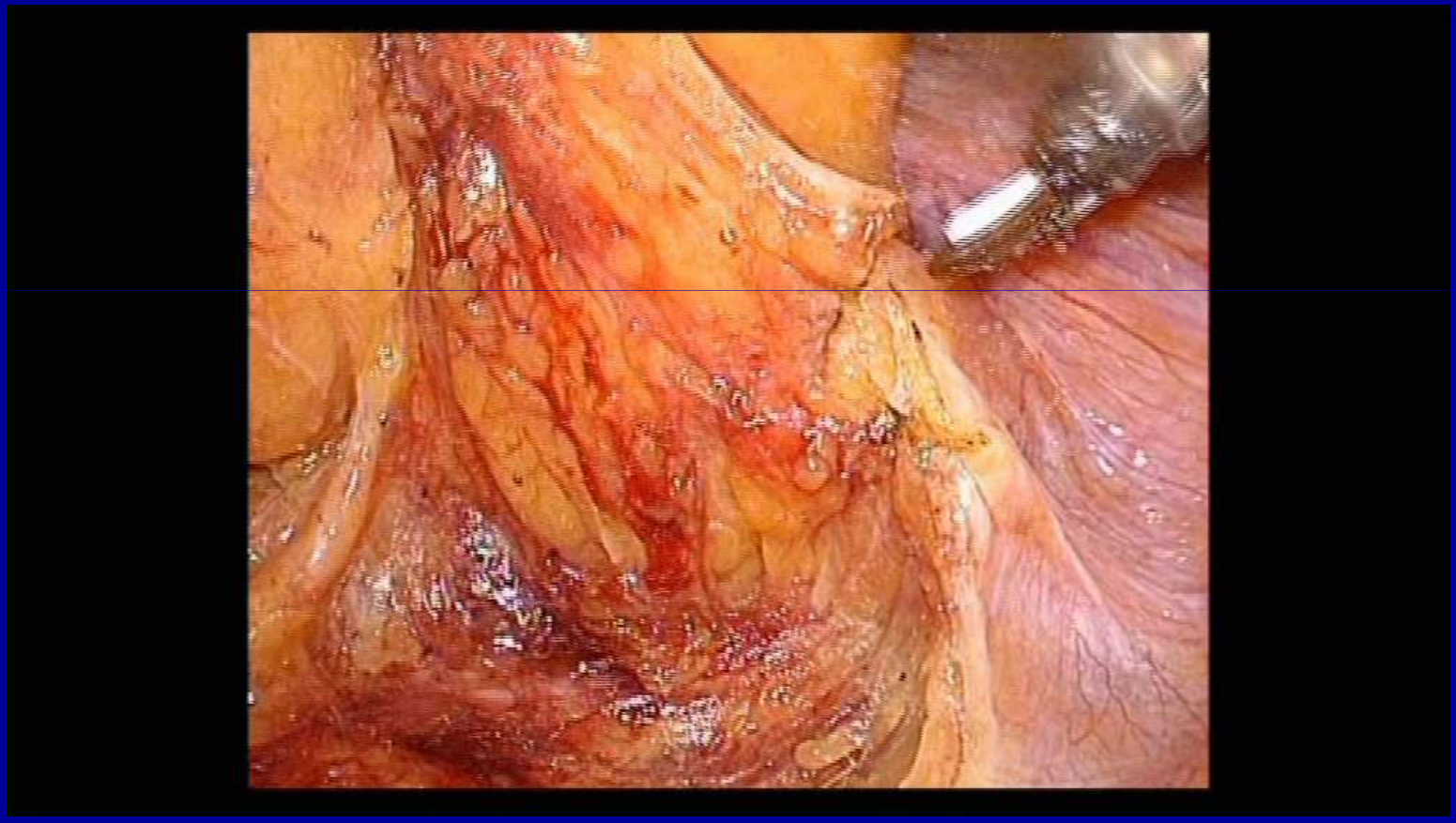

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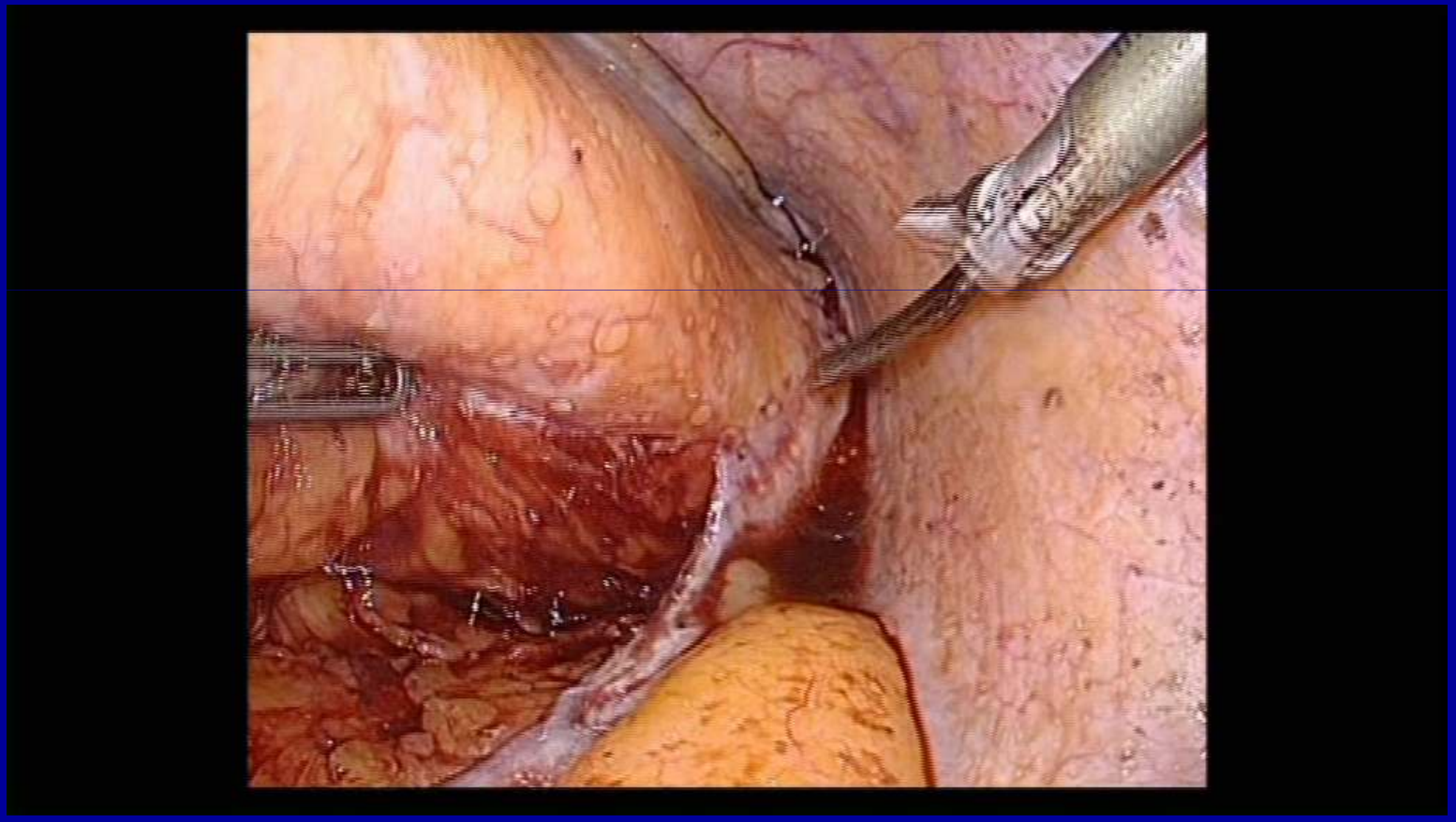

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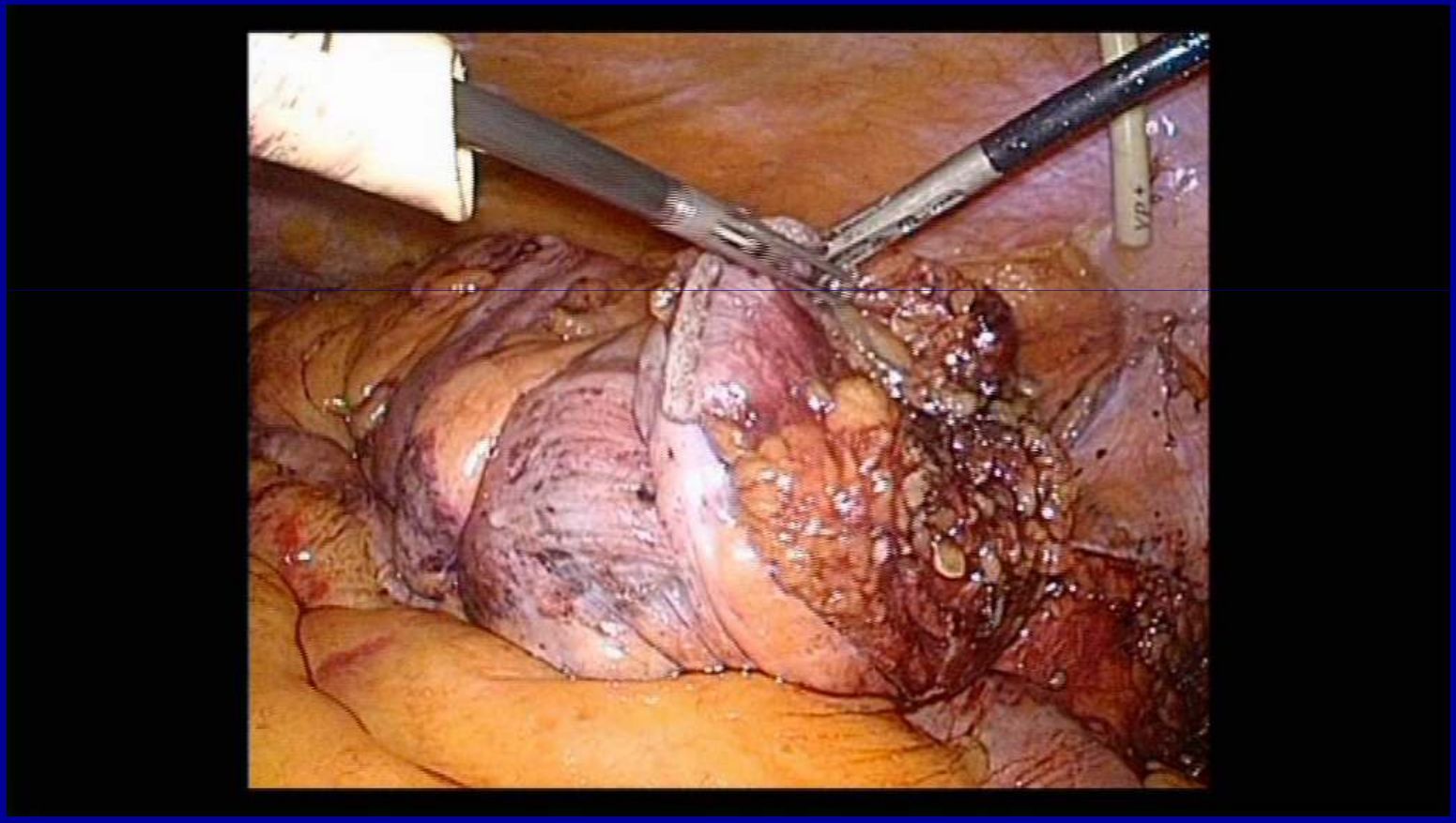

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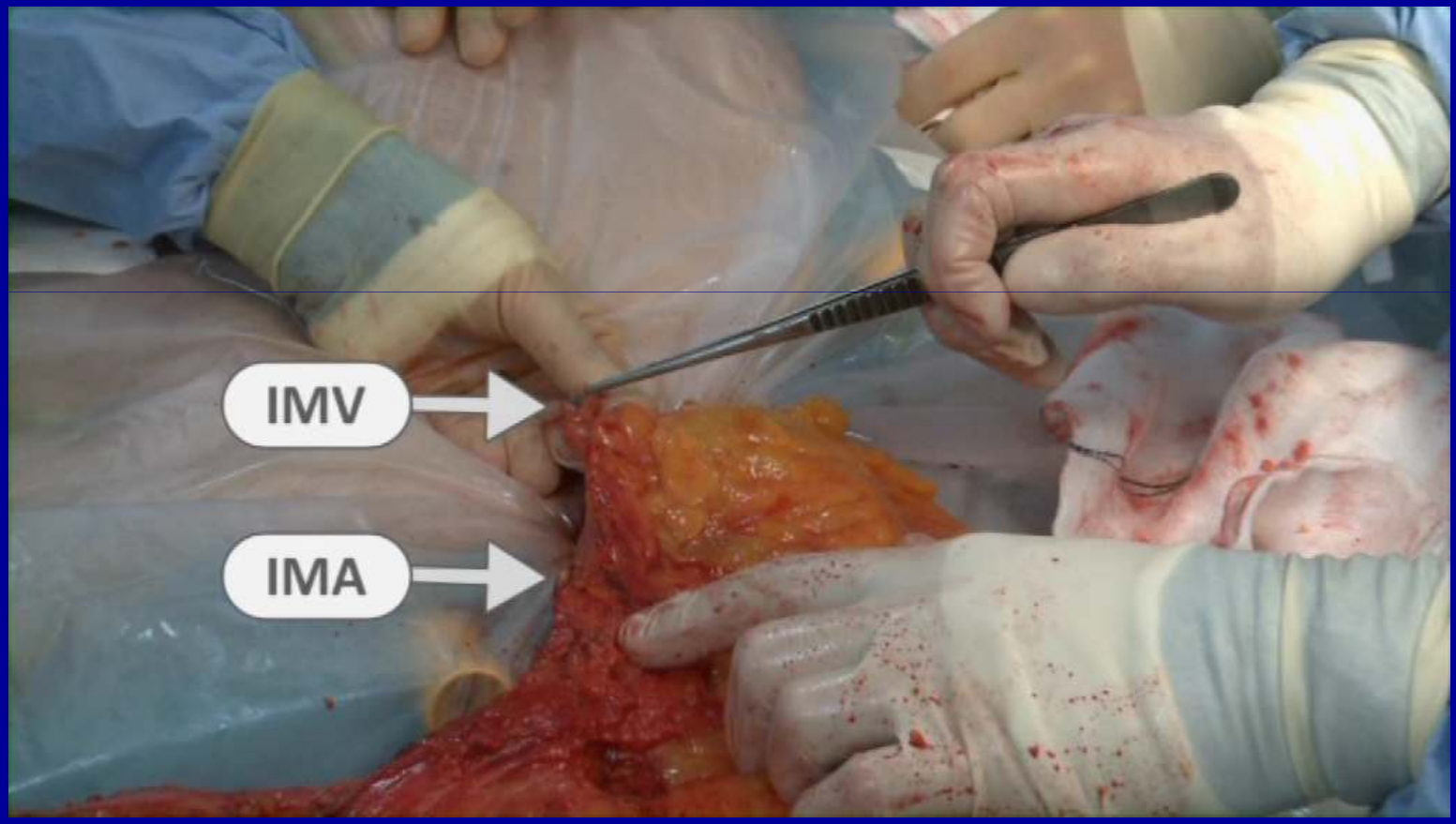

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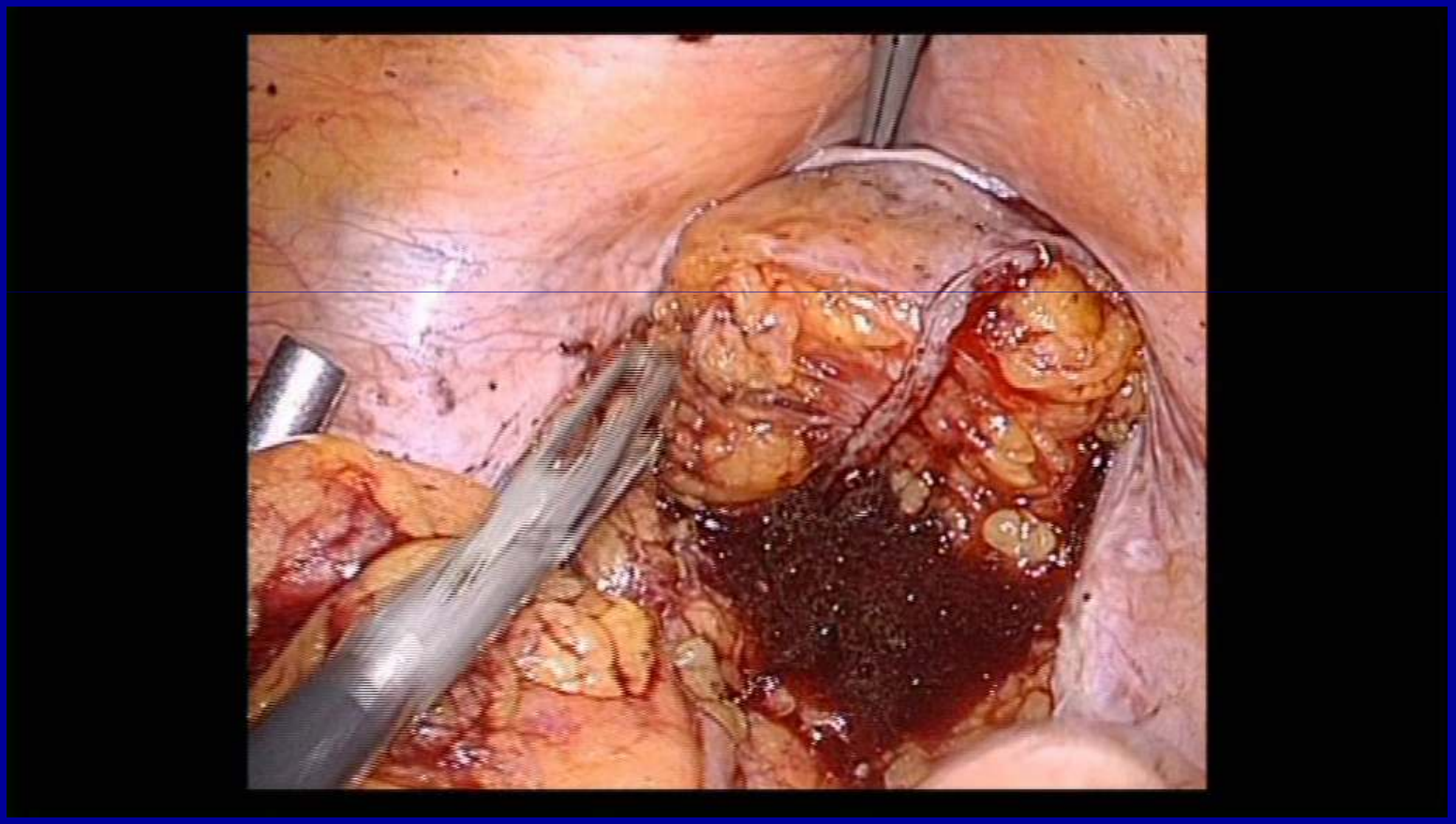

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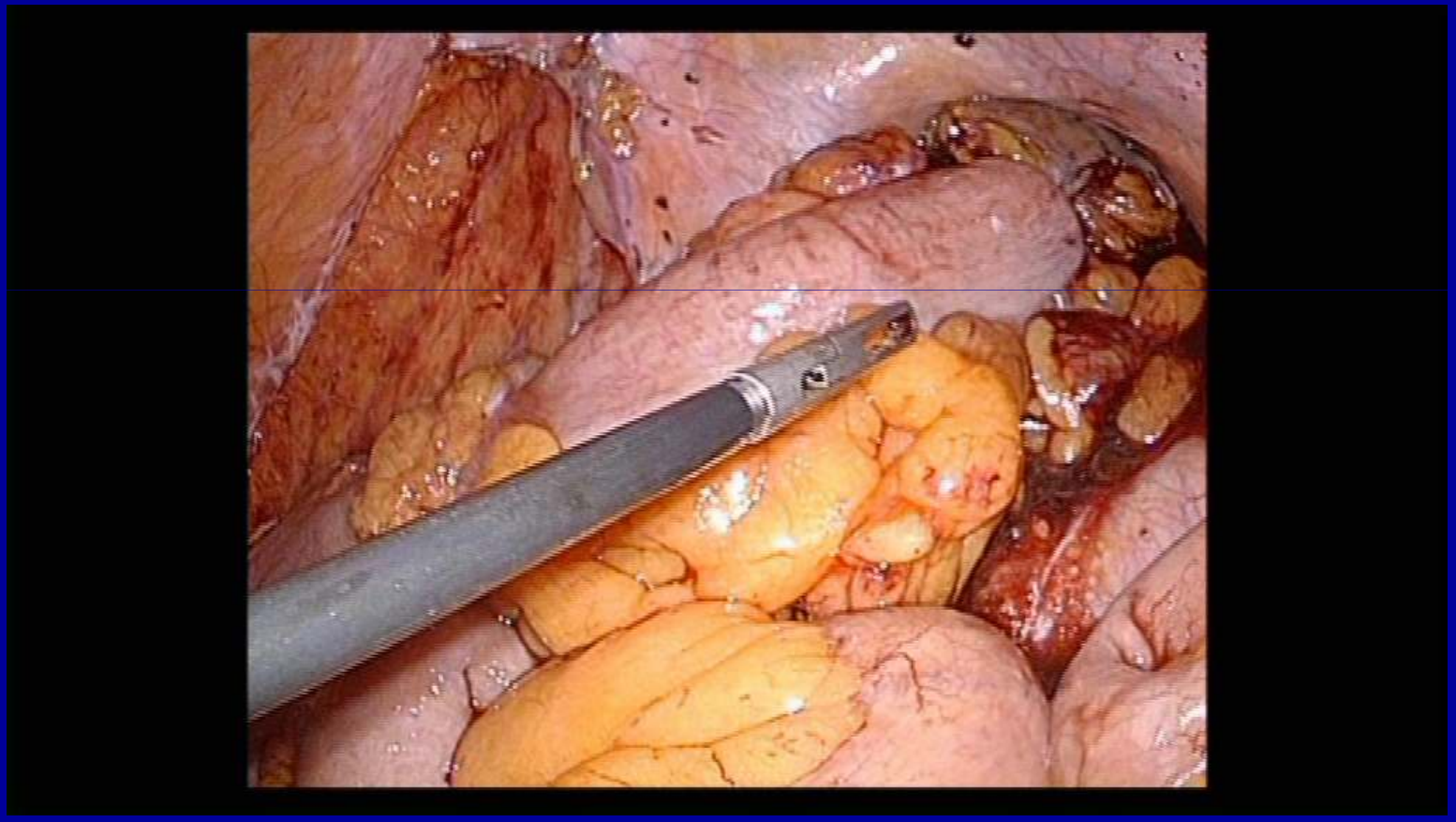

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# Endocrine Surgery

- Total/hemi thyroidectomy
- Focused parathyroidectomy
- Laparoscopic/open adrenalectomy

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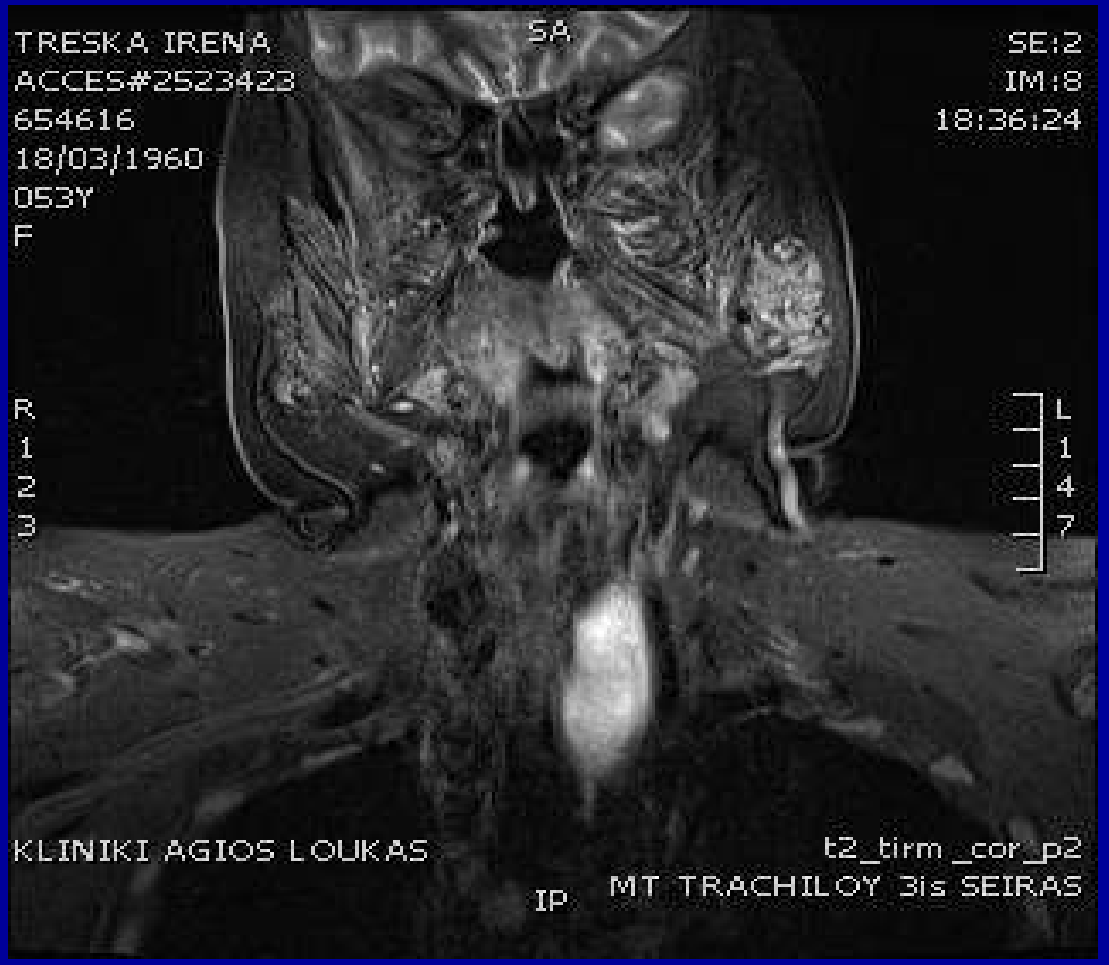

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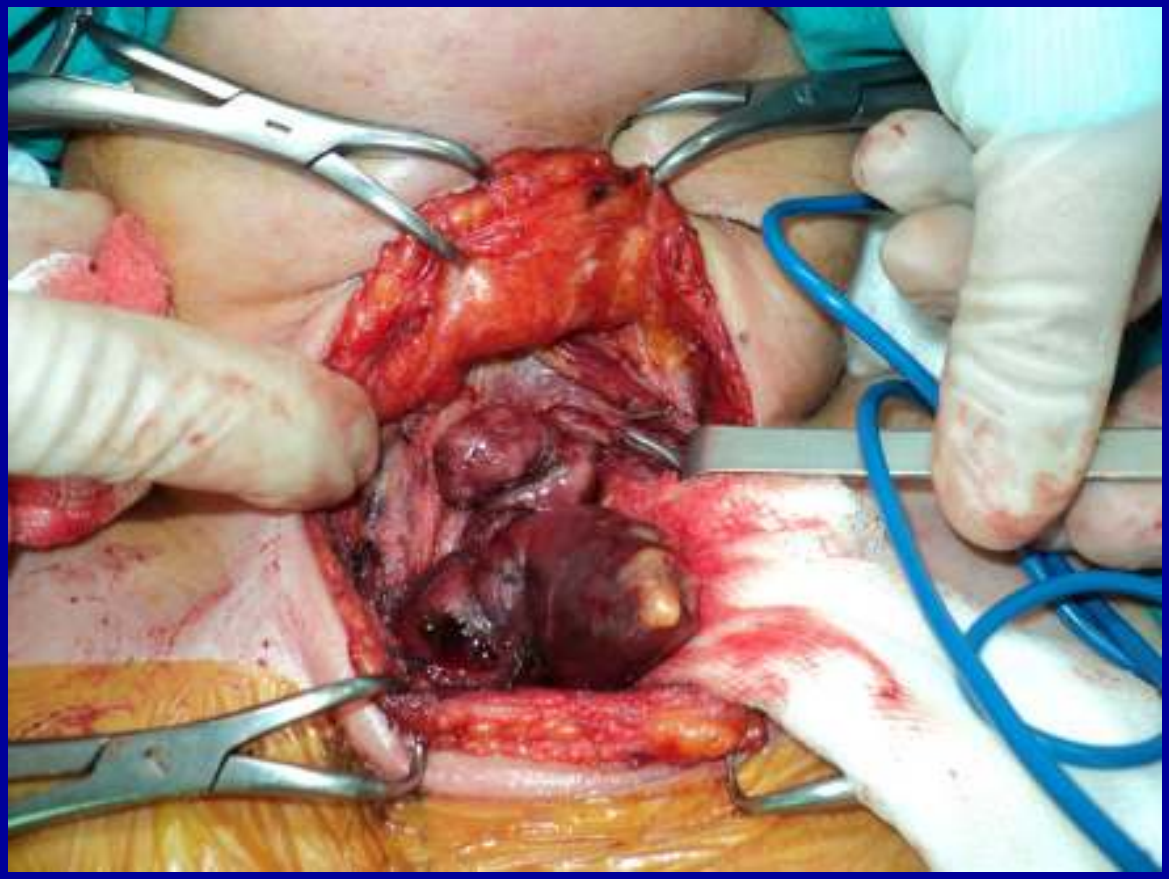

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