Dr John Dunn

Endoscopy Auckland &
Laparoscopy Auckland

Best Practice in the Diagnosis and RX of Gallstones - Concurrent Workshop

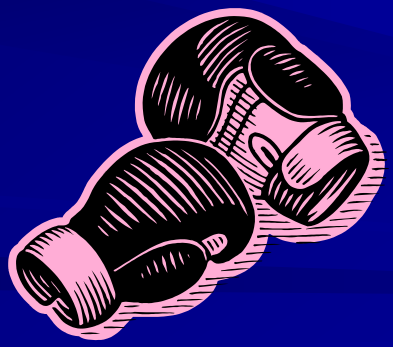
Saturday, 22 June 2013 Start 4:30pm Duration: 60mins Da Vinci

DISCLAIMER

No Conflict of Interest

EXCLAIMER

No Interest in Conflict

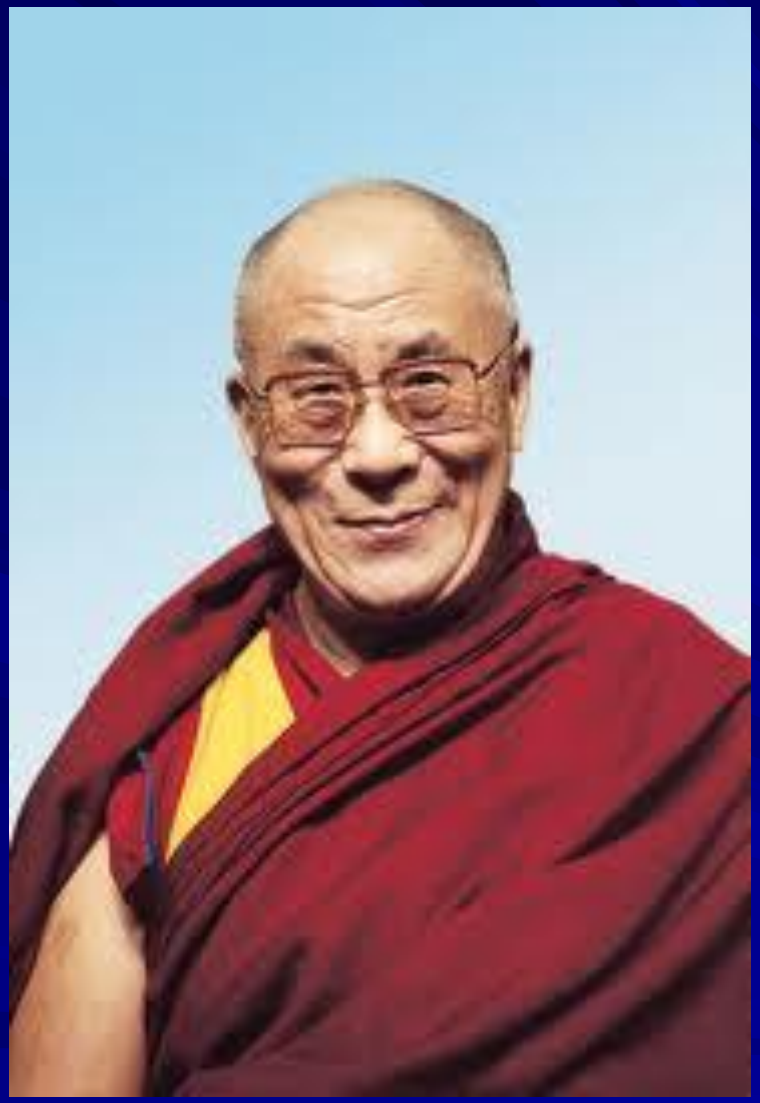


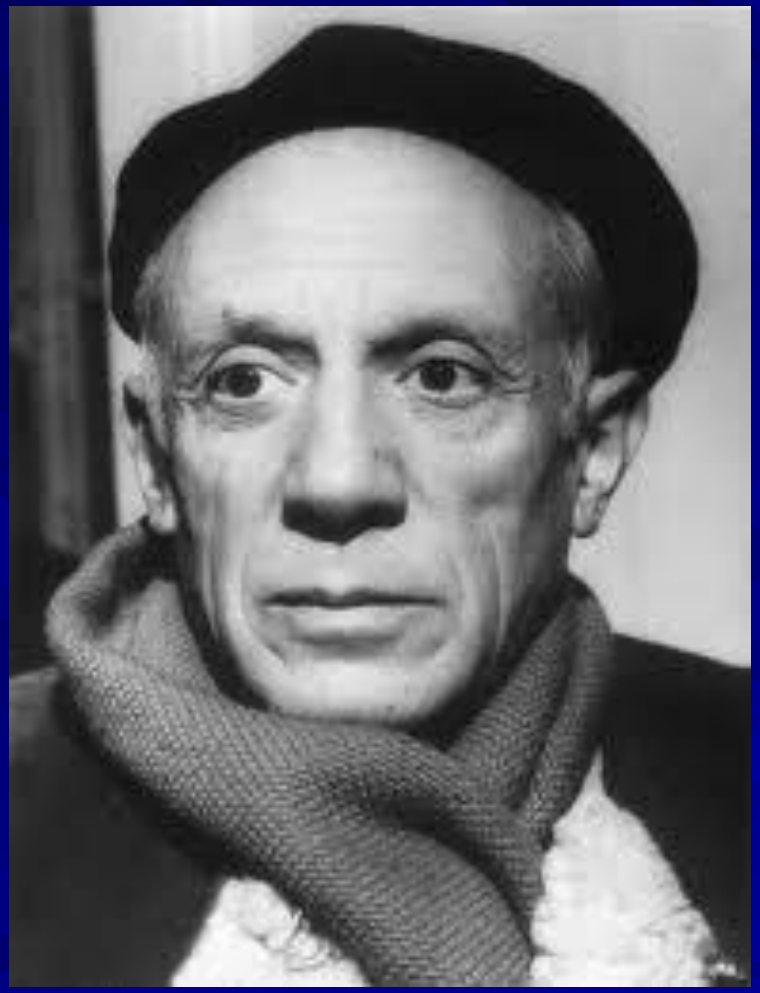
GALLSTONES

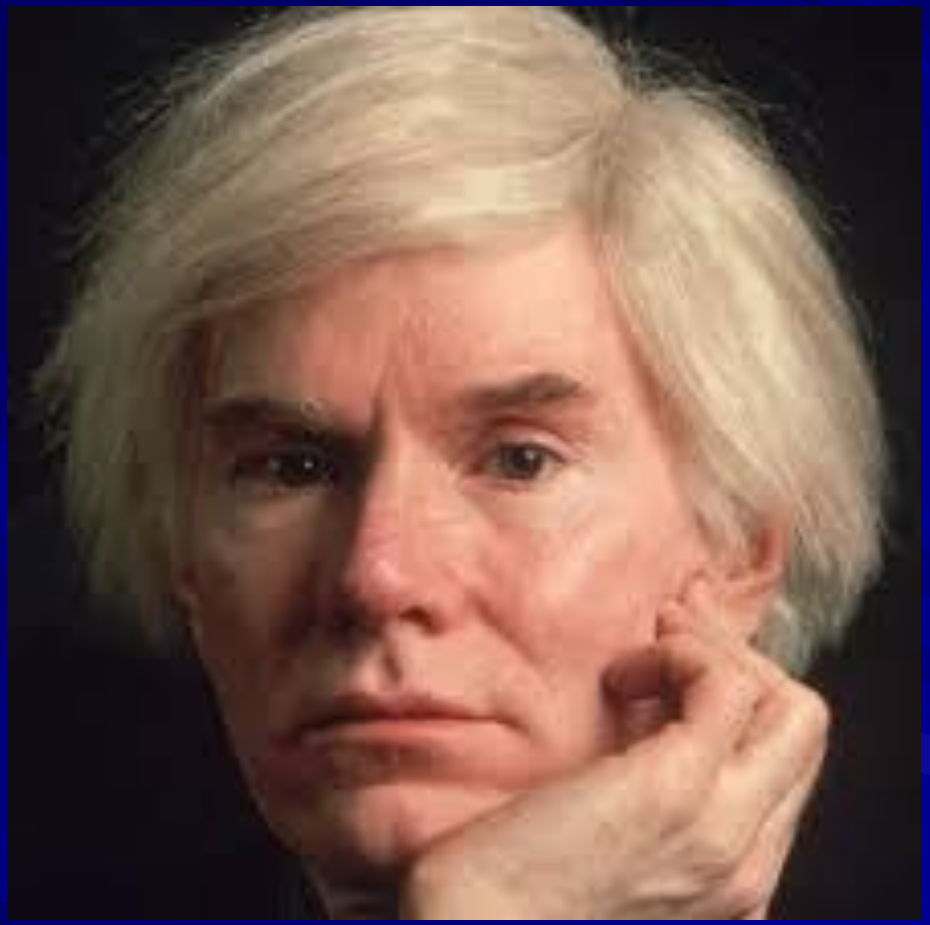
FAQs and FACTS

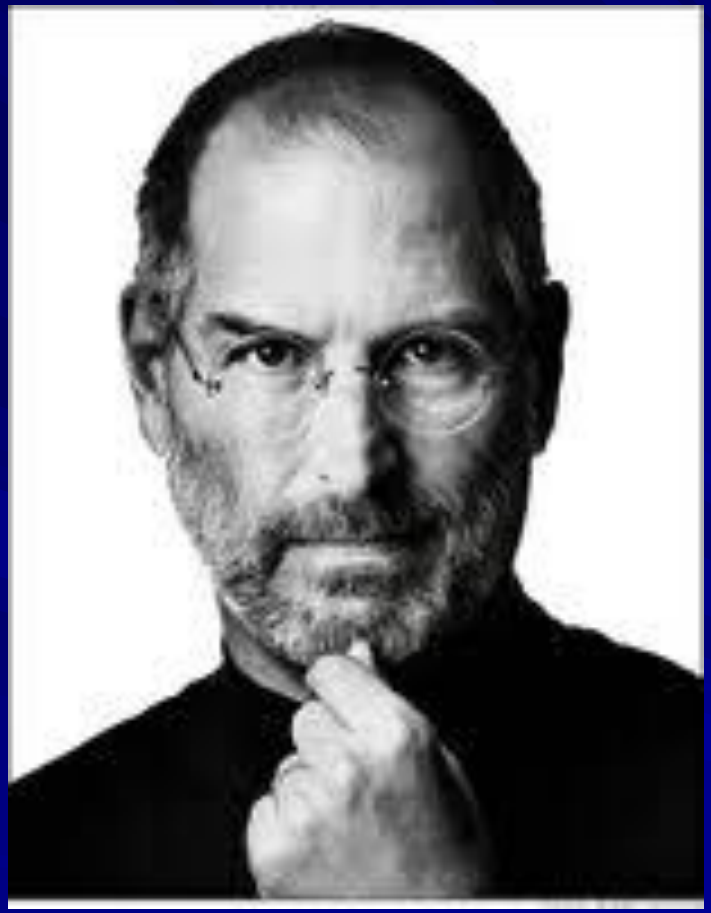
John Dunn, FRACS

Laparoscopy Auckland





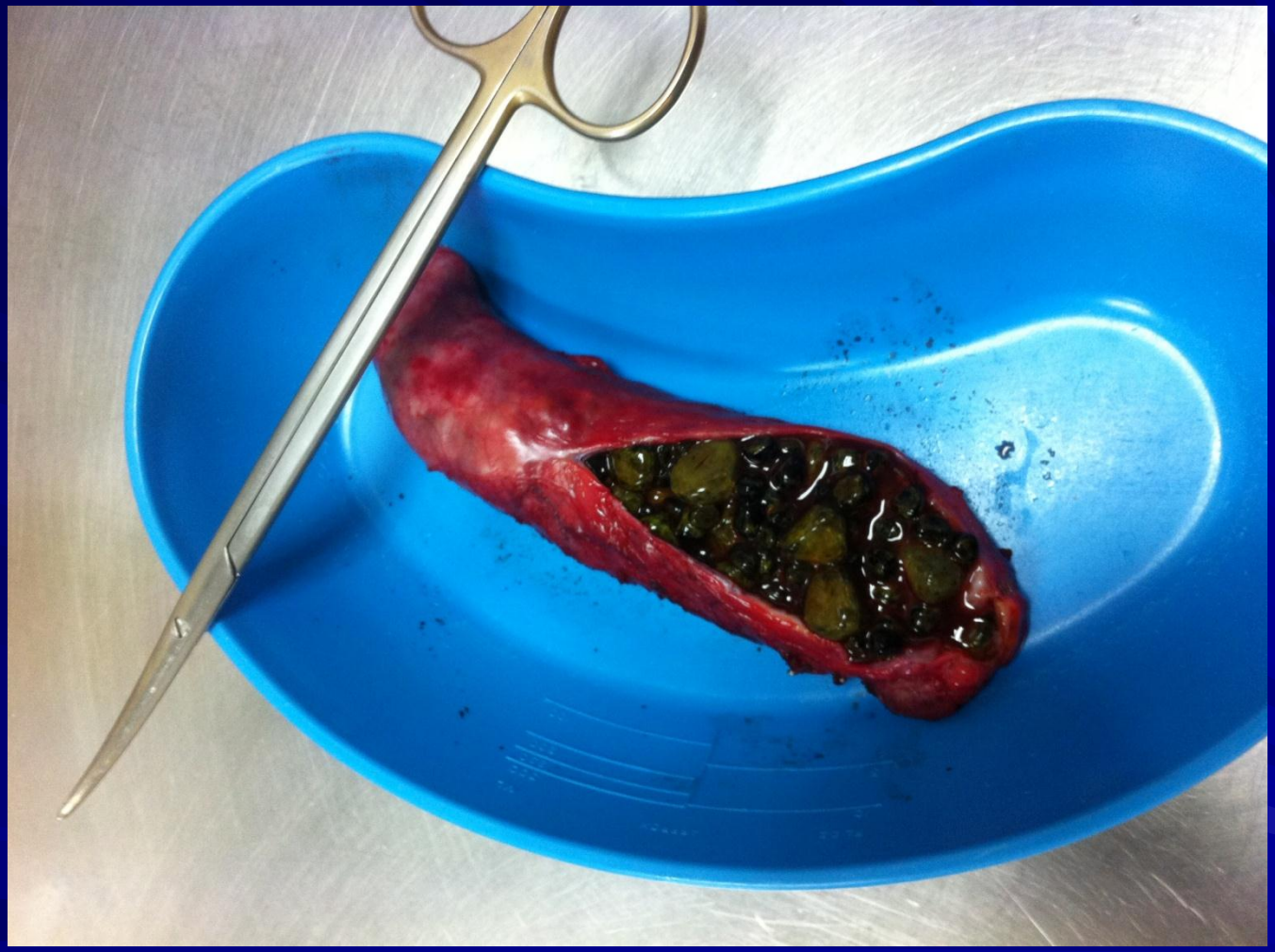




YOU GOTTA KNOW THIS STUFF

HOW DO THEY FORM?

- Gallbladder
- Lithogenic bile (super-saturated)



RISK FACTORS?

- female (two thirds)
- babies
- obesity
- weight loss (> 15kg)
- family history
- haemolysis
- Kiwi (20%)

SYMPTOMS (1)
PAIN

- 0200 hrs
- epigastric > RUQ
- back (mid thoracic)
- severe (usually)
- fats & oils

SYMPTOMS (2) RESTLESS

- couldn’t get comfy
- didn’t know what to do
- pacing/rolling
- shifting

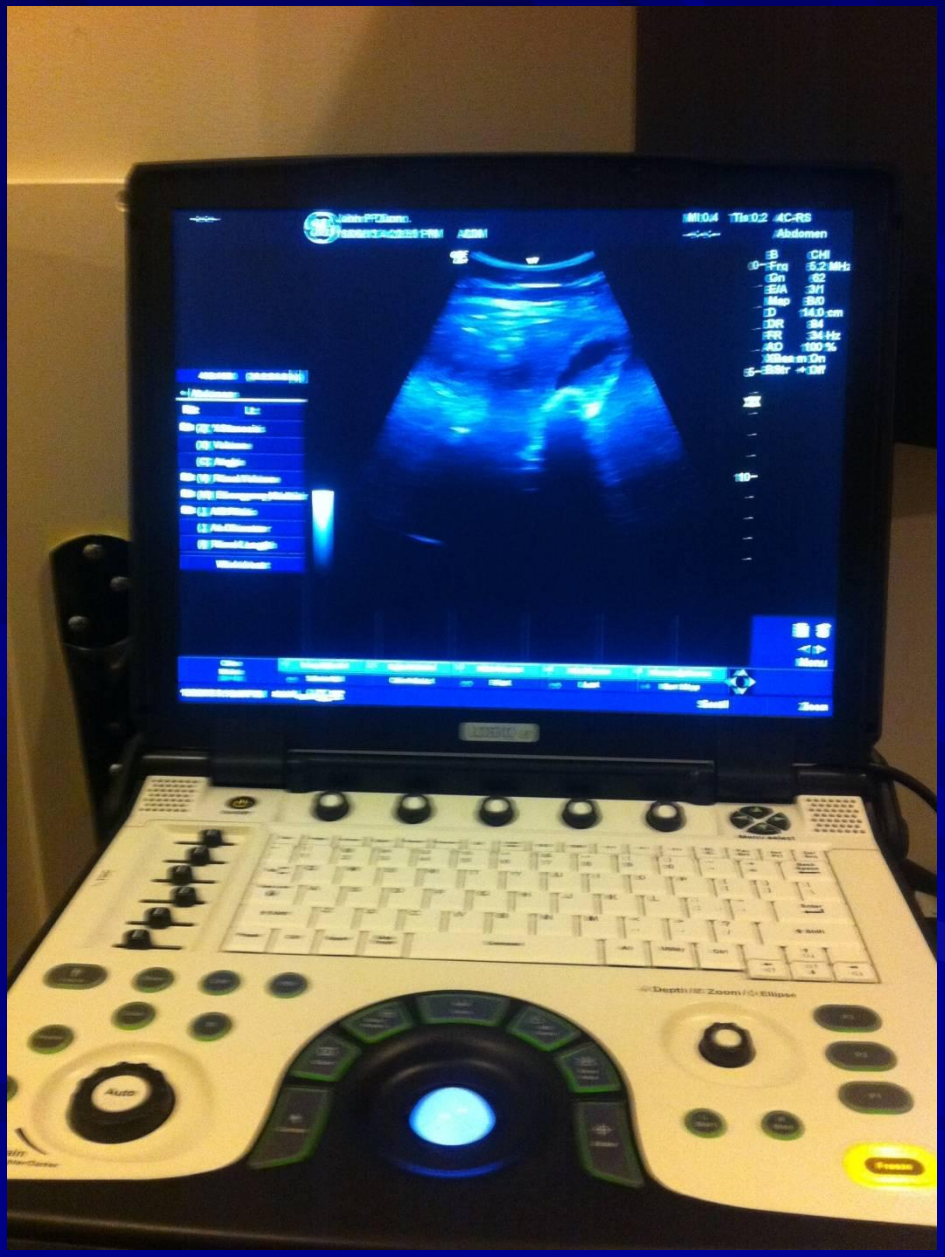
SYMPTOMS (3) NAUSEA & VOMITING

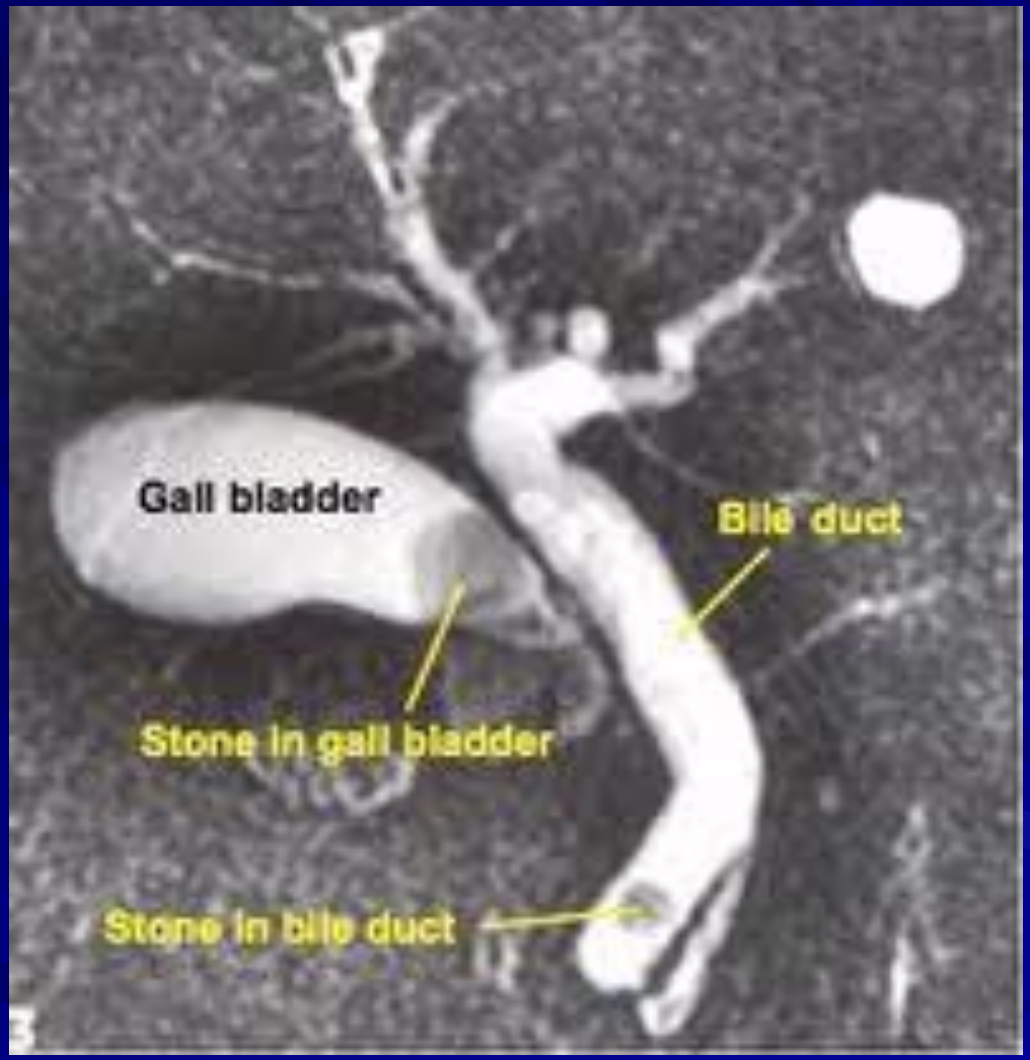
- can be severe
- may relieve pain
- beware Mallory-Weiss
- morning nausea

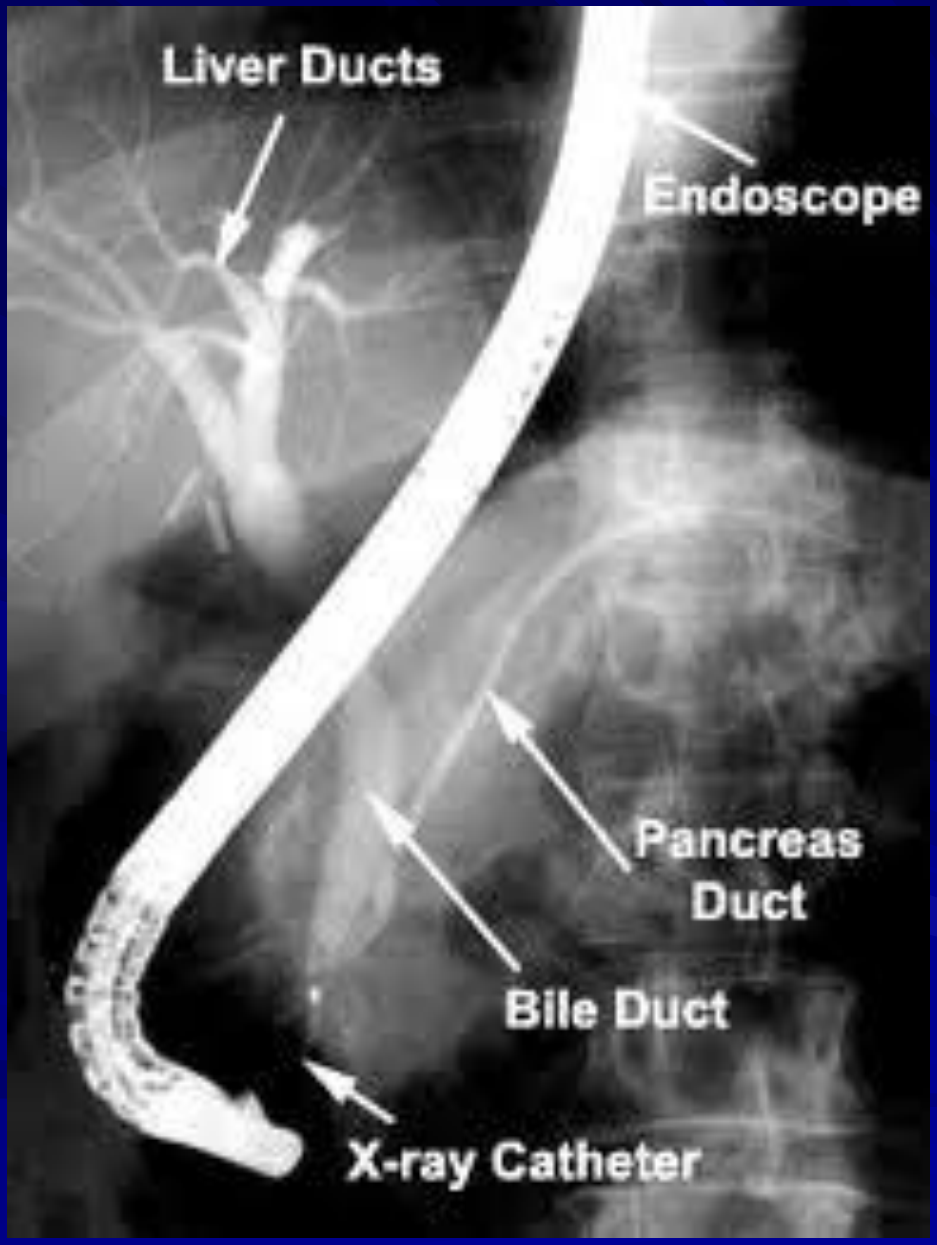
INVESTIGATIONS

- ultrasound

- gastroscopy (second)
- CT (no)
- MRCP (debatable)
- ERCP (interventional)


Abdomen
Auto


Gall bladder
Bile duct
Stone in gall bladder
Stone in bile duct


Liver Ducts
Endoscope
Pancreas Duct
Bile Duct
X-ray Catheter

DIFFERENTIAL (1)
COLIC

- gallbladder/duct
- small bowel (umbilical)
- large bowel (lower)
- ureter (flank)
- (uterus)

DIFFERENTIAL (2)

- DU/GU (constant)
- MI (still)
- GORD (rising)
- Spasm (bollocks)
- Pancreatitis (constant)


Active Duodenal Ulcer

TREATMENT (1) ANALGESIA

- Buscopan (waste of time)
- Paracetamol (nope)
- Tramadol (unpredictable)
- NSAIDs (PO/PR, never IM)
- Narcotics (morphine/pethidine)

TREATMENT (2) ANTI-EMETICS

- Metoclopramide
- Prochlorperazine
- Ondansetron

TREATMENT (3) MEDICAL

- antibiotics (waste of time)
- dissolution (waste of time)
- lithotripsy (nope)

TREATMENT (4)
ERCP

- includes sphincterotomy

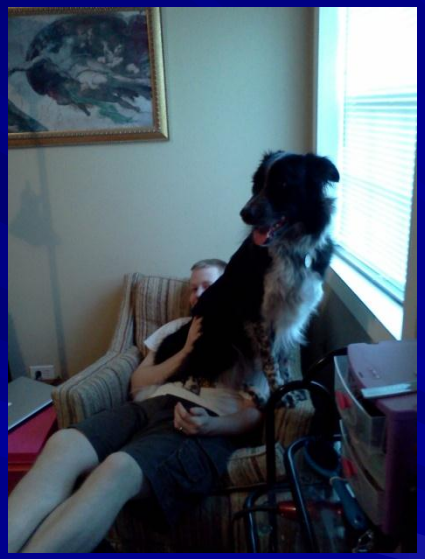
- jaundice/cholangitis
- pancreatitis
- deranged LFTs

- bleed/pancreatitis
- endoscopist dependent

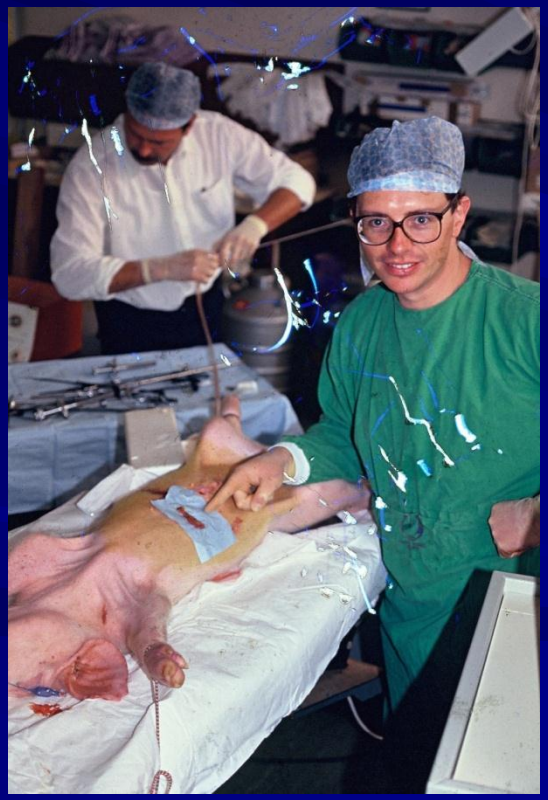
TREATMENT (5) SURGICAL

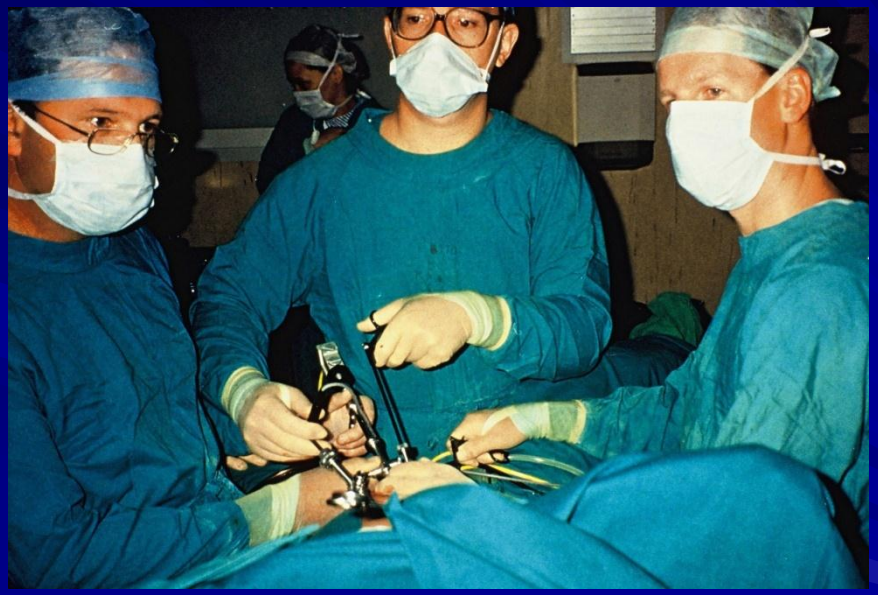
- laparoscopic cholecystectomy
- cholecystostomy
- subtotal
- CBD exploration
- intra-op cholangiogram

LAP CHOLE



LAP CHOLE
MY OPERATION



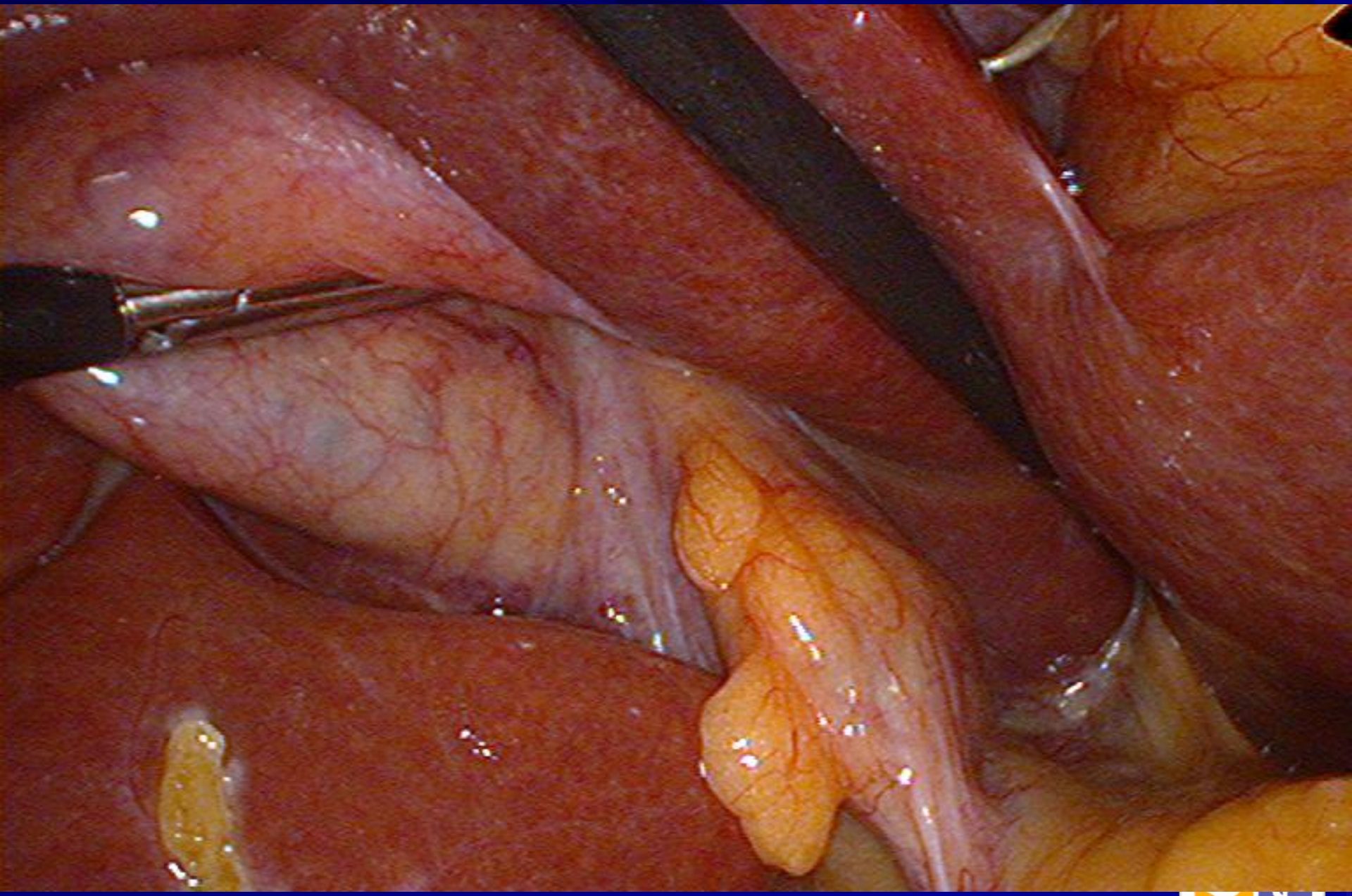


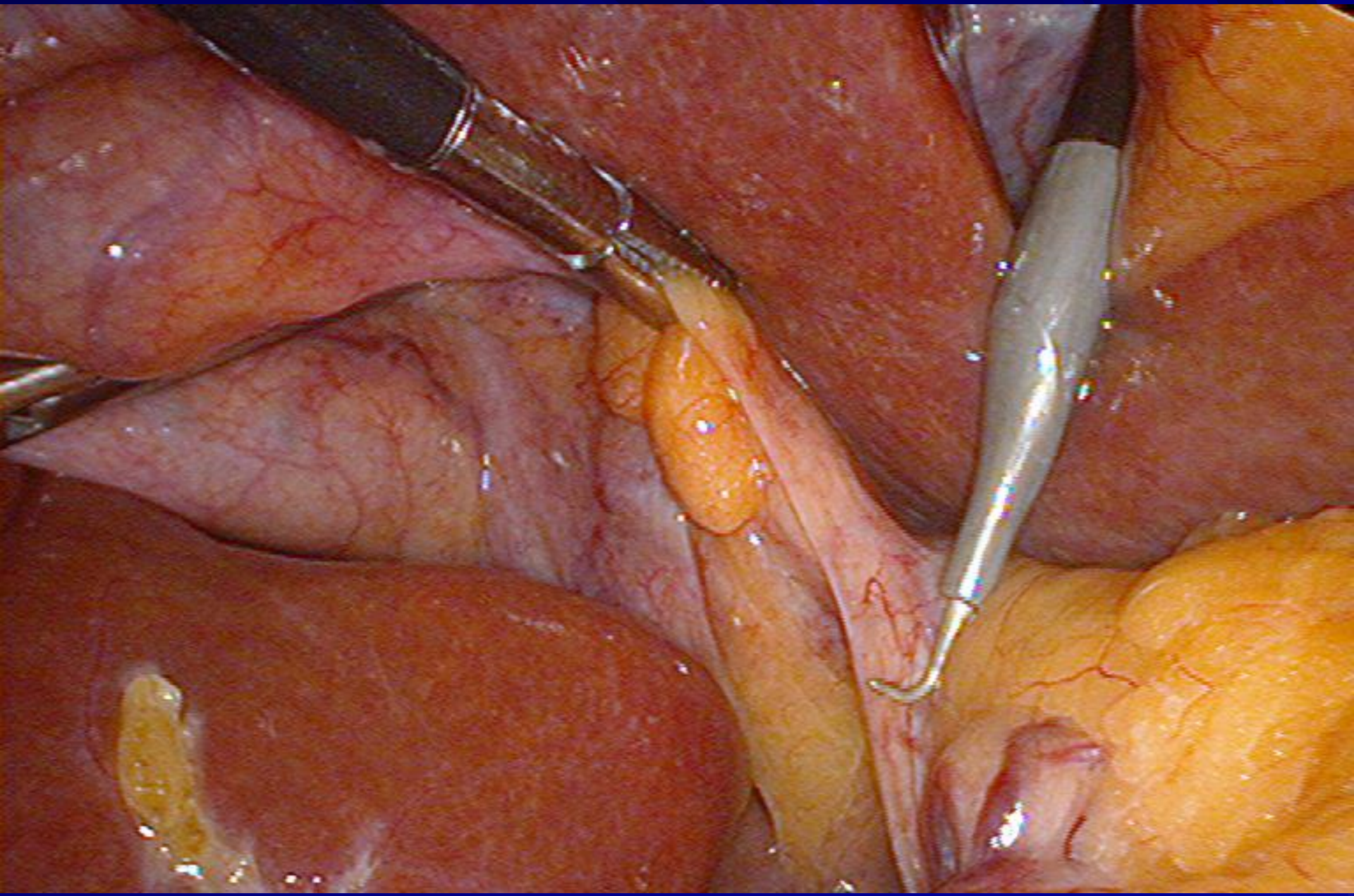
ADVANTAGES

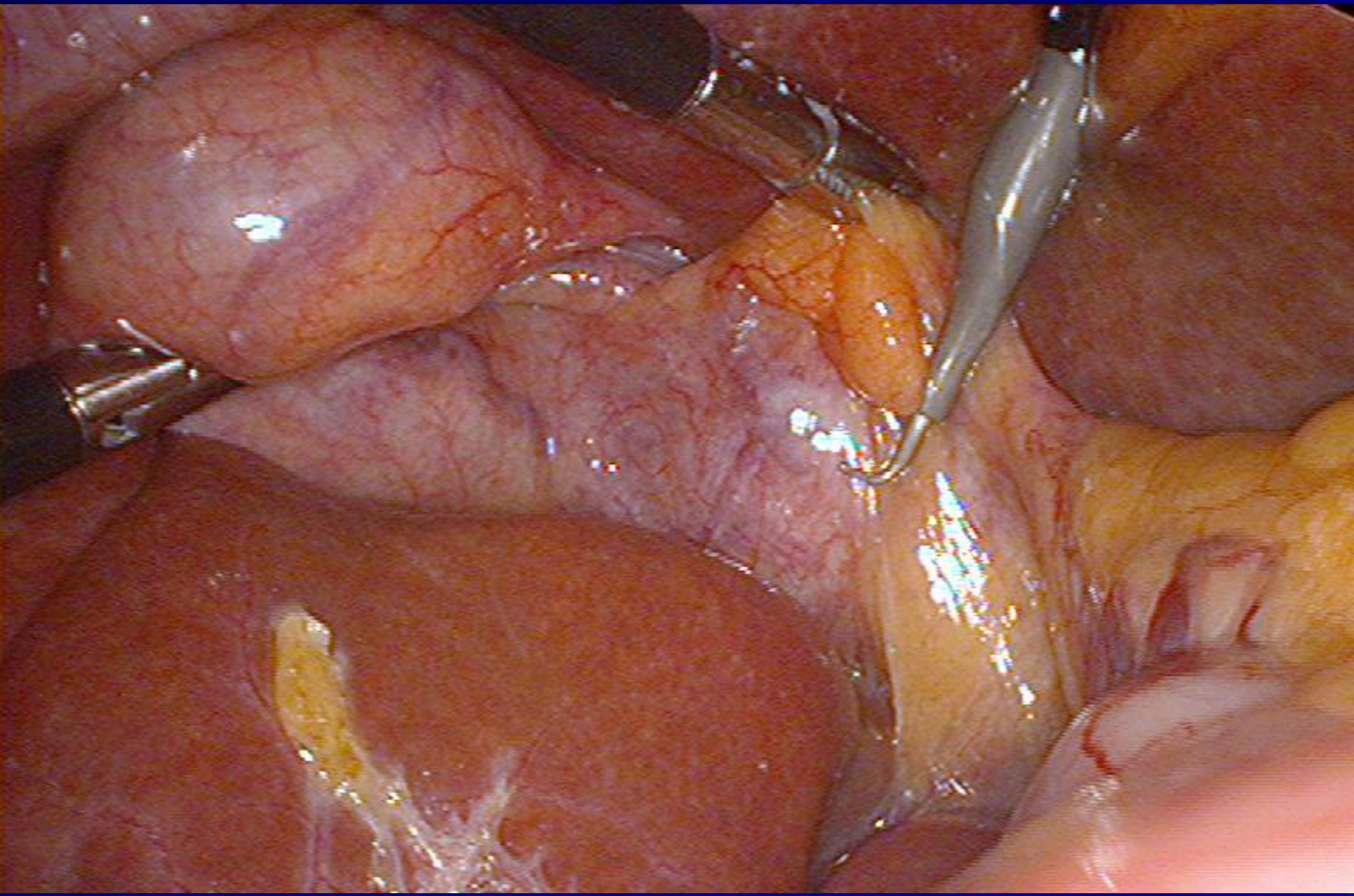
- pain
- stay 1 day
- RTW 1 week
- cosmesis
- safer

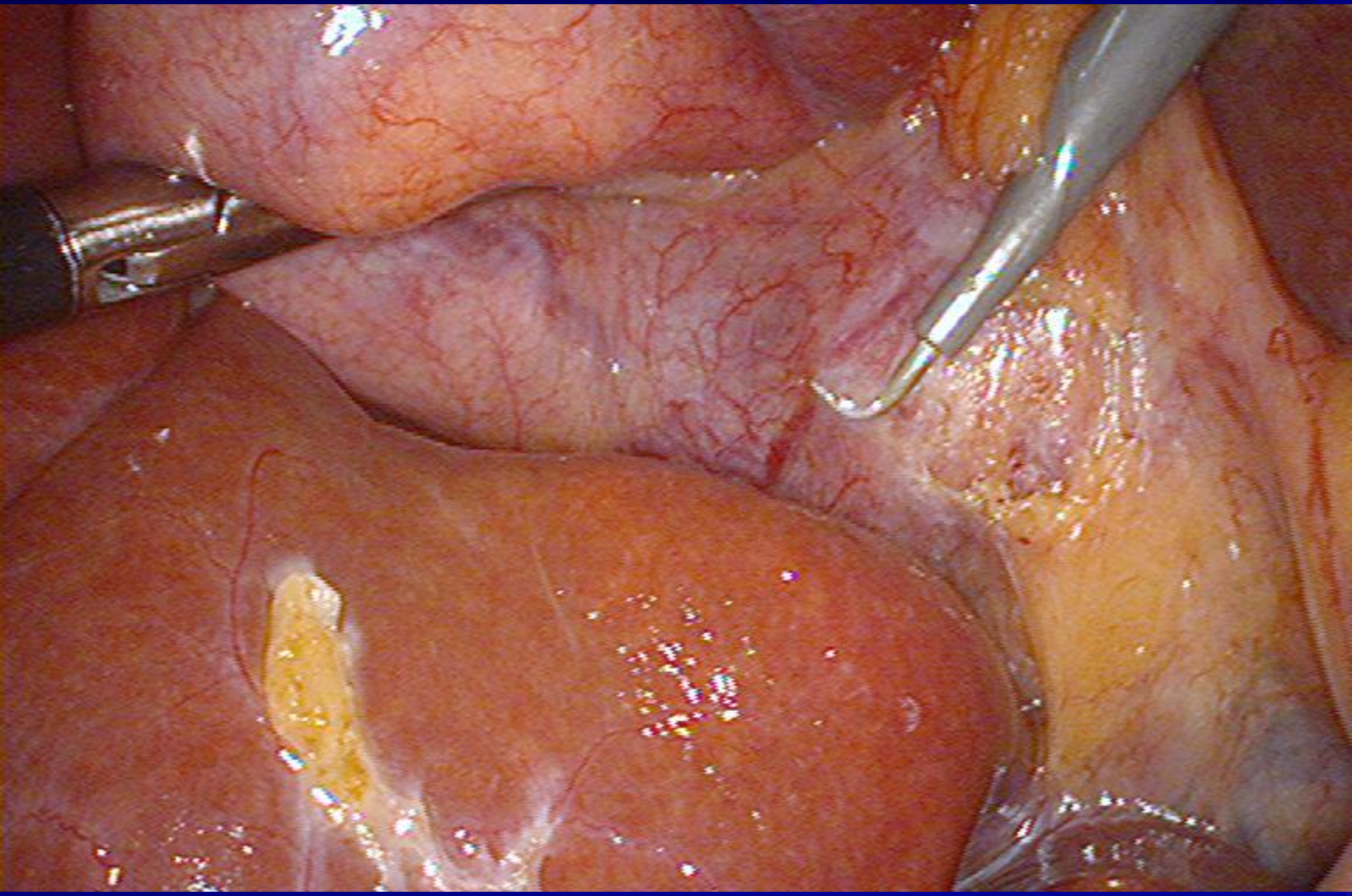
RESULTS (23 YRS)

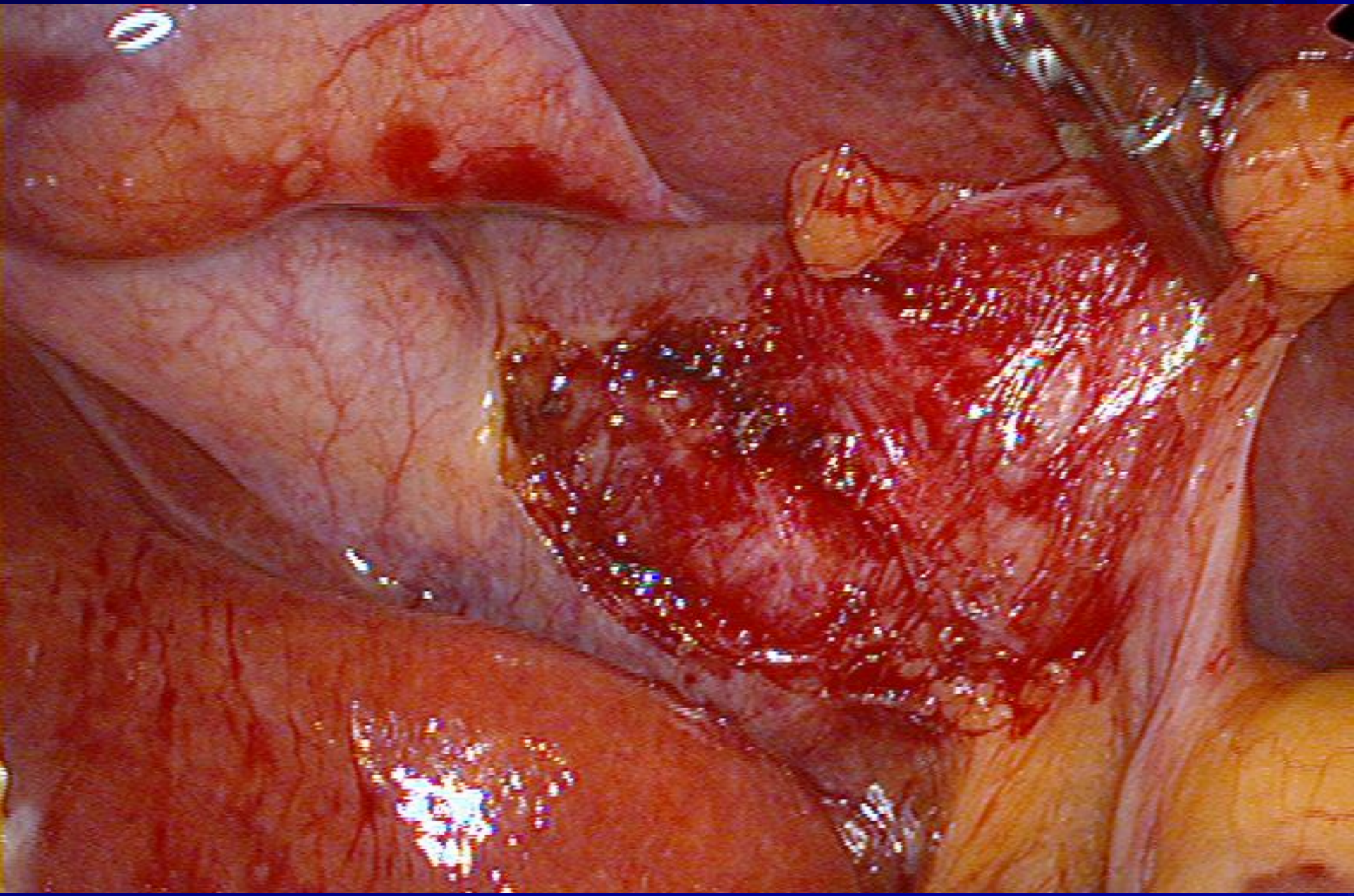
- n = 4,000+
- major CBI injury - 0
- DVT - 1
- Pneumonia - 0
- Death - 2 (MI day 3)
- Wound infection/hernia << 1%
- Trocar injury << 1%
- Conversion << 1%

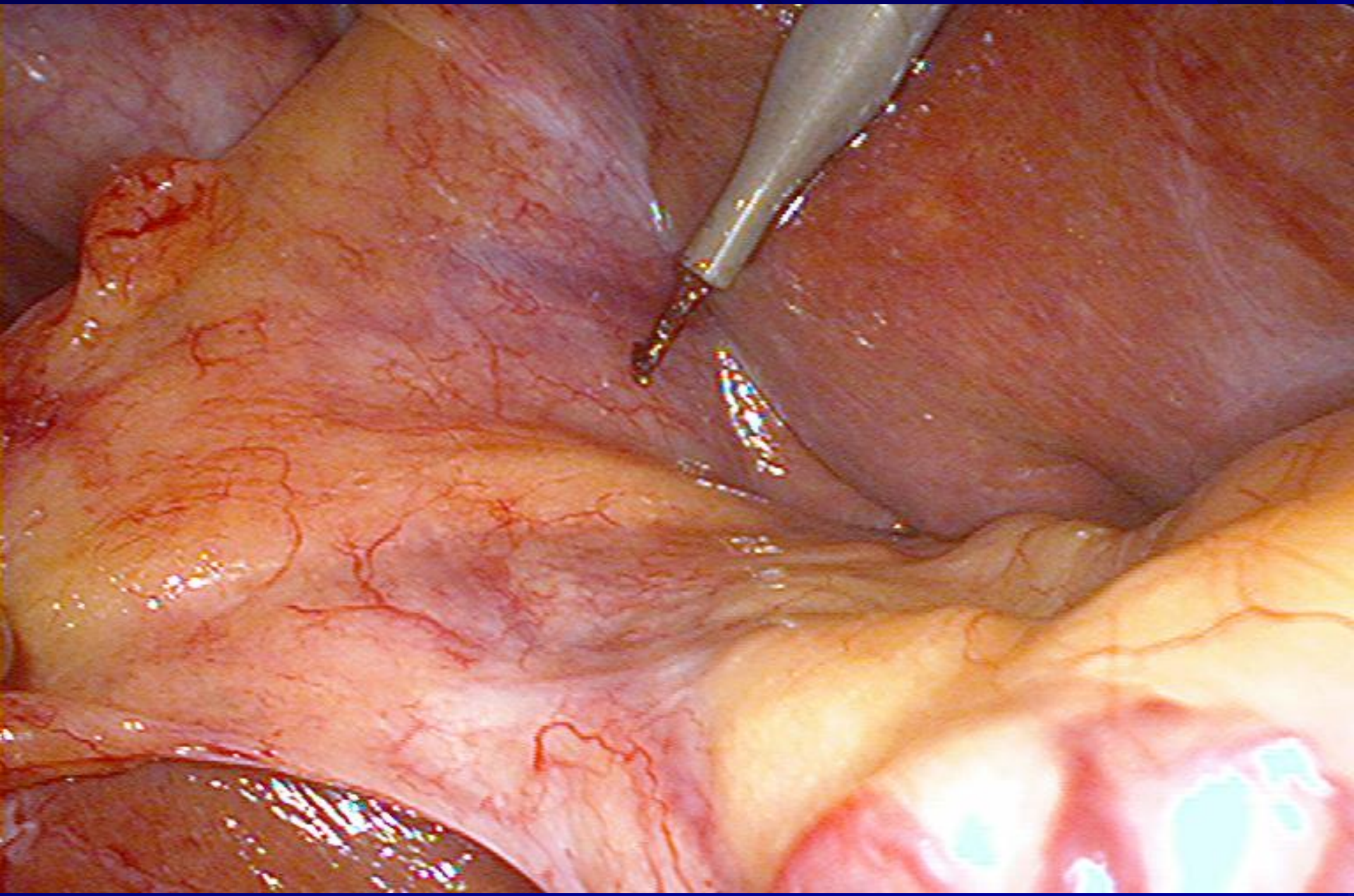


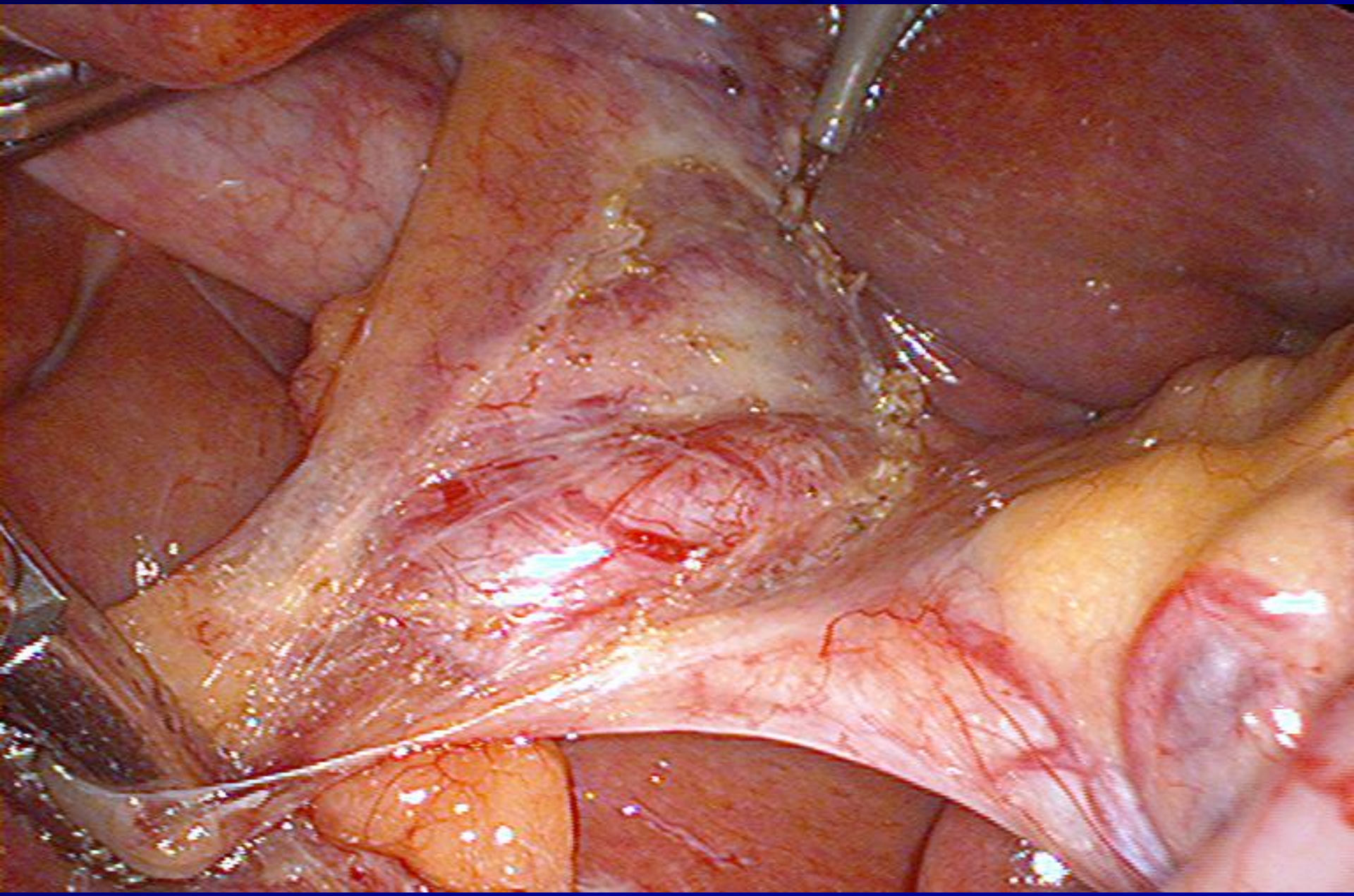


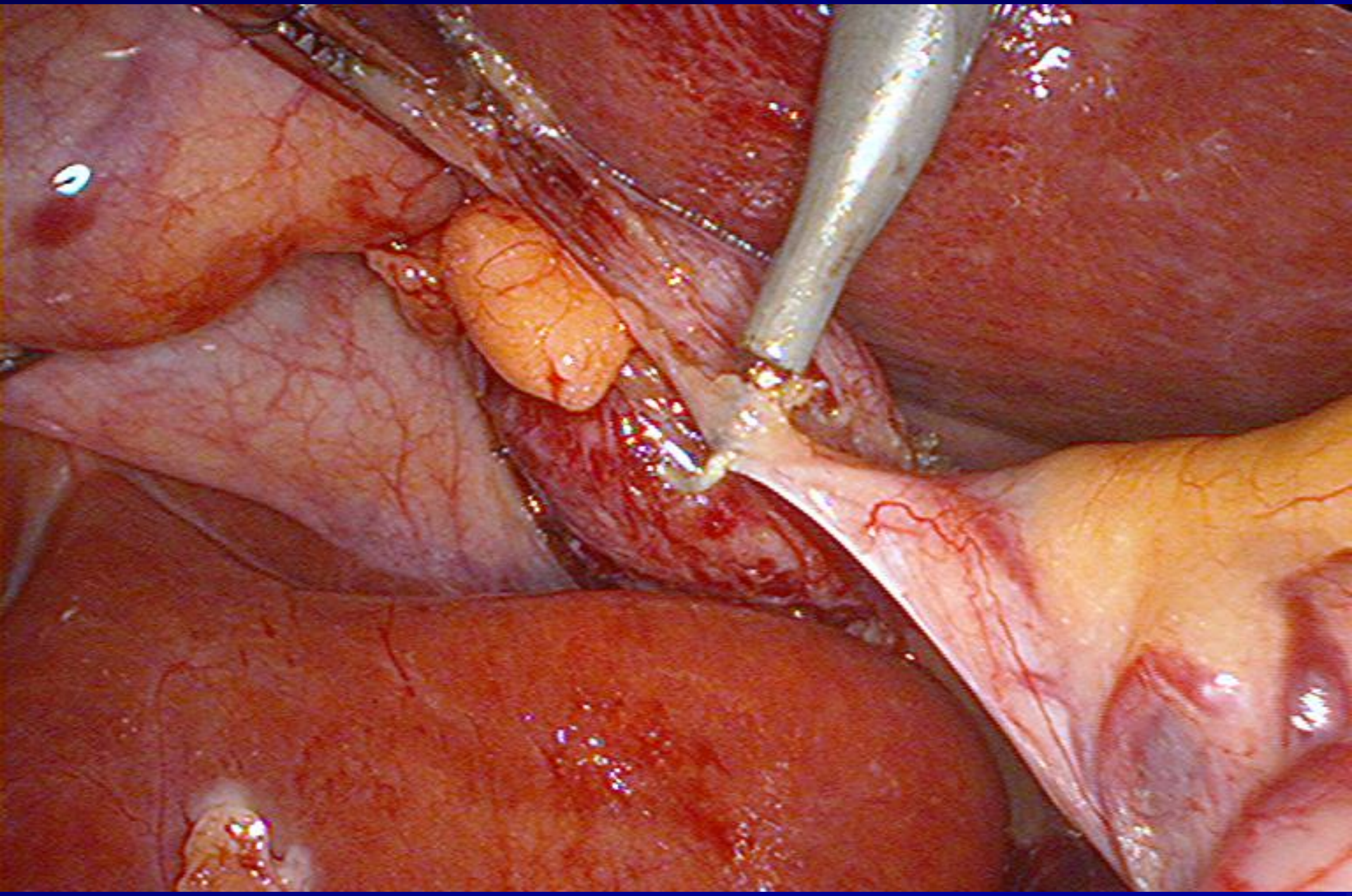


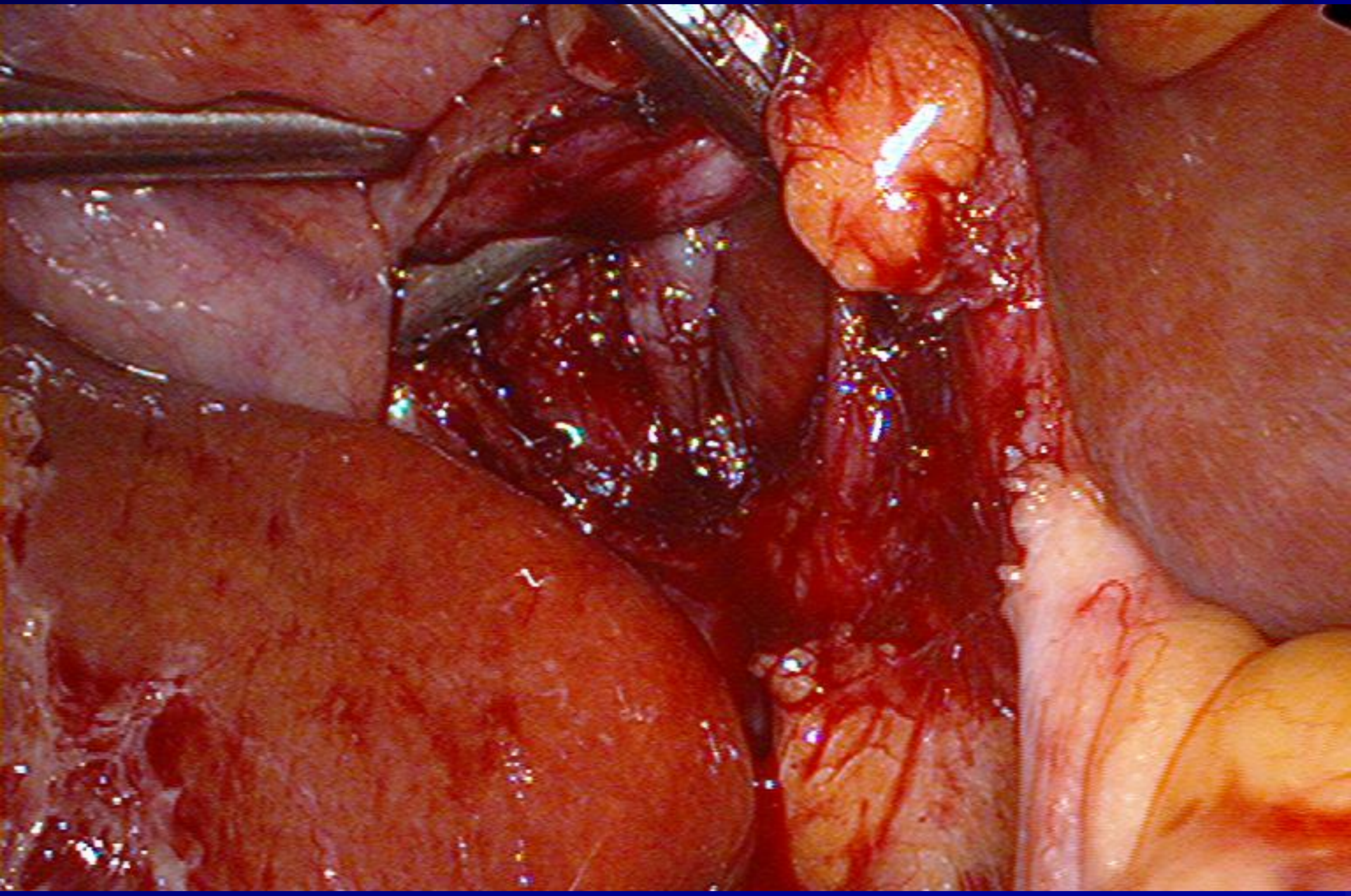


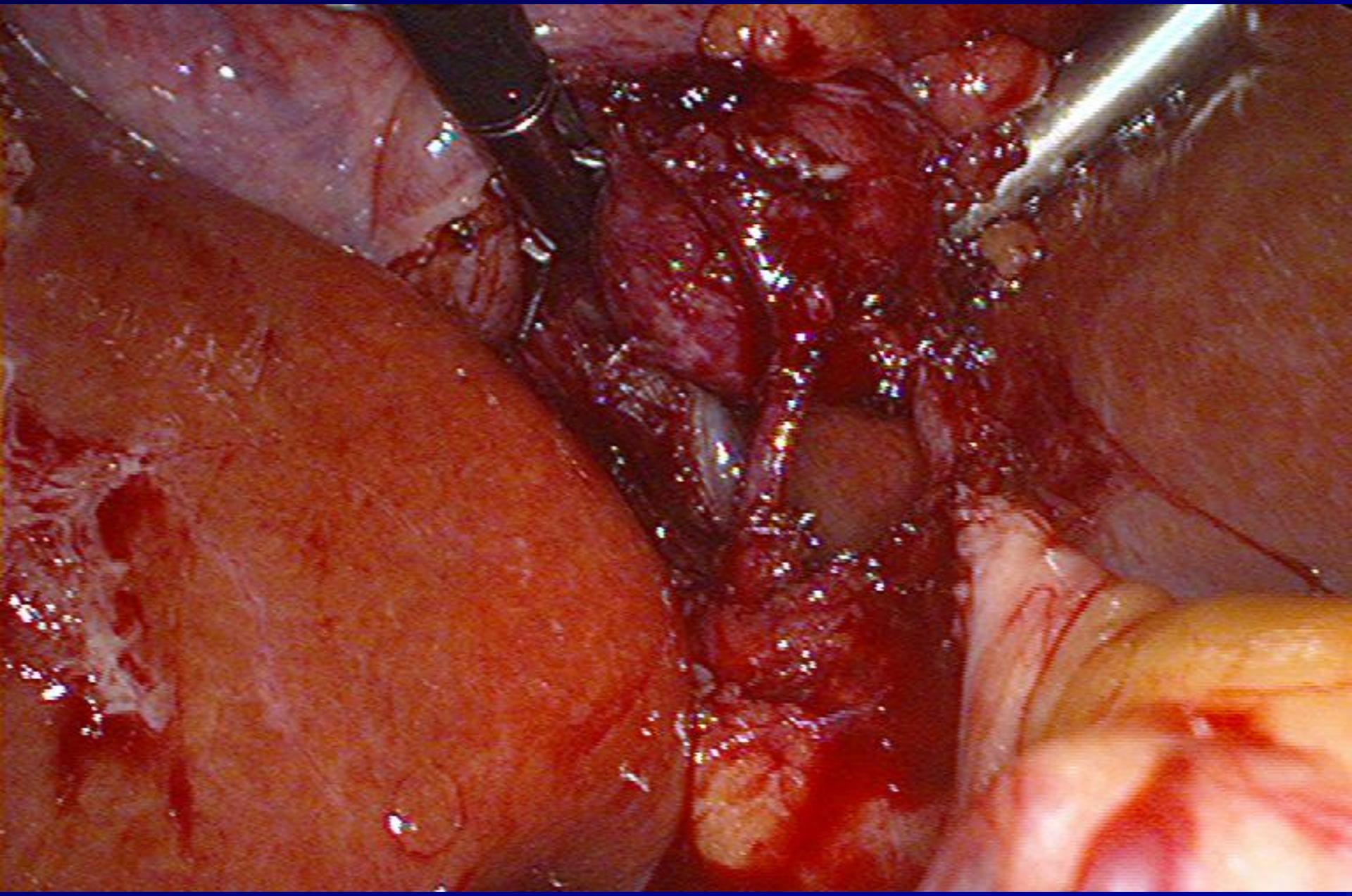


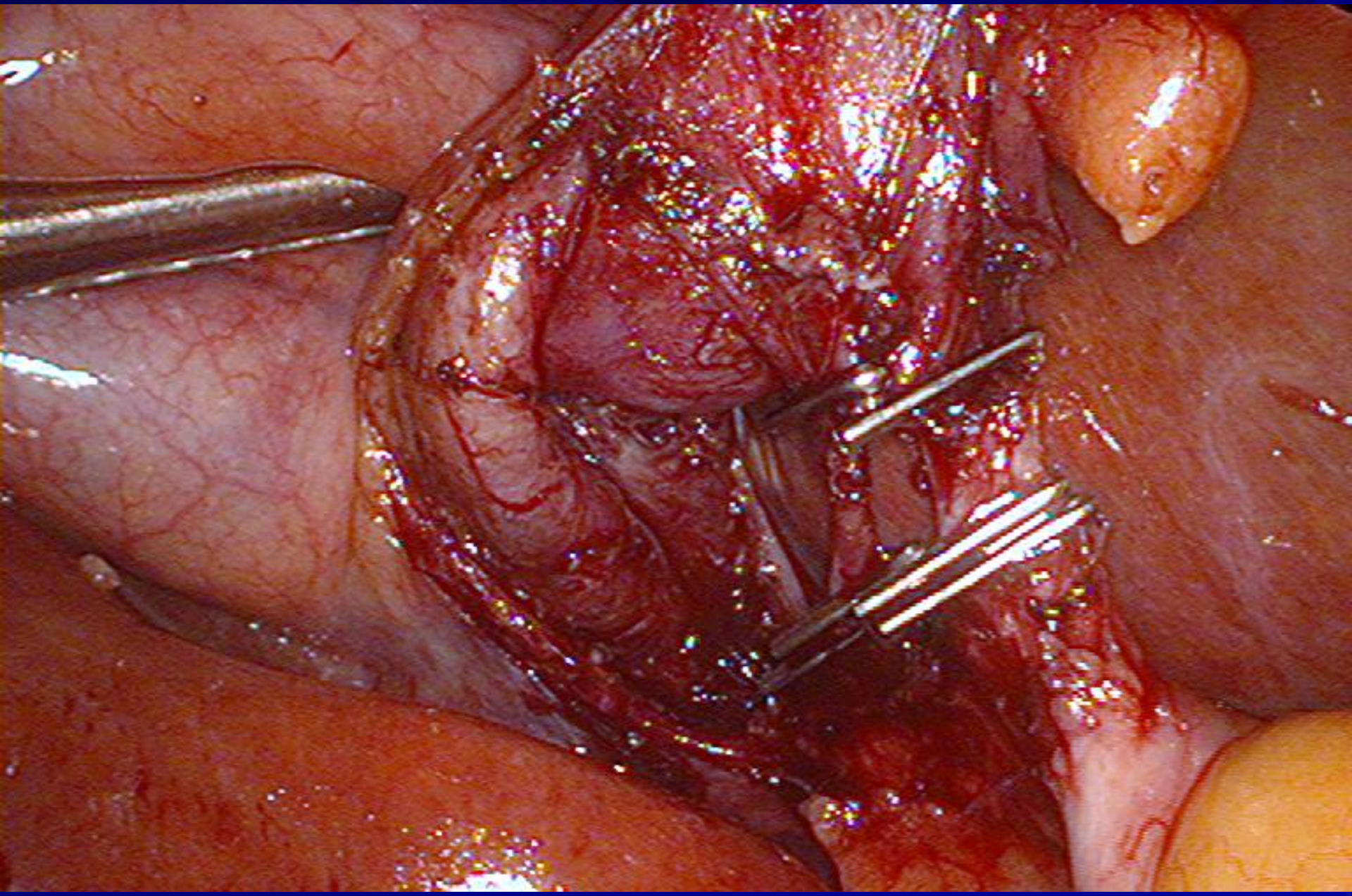


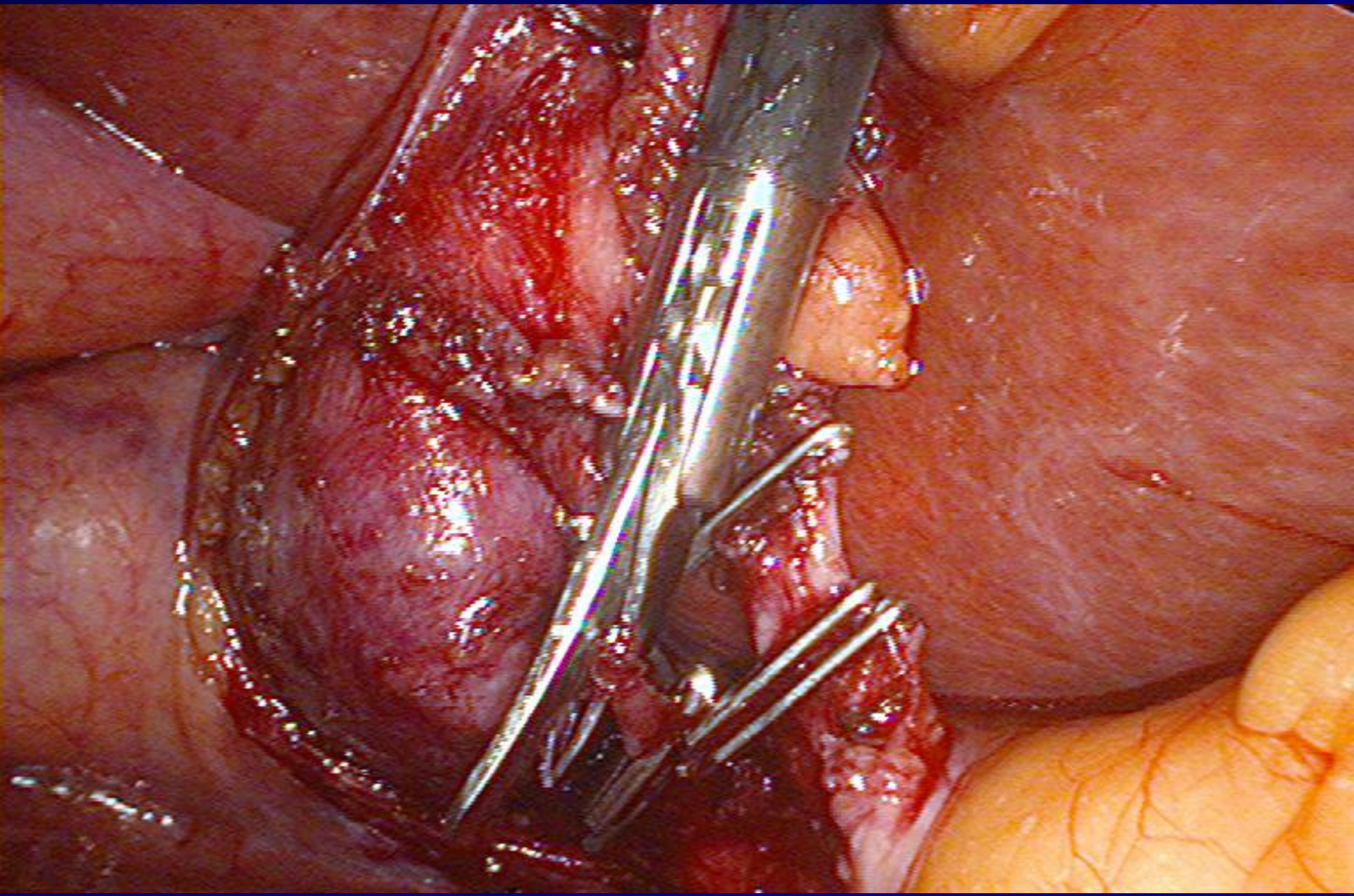


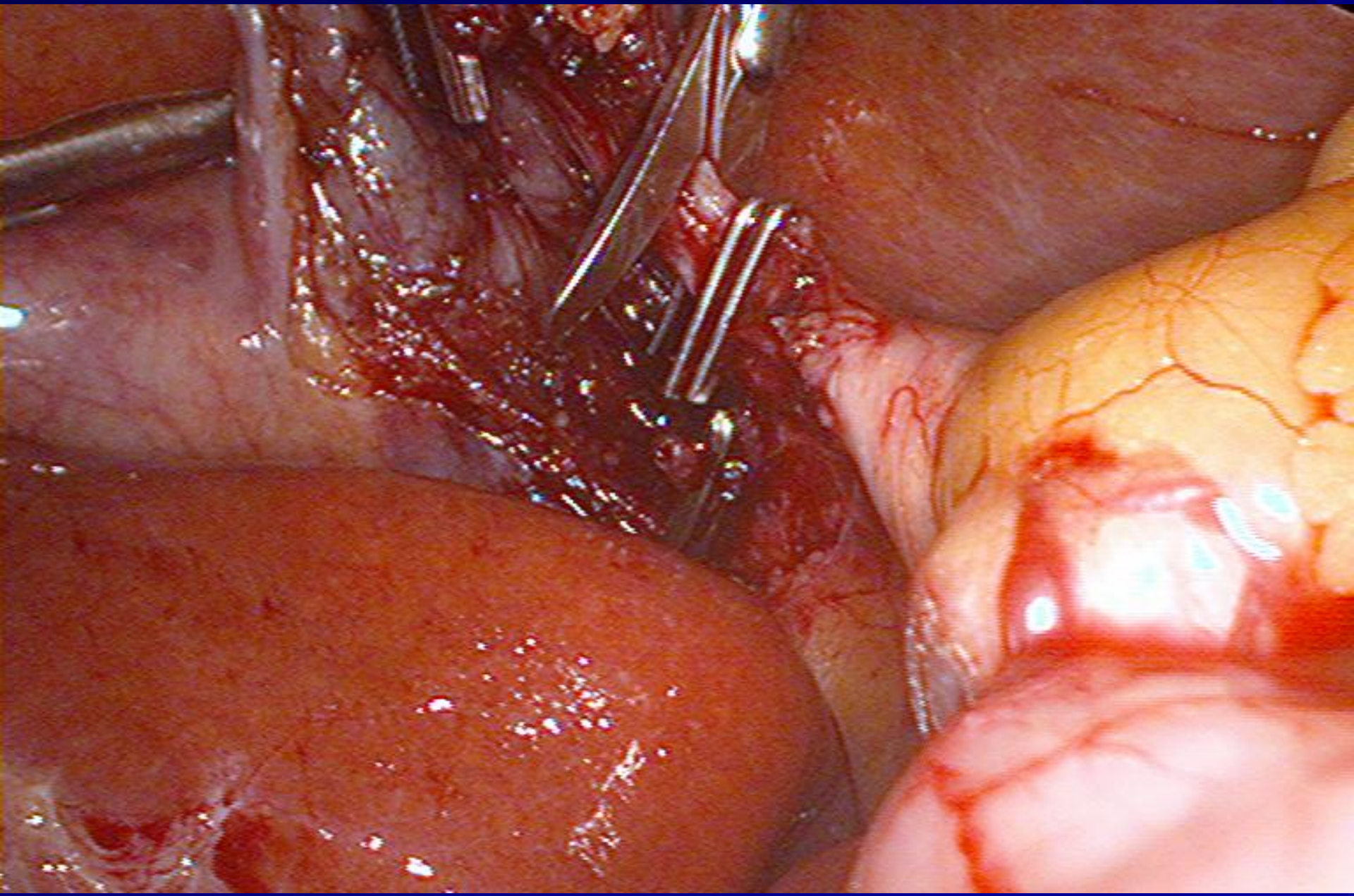


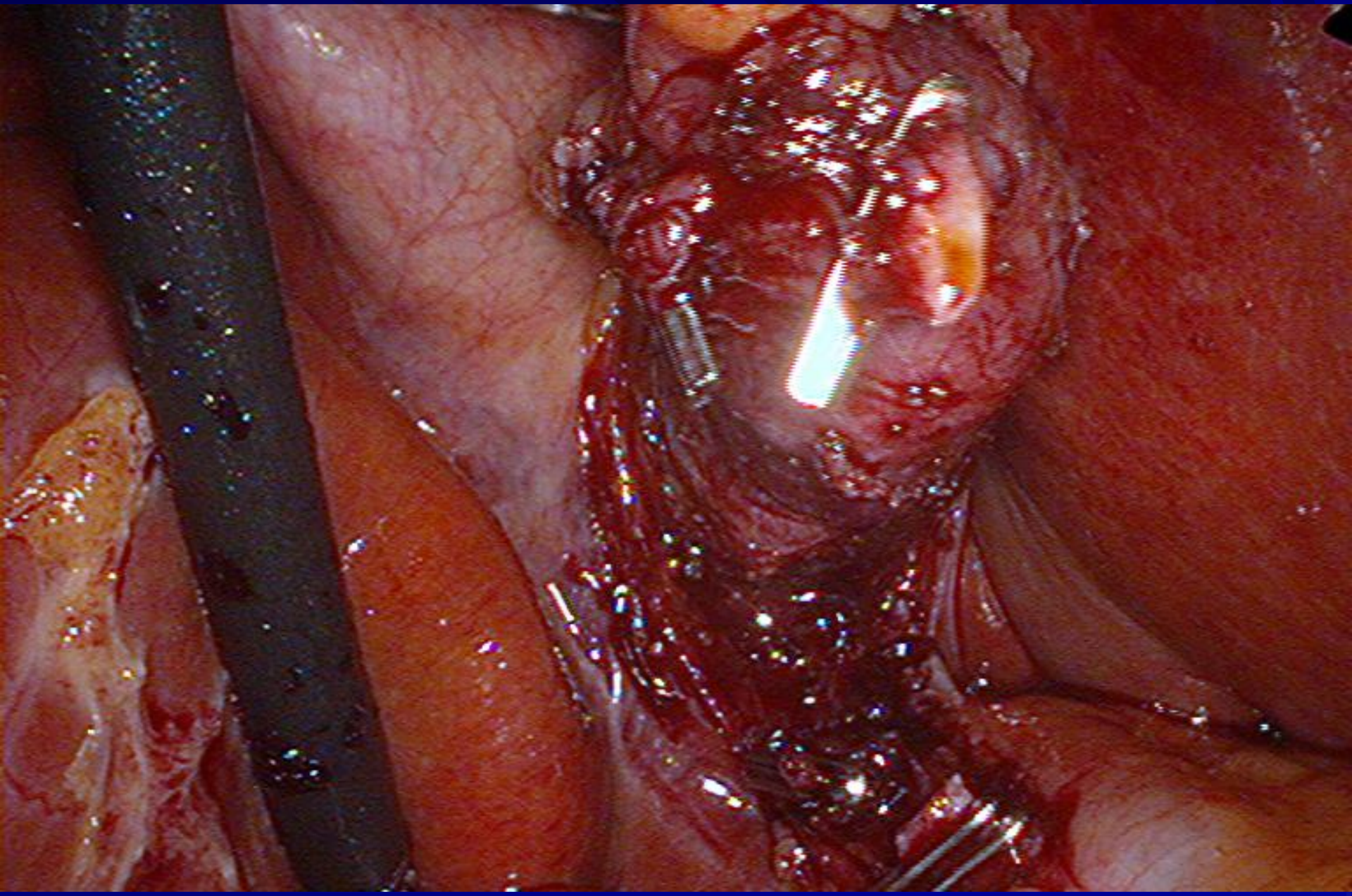


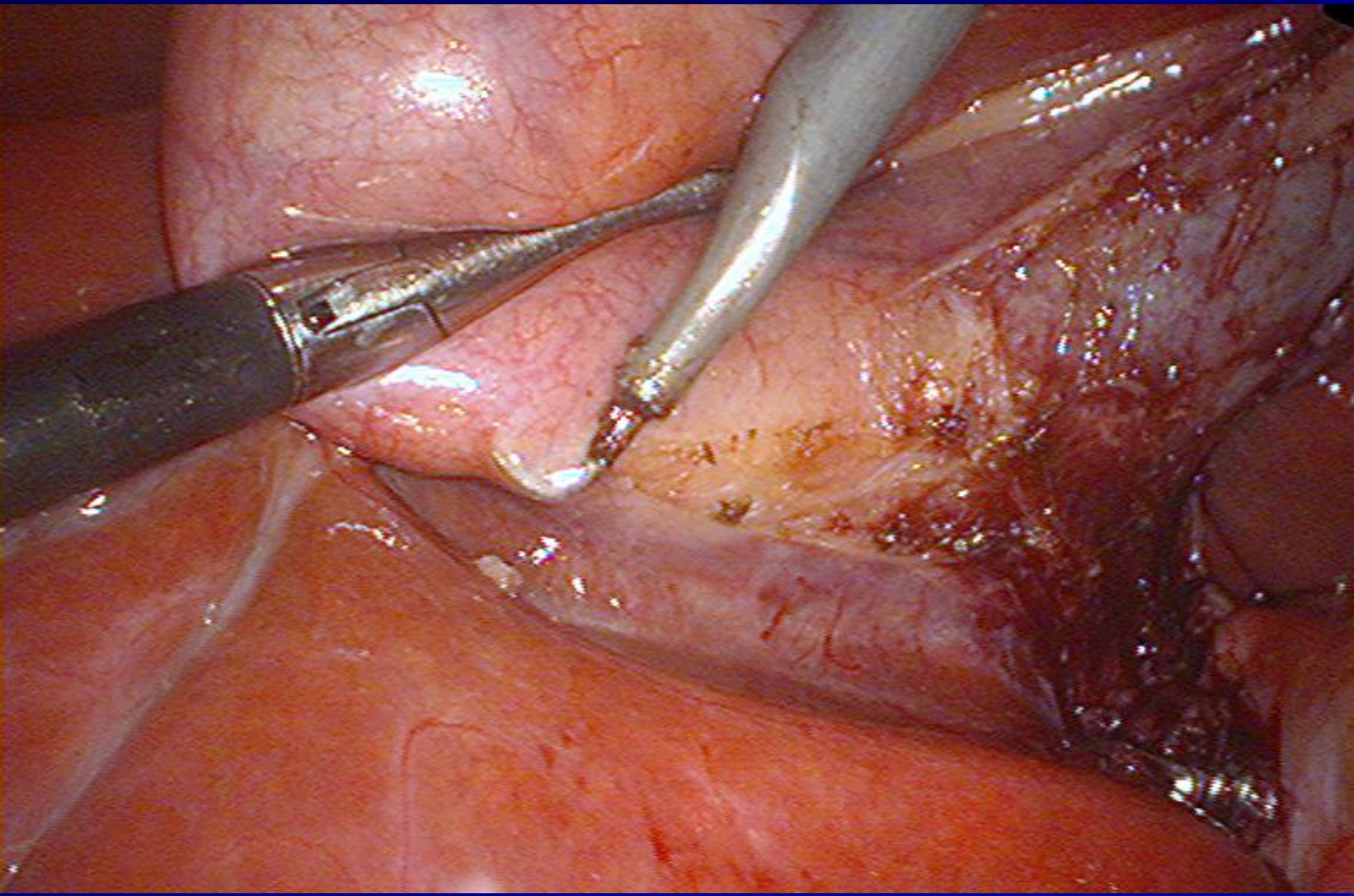


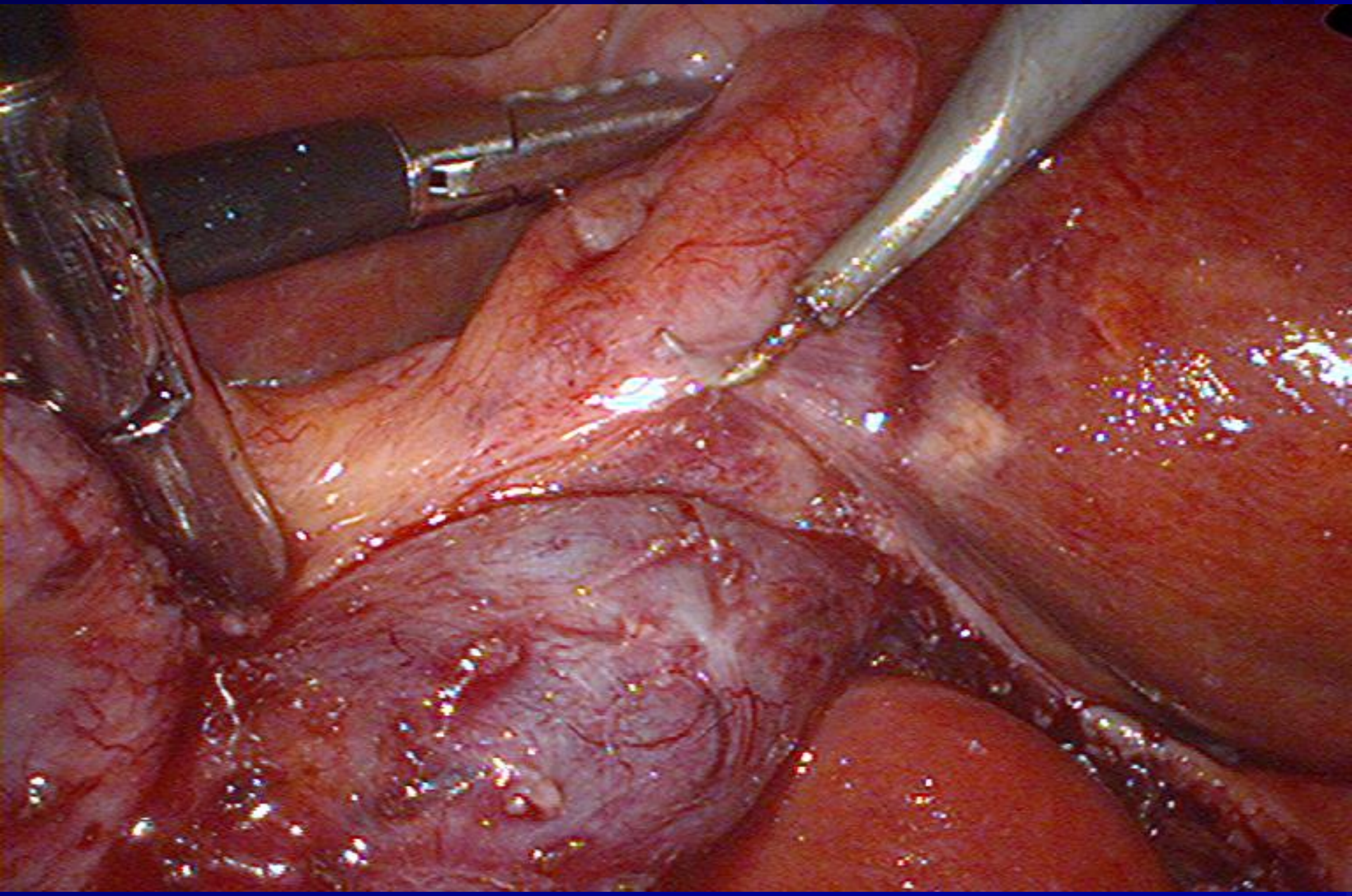


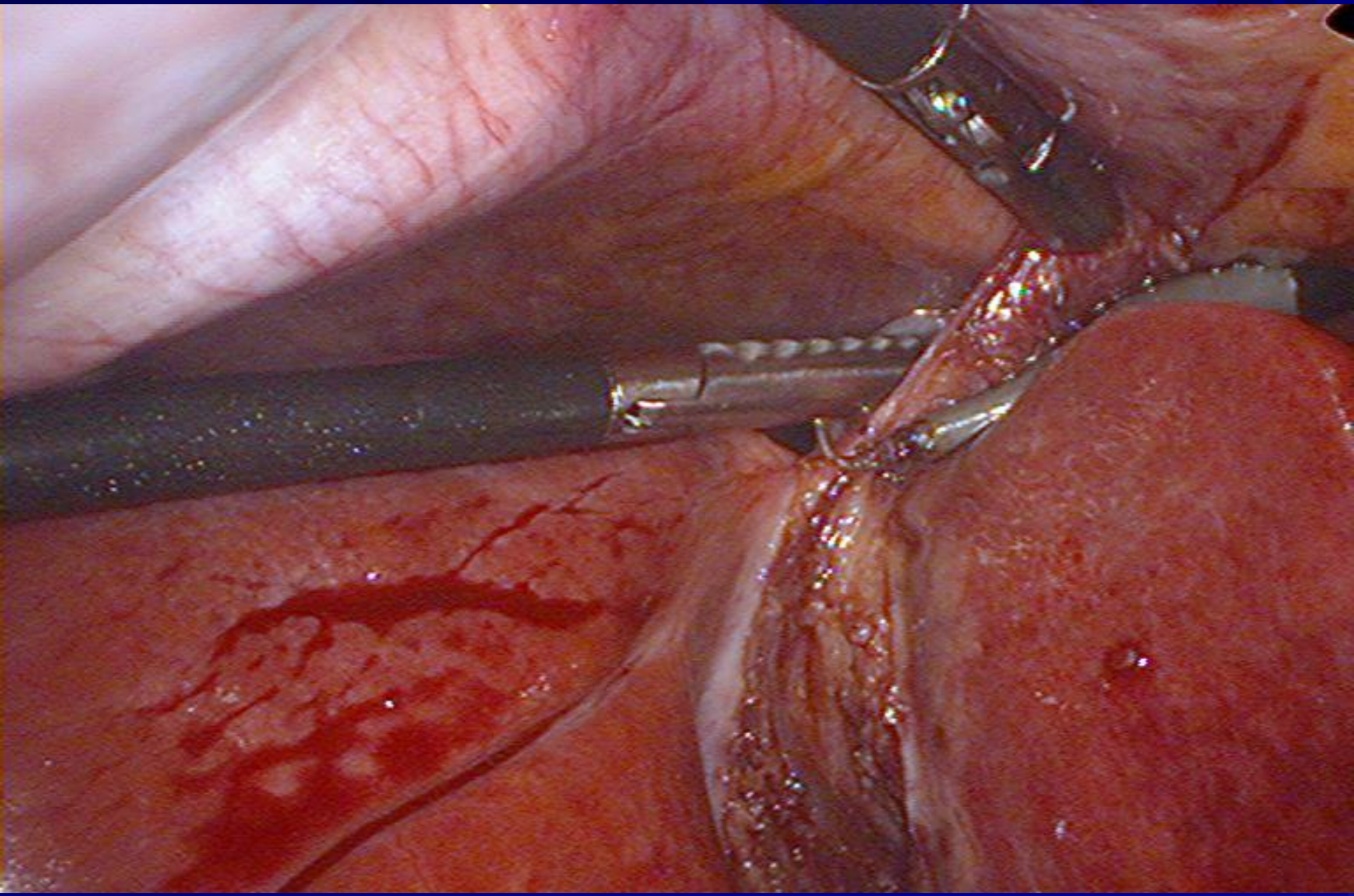


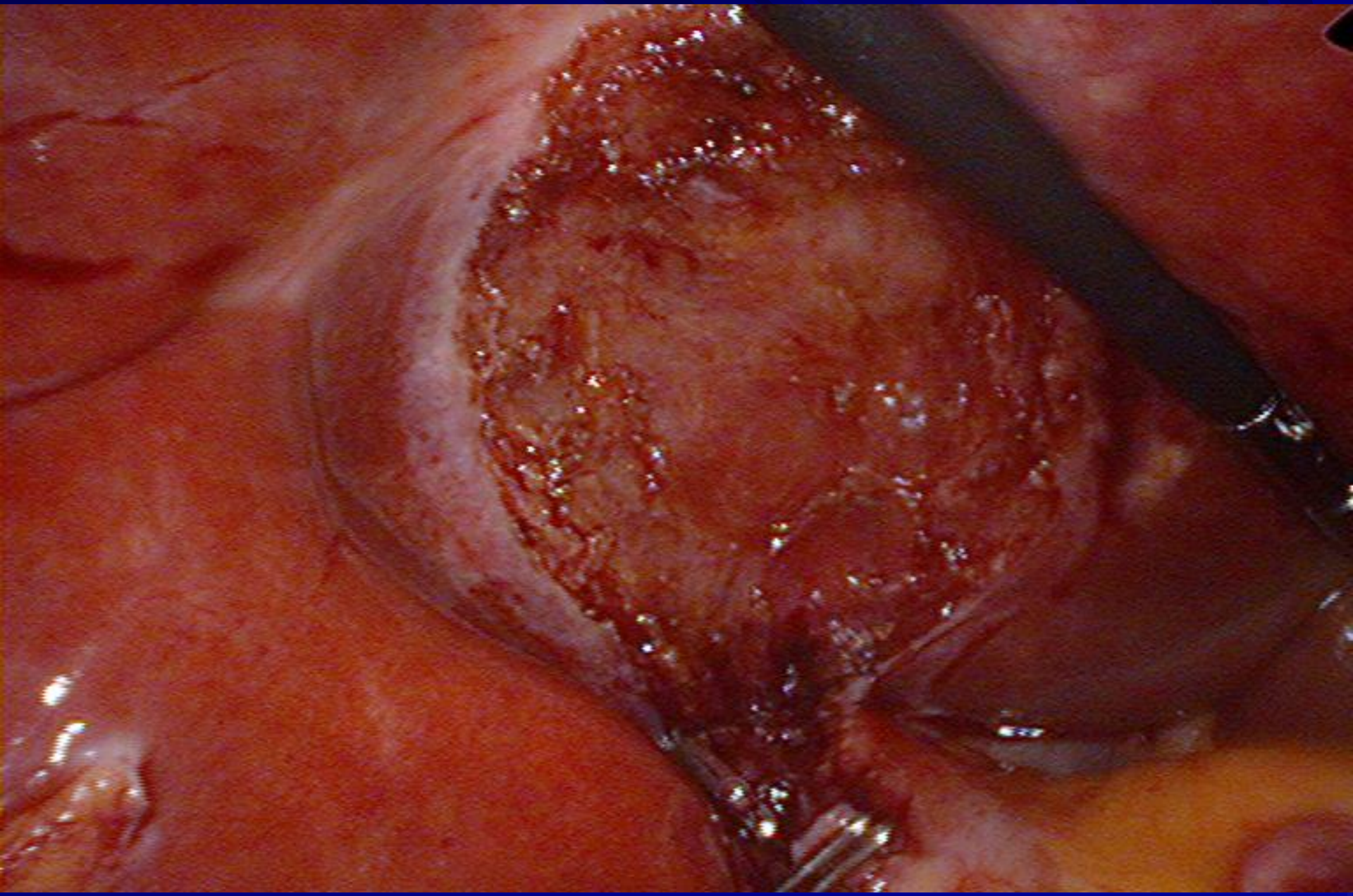


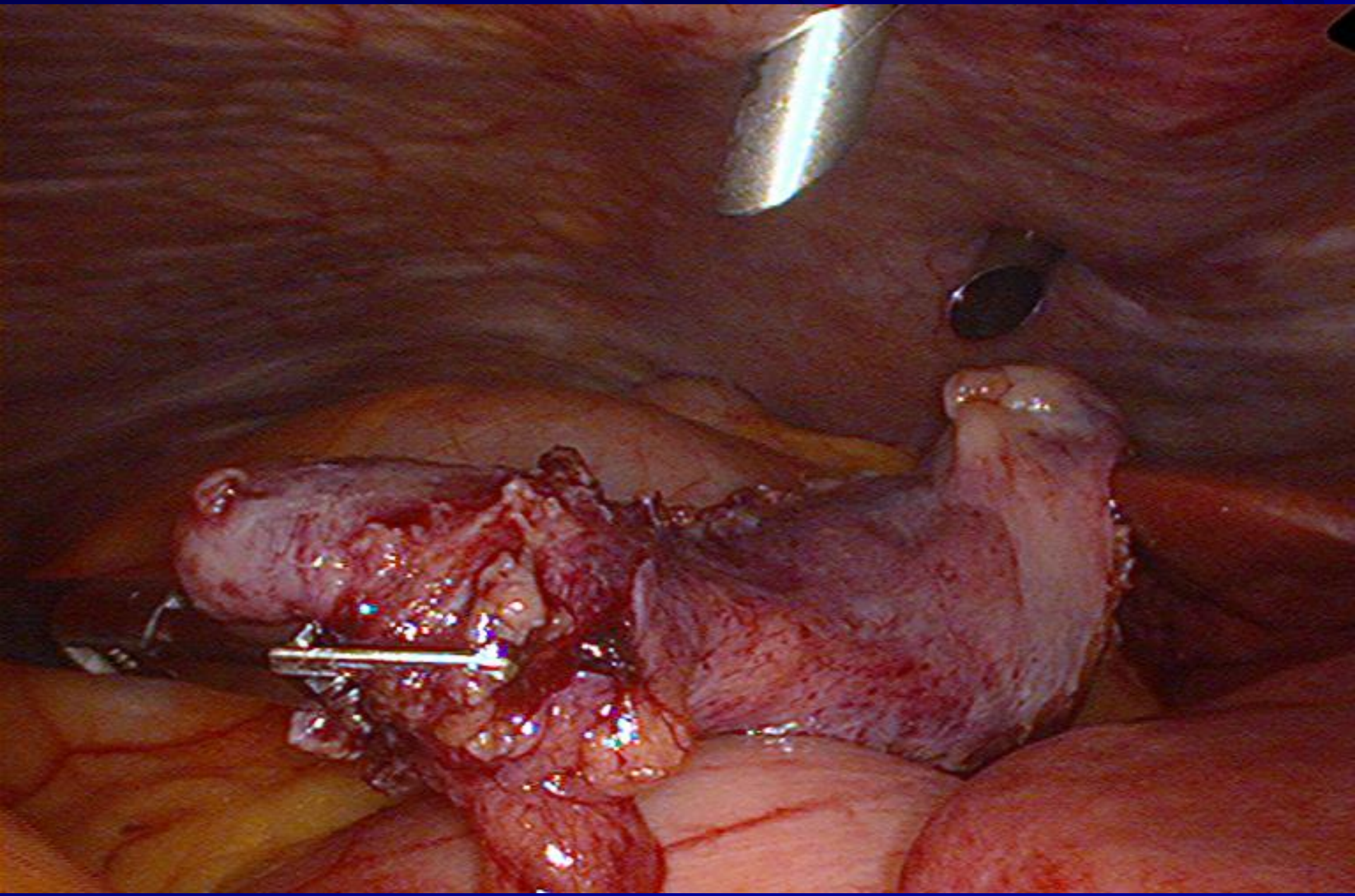


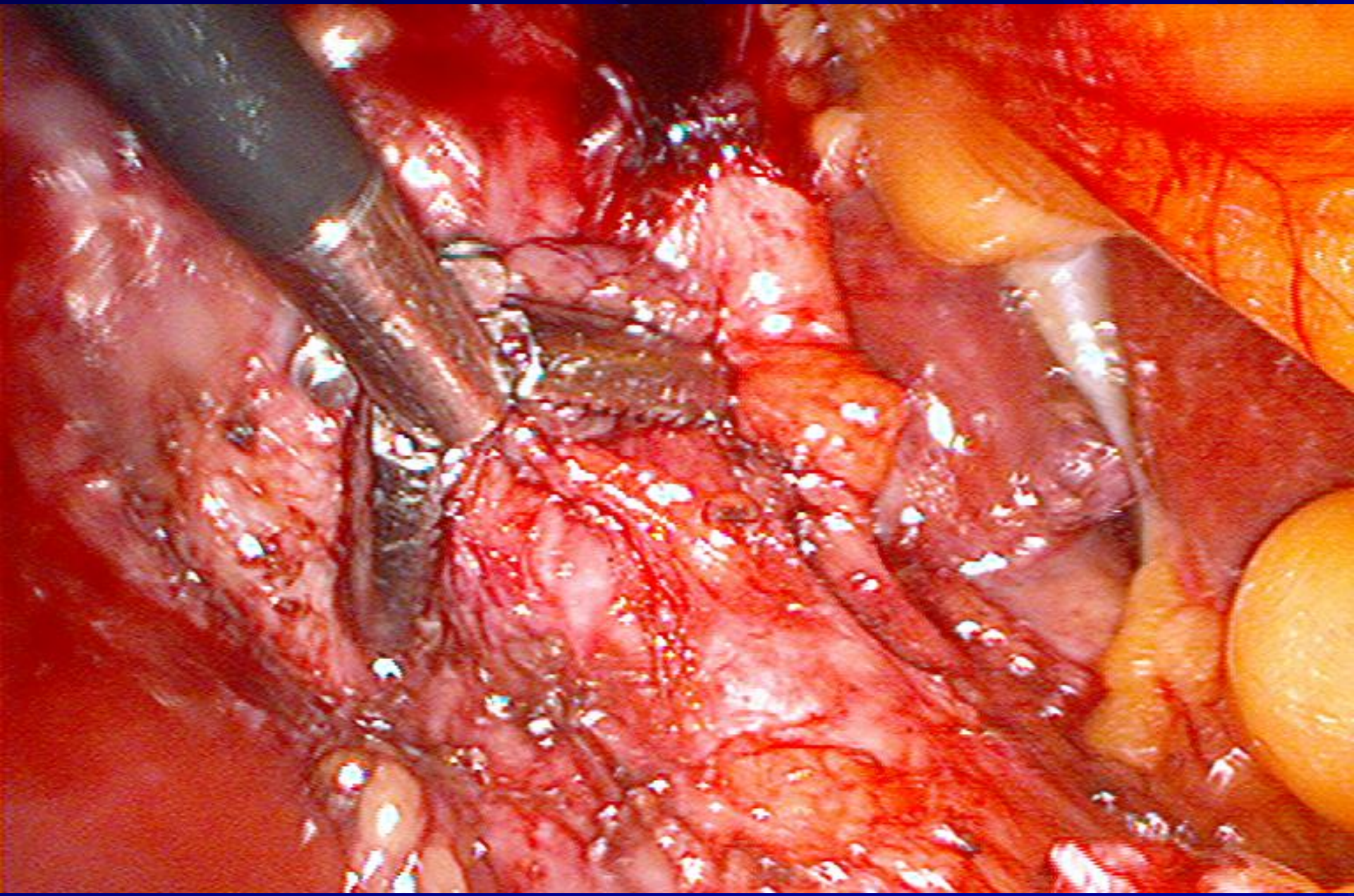


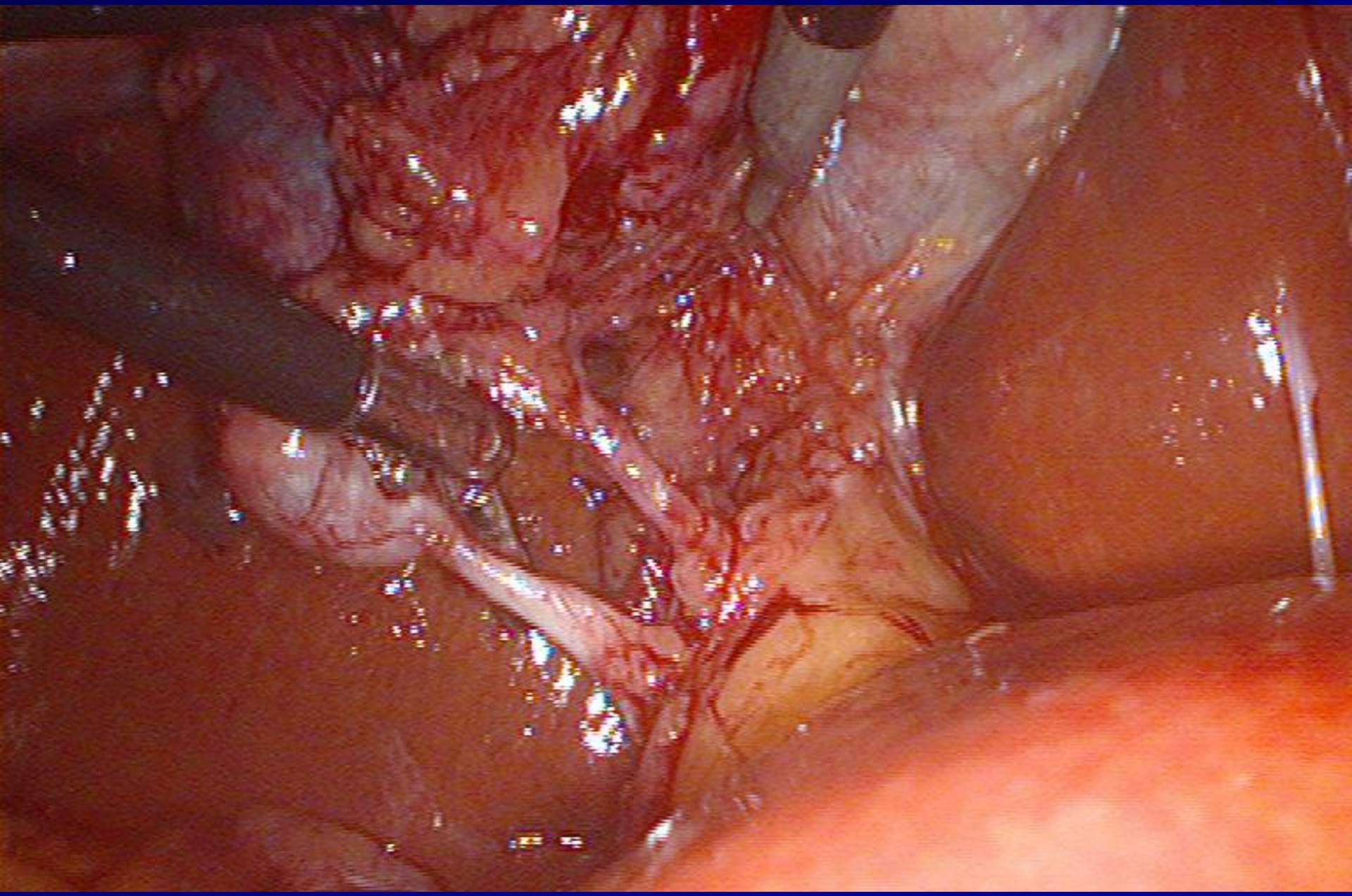


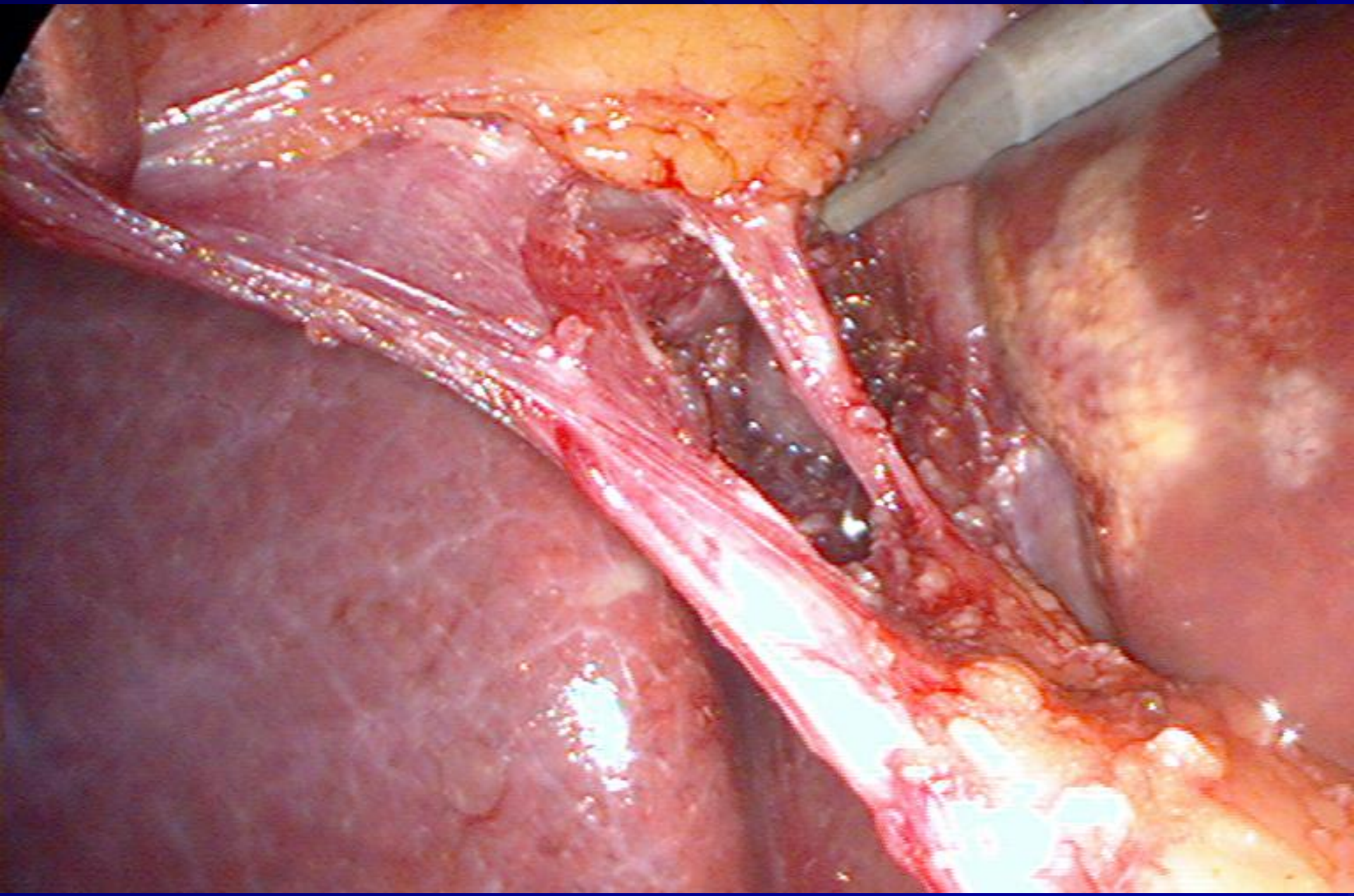


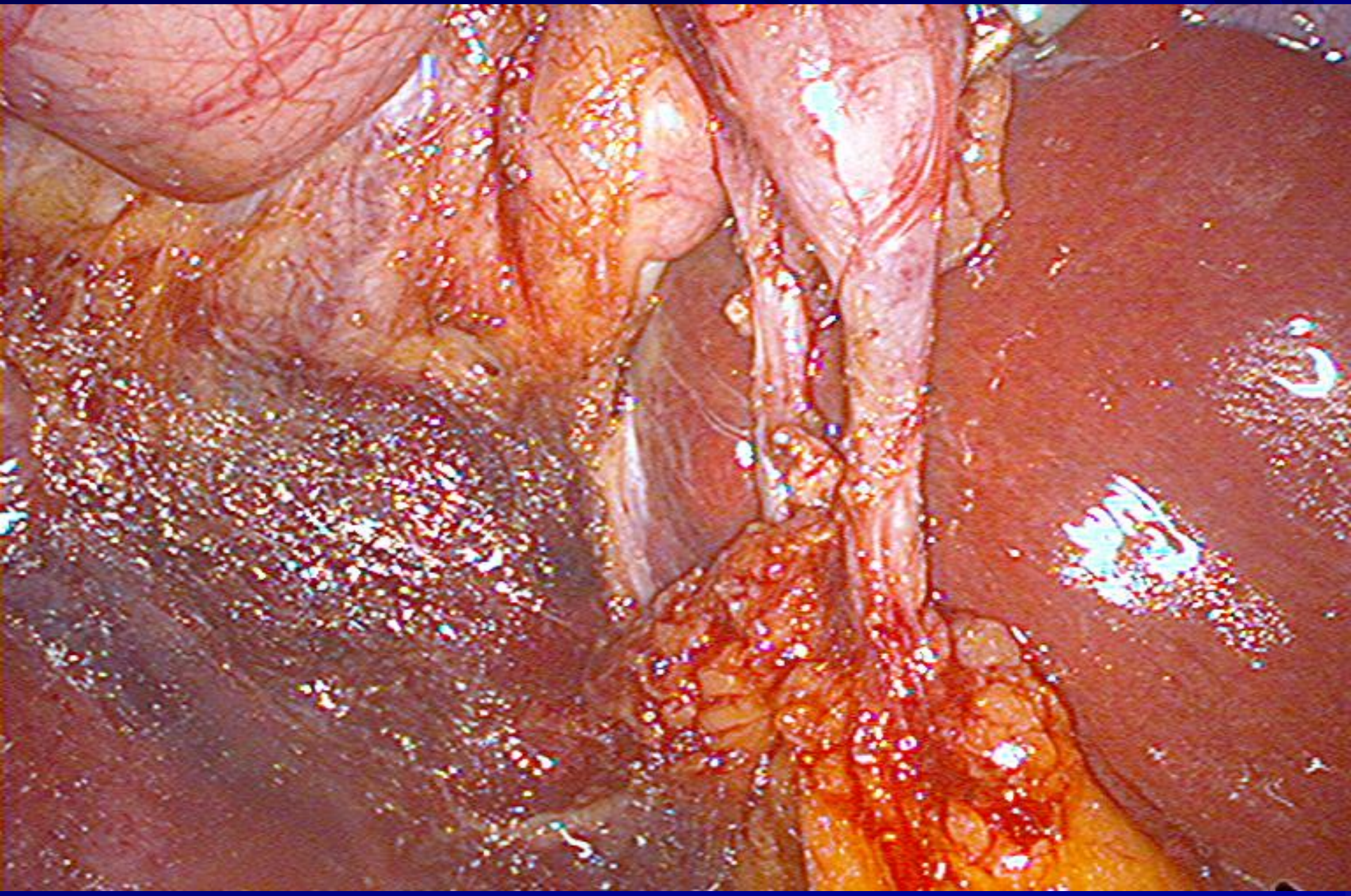


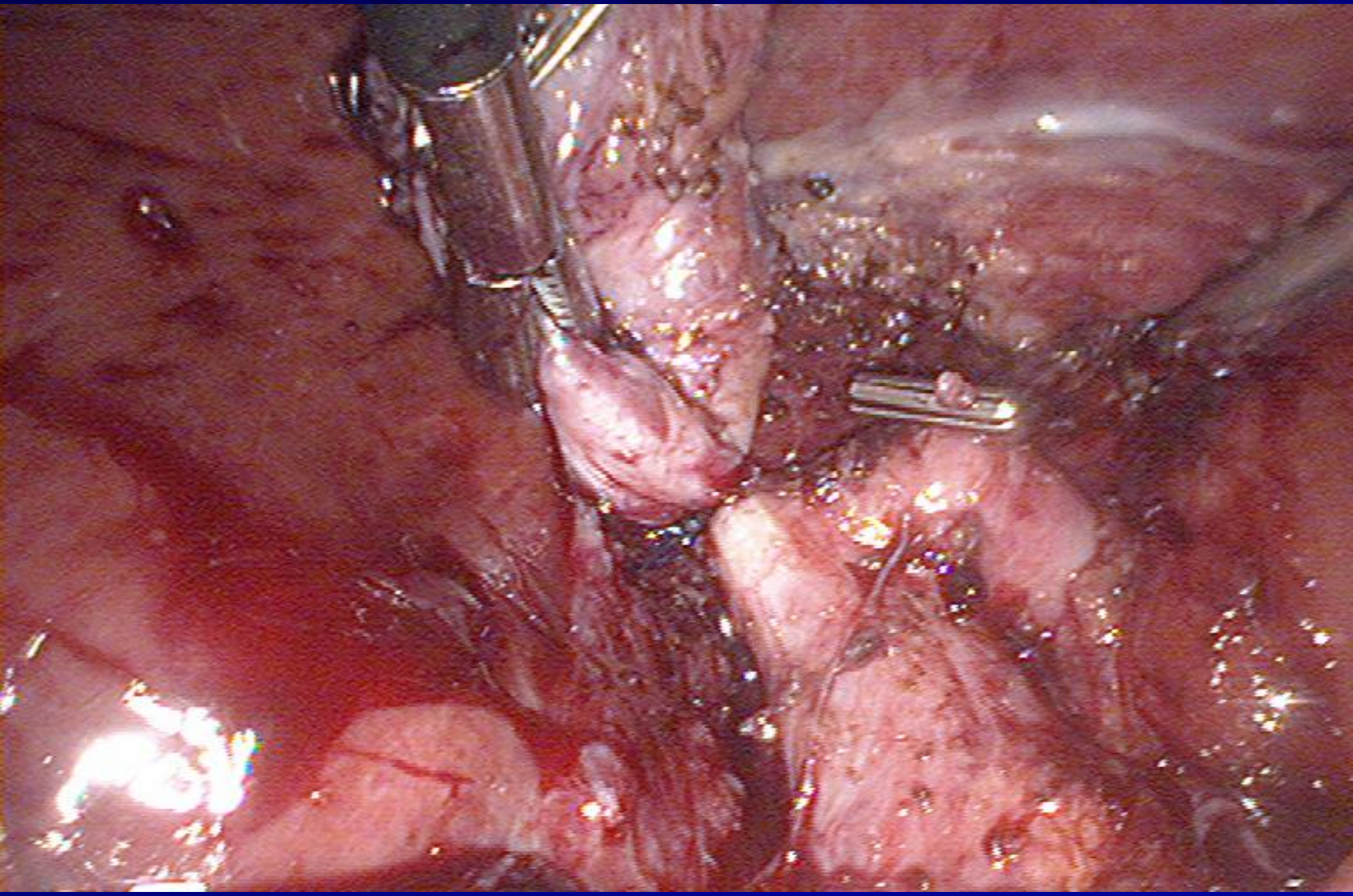


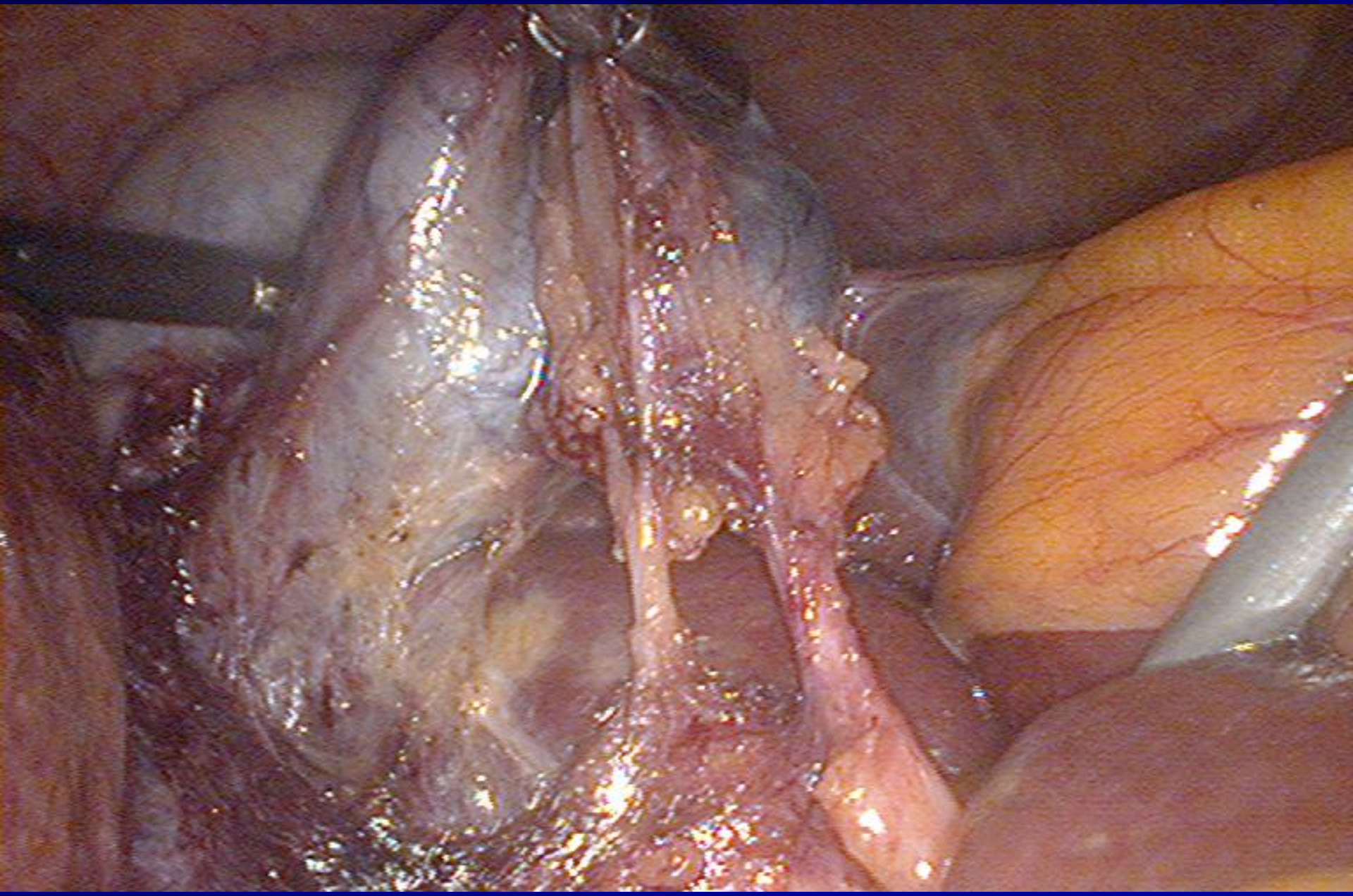


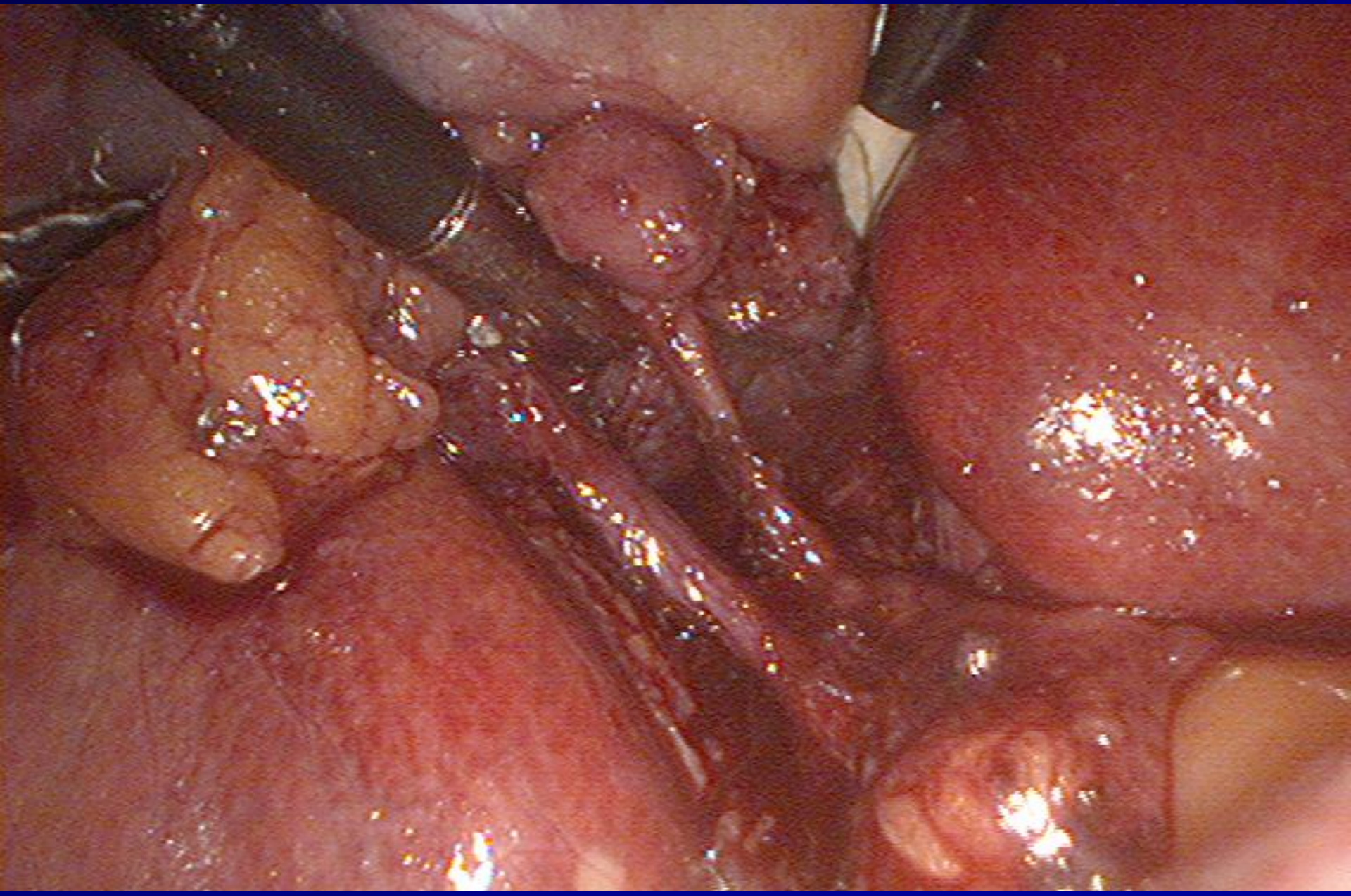


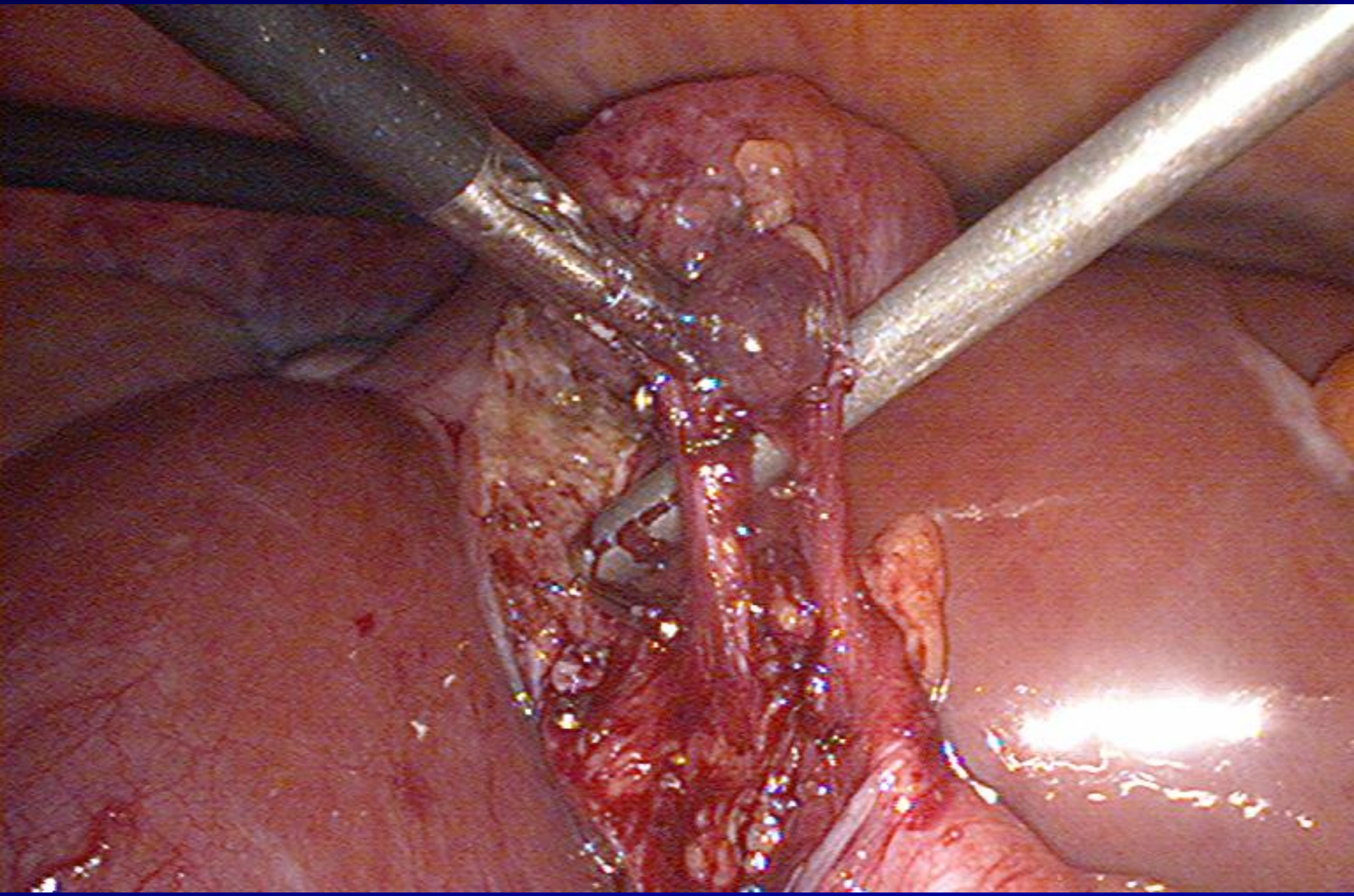


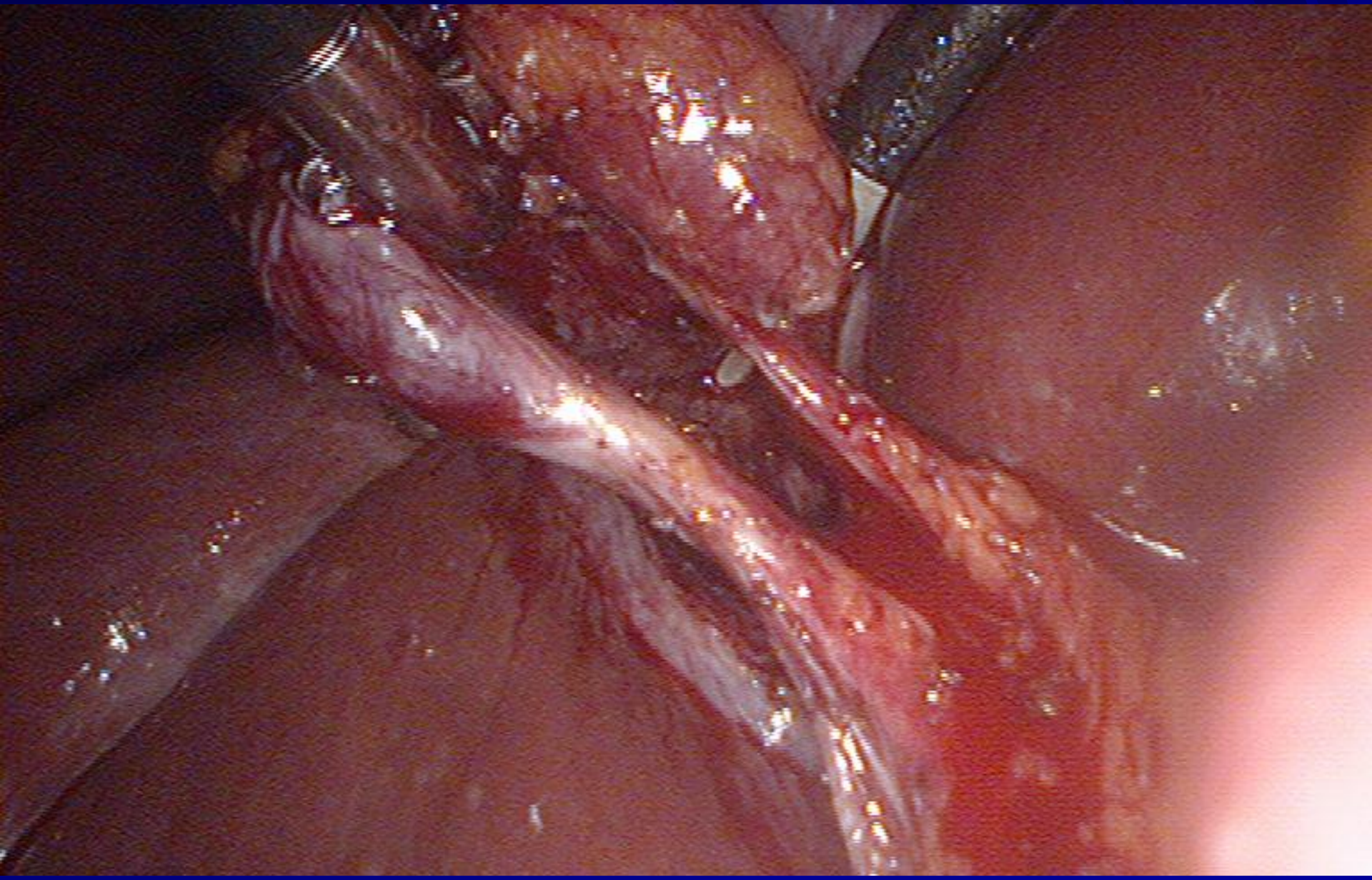


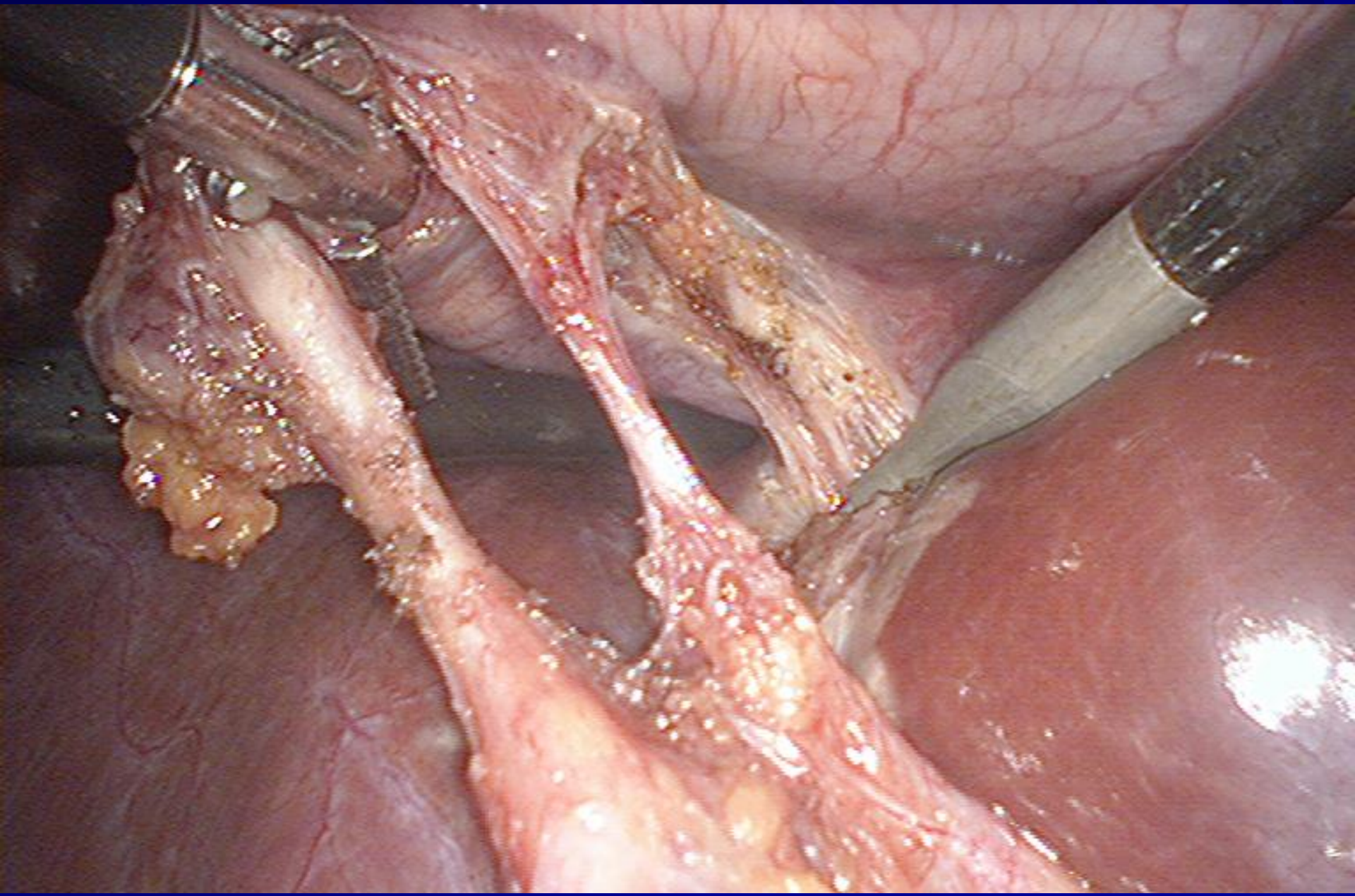


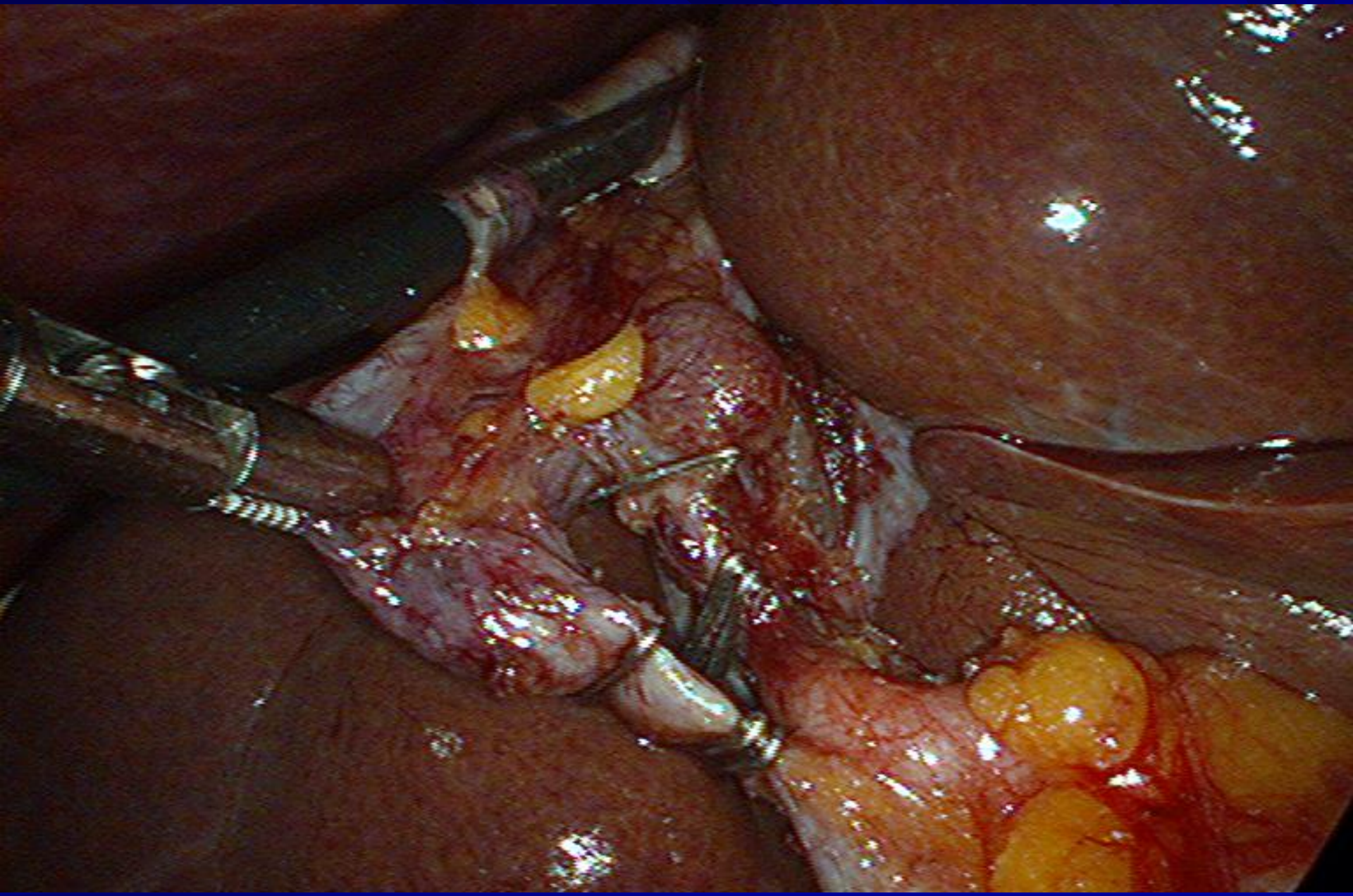


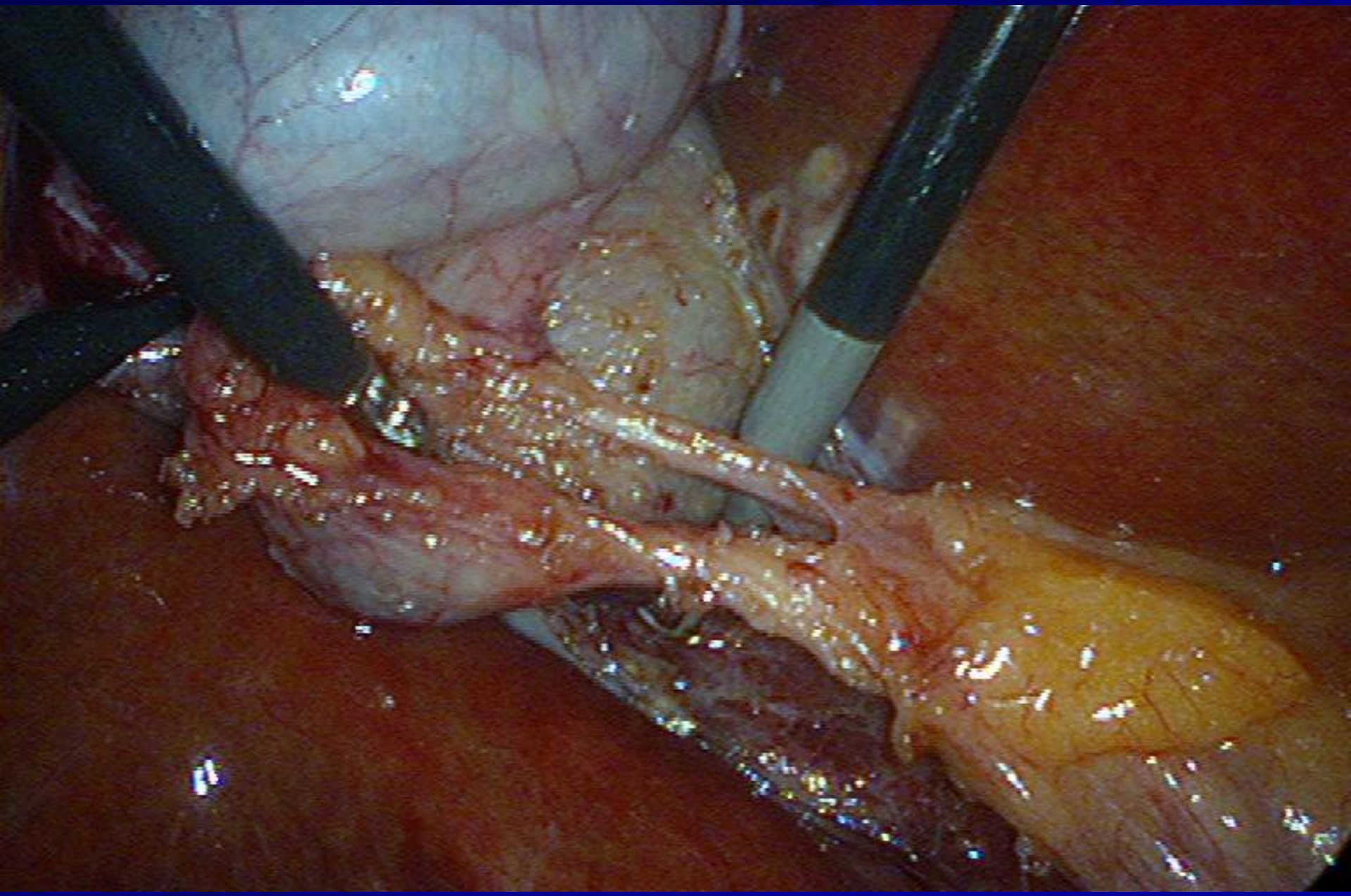


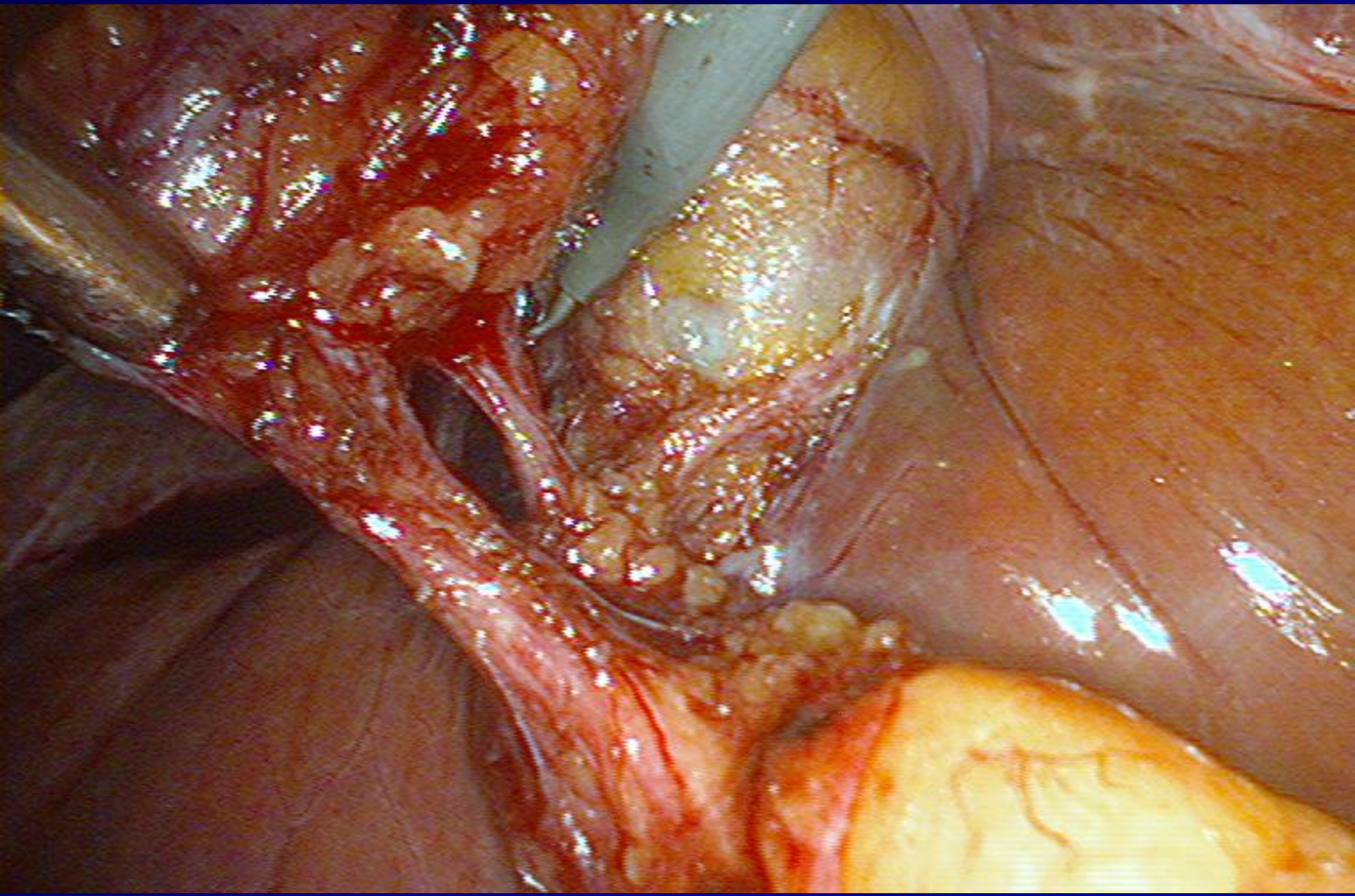


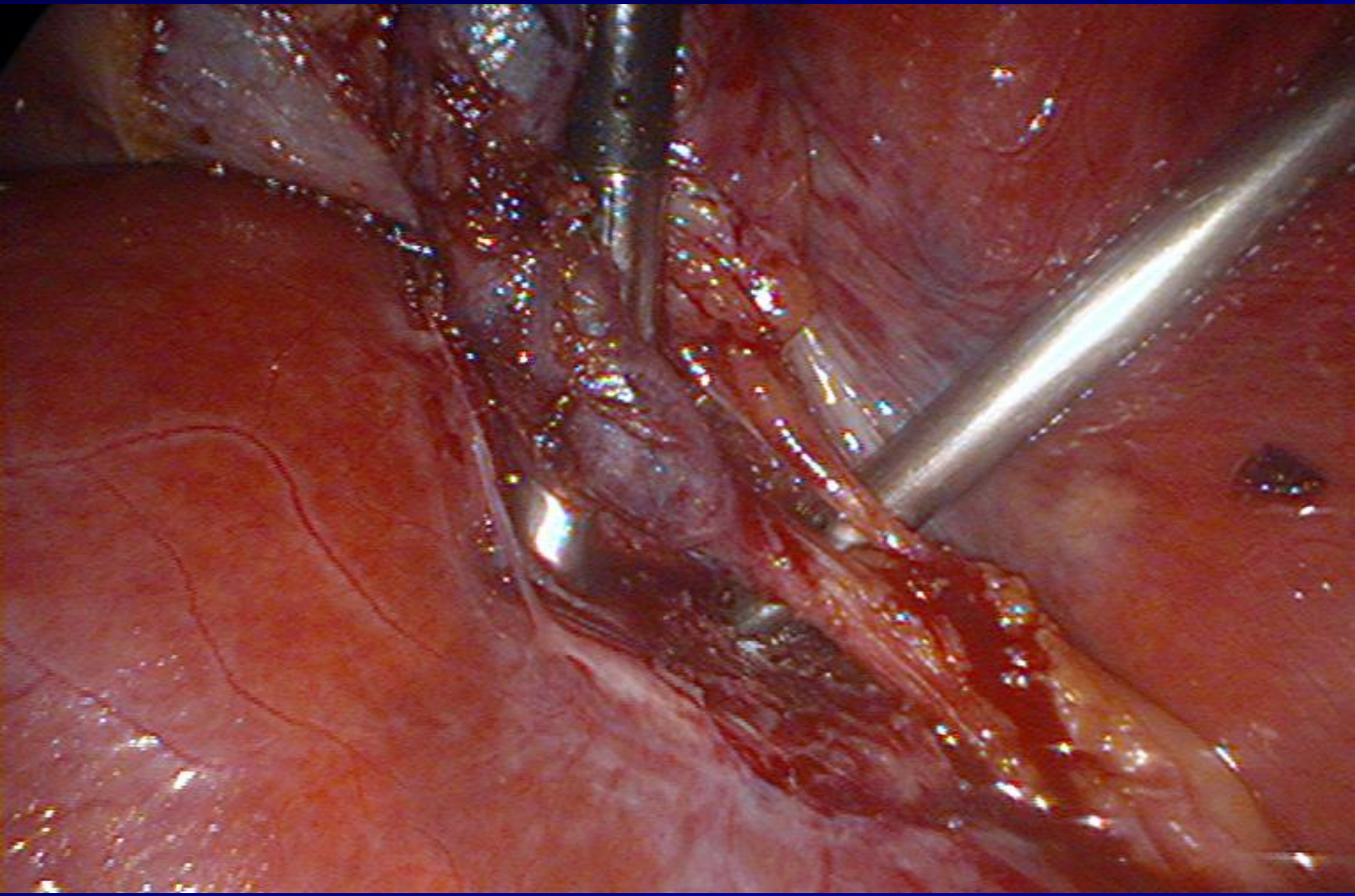


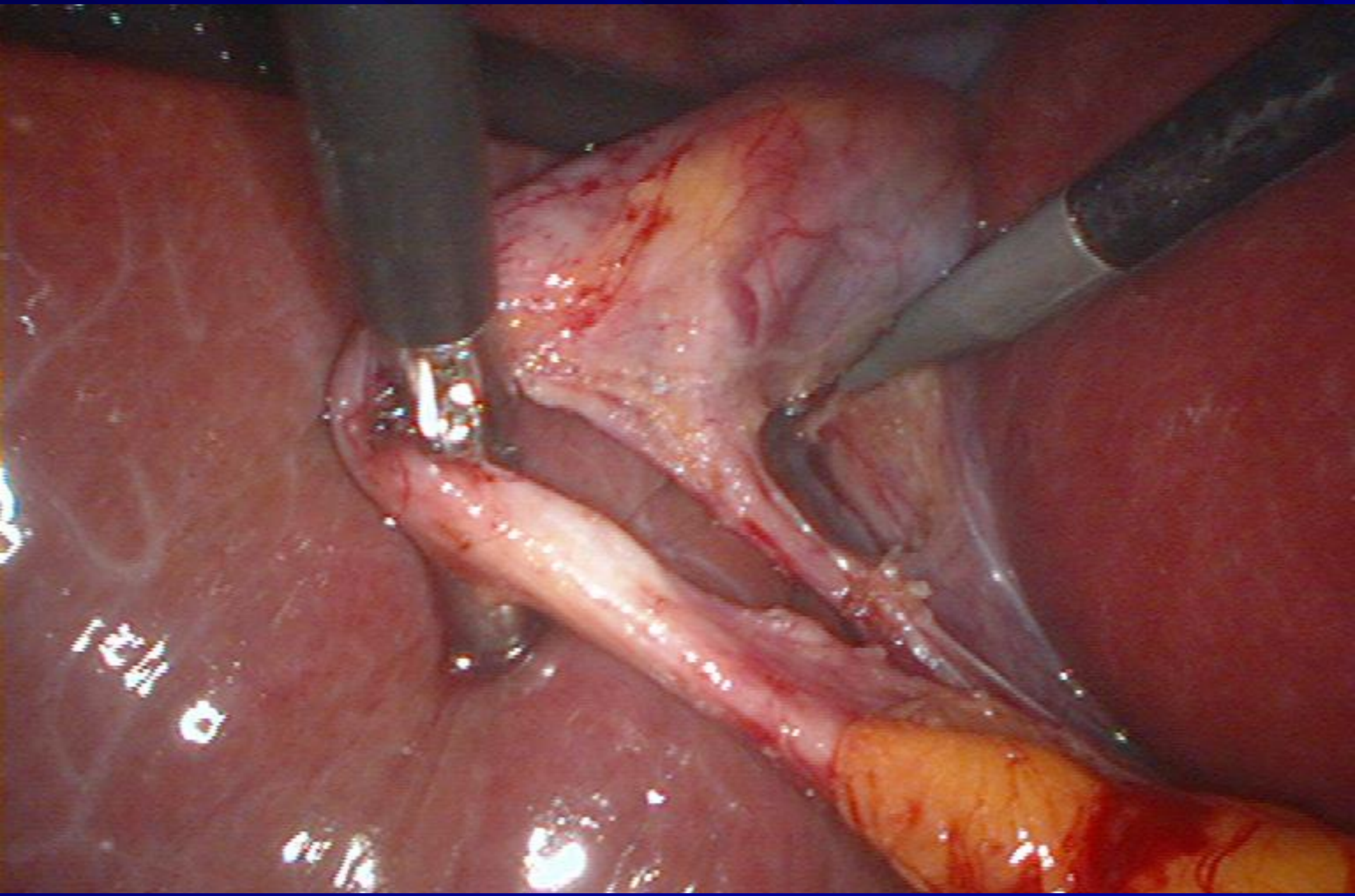


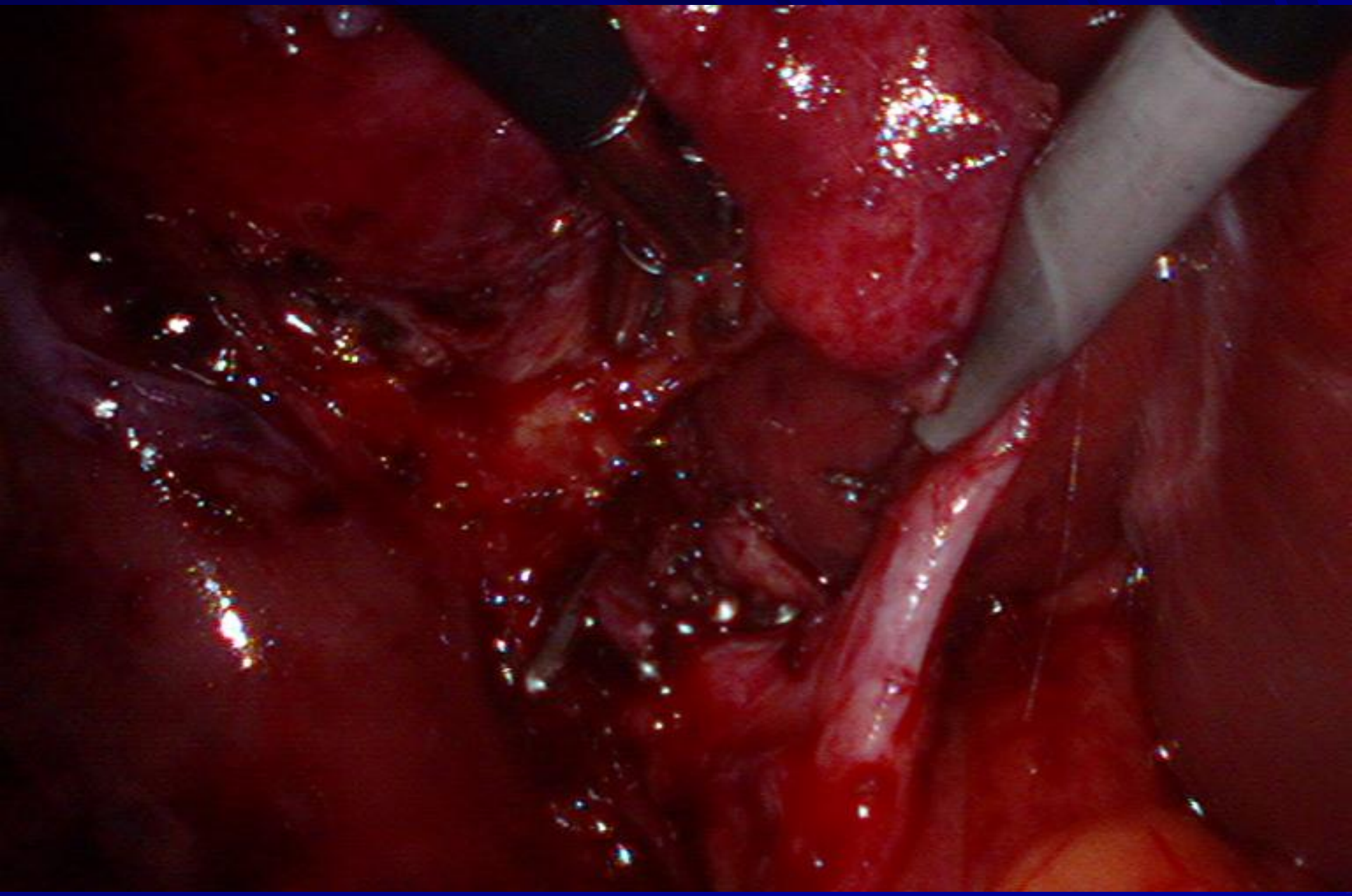


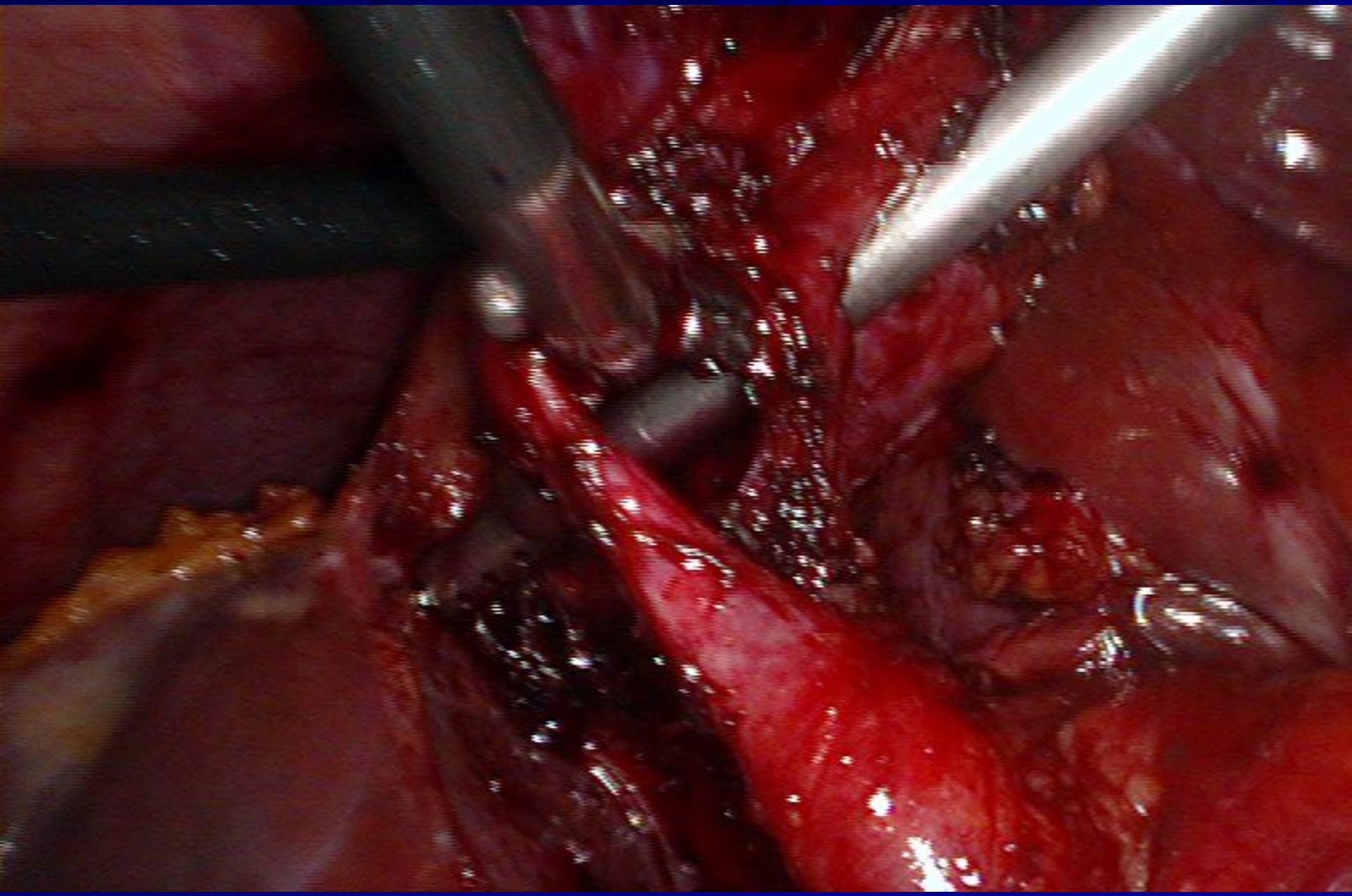


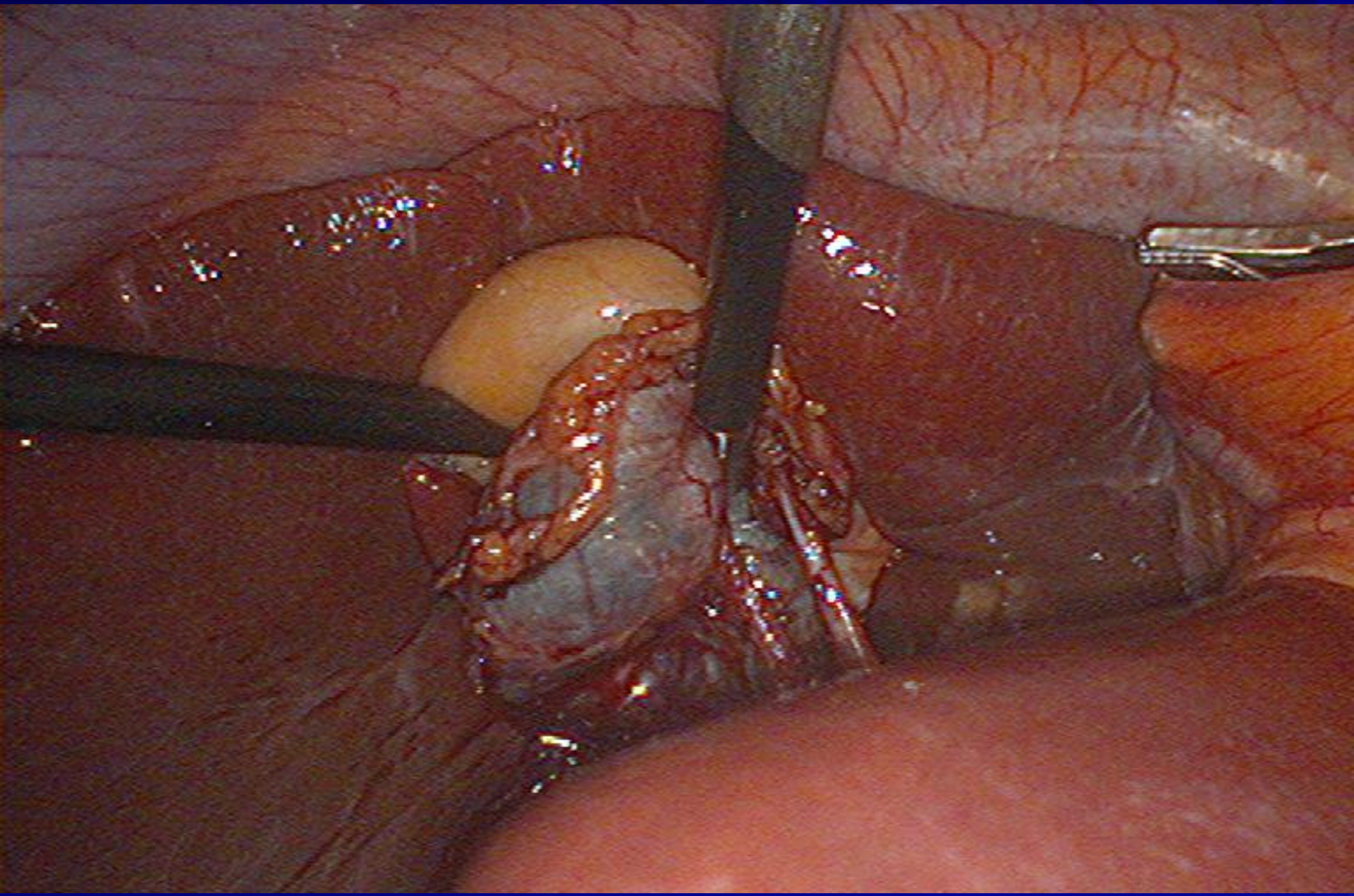


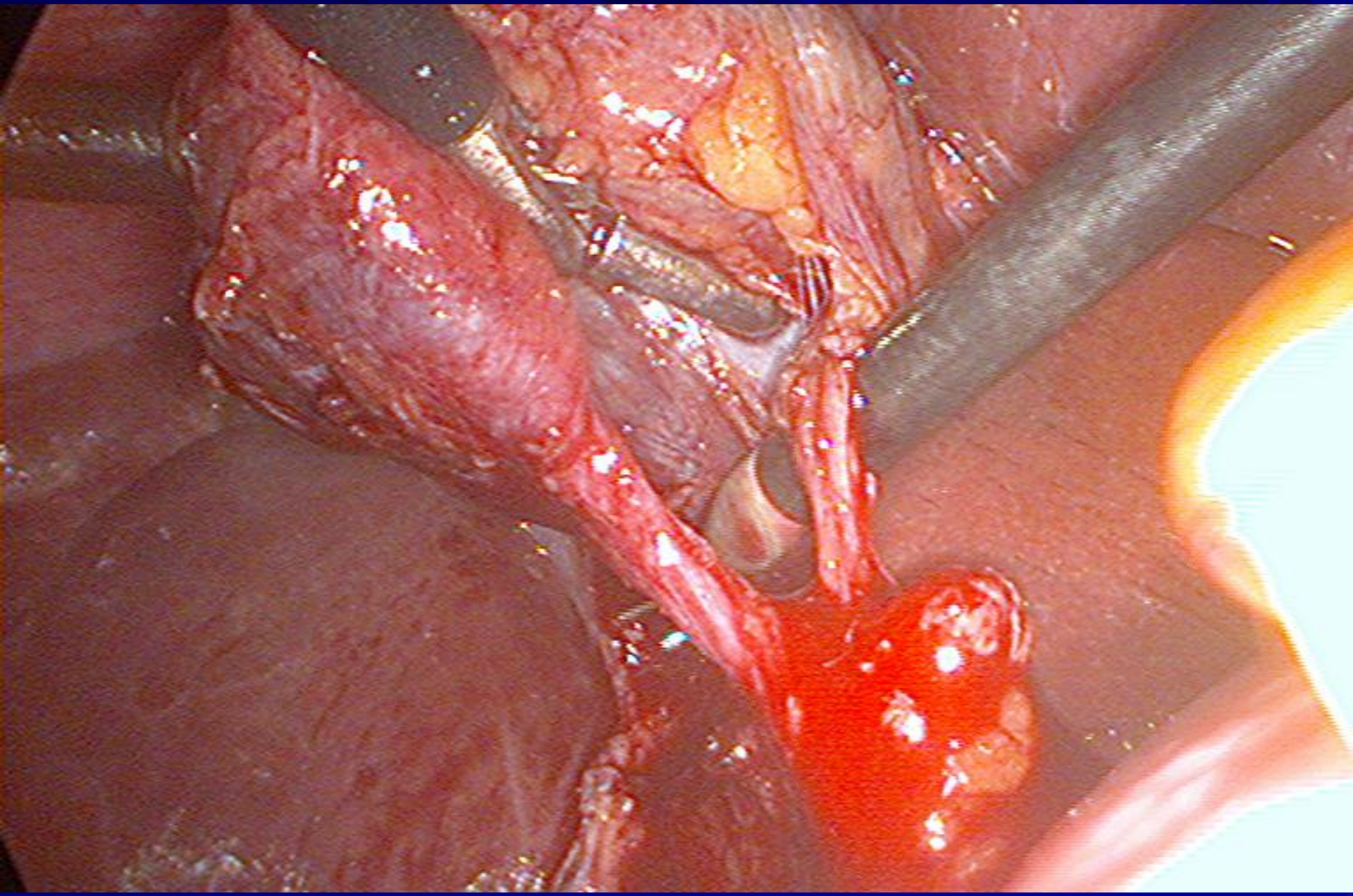


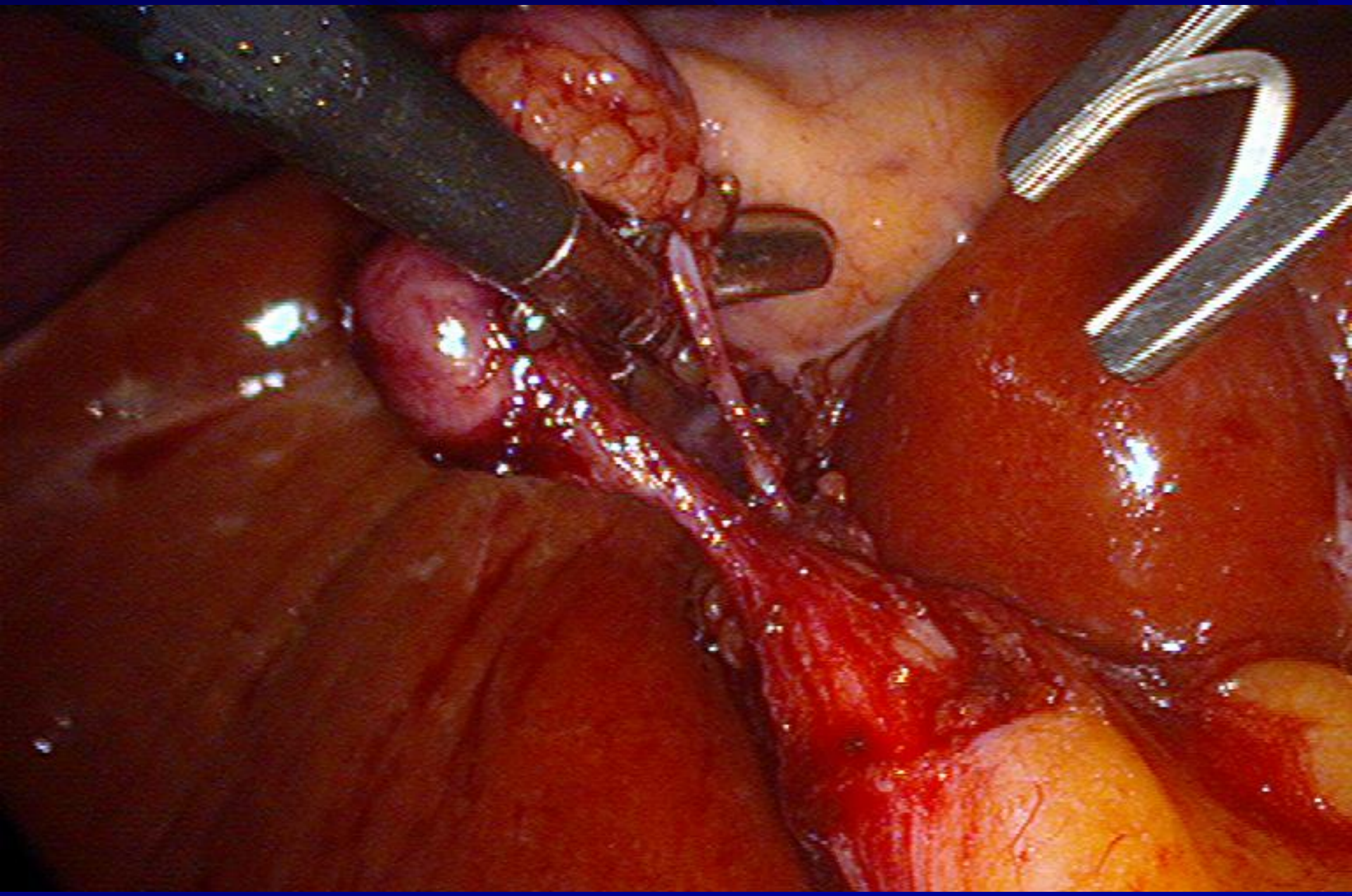


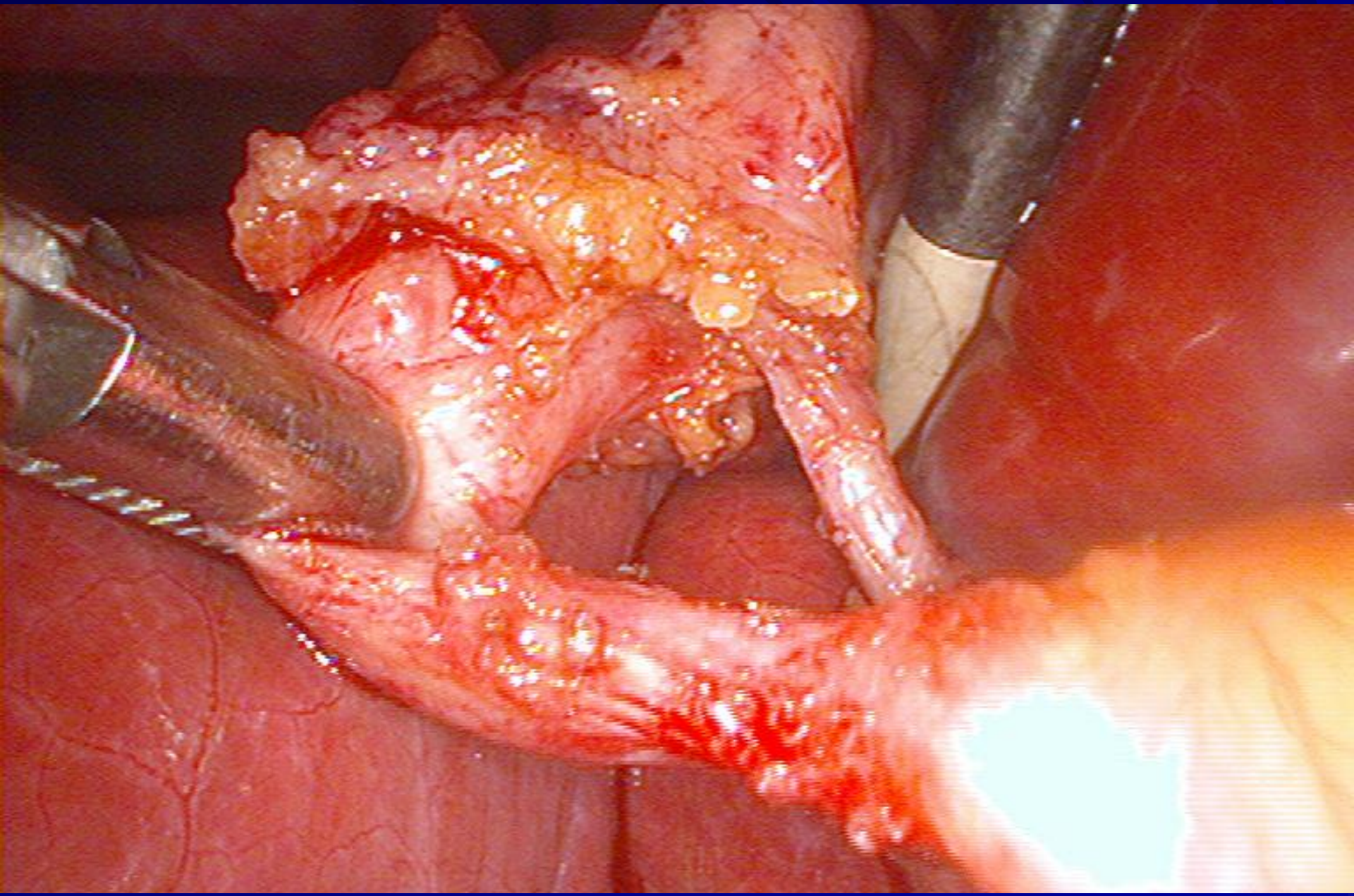


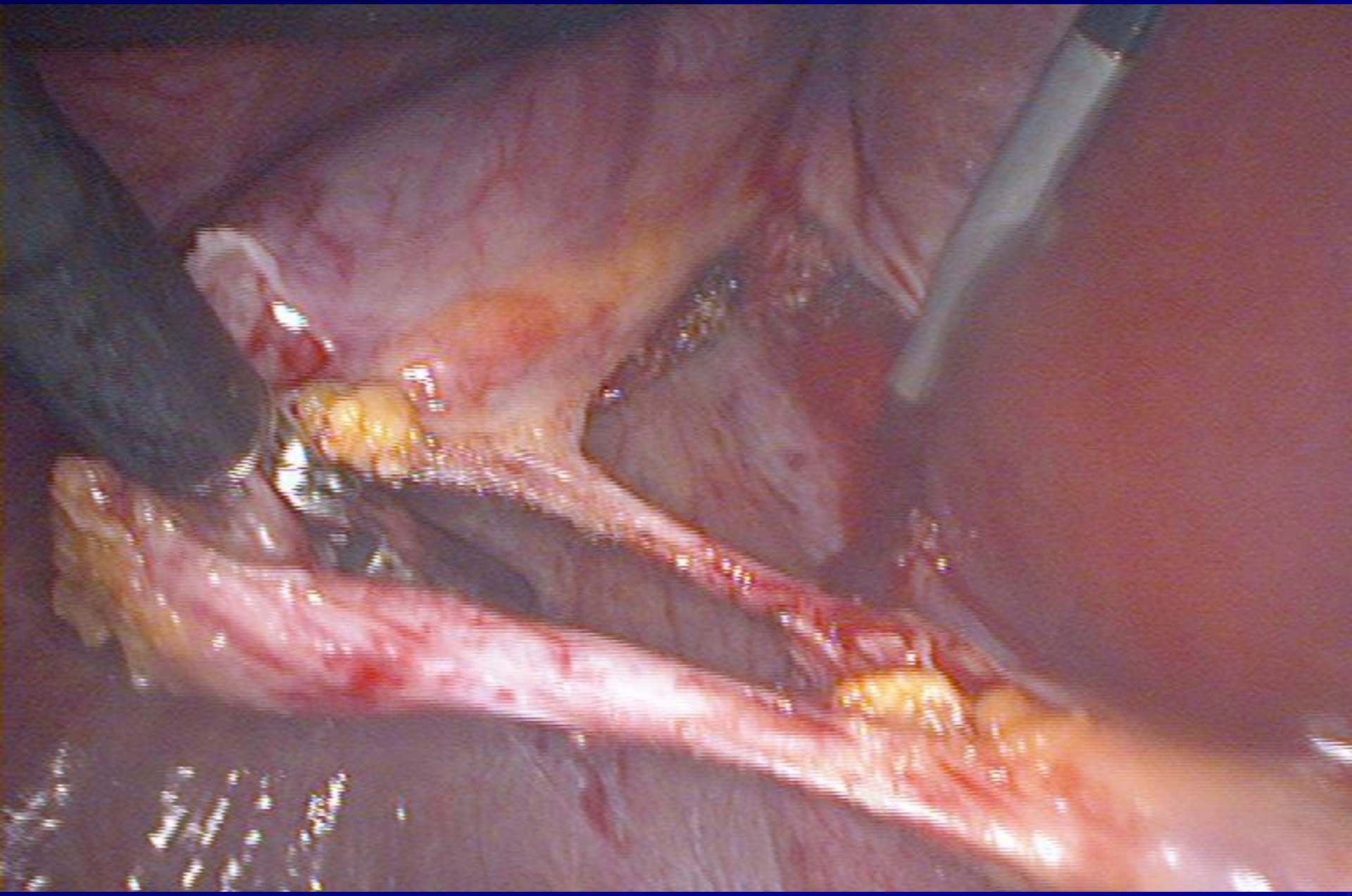


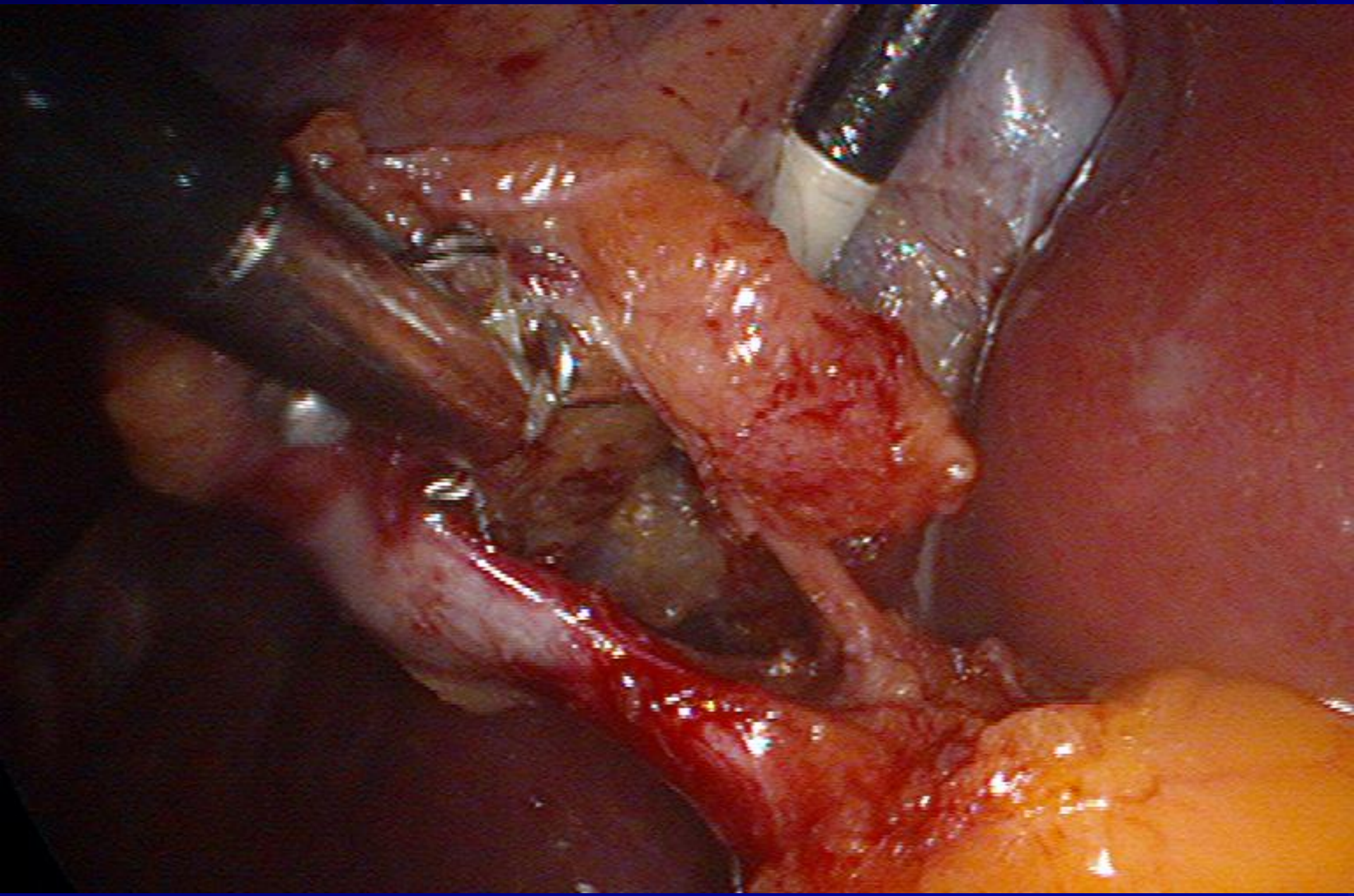


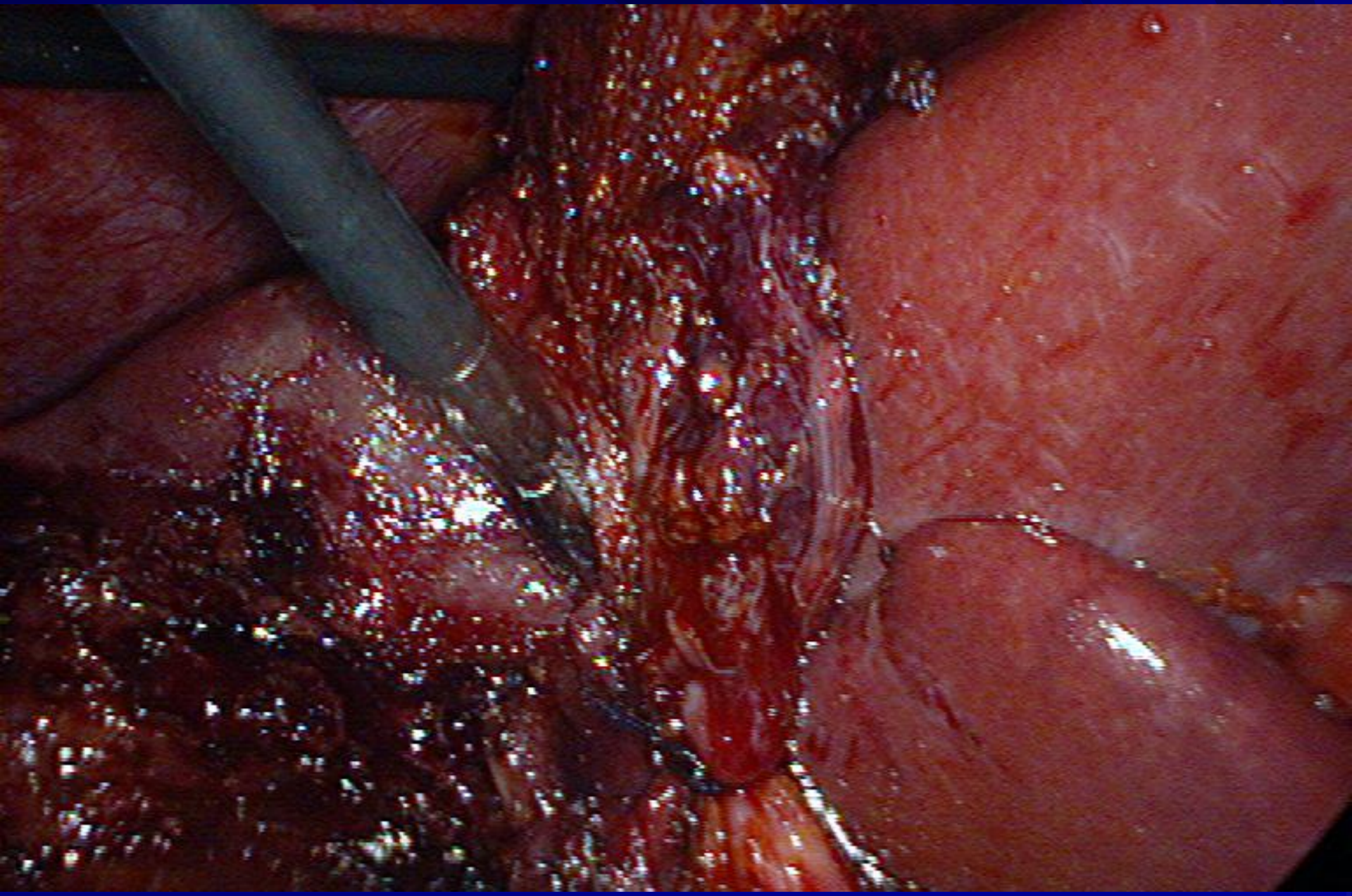


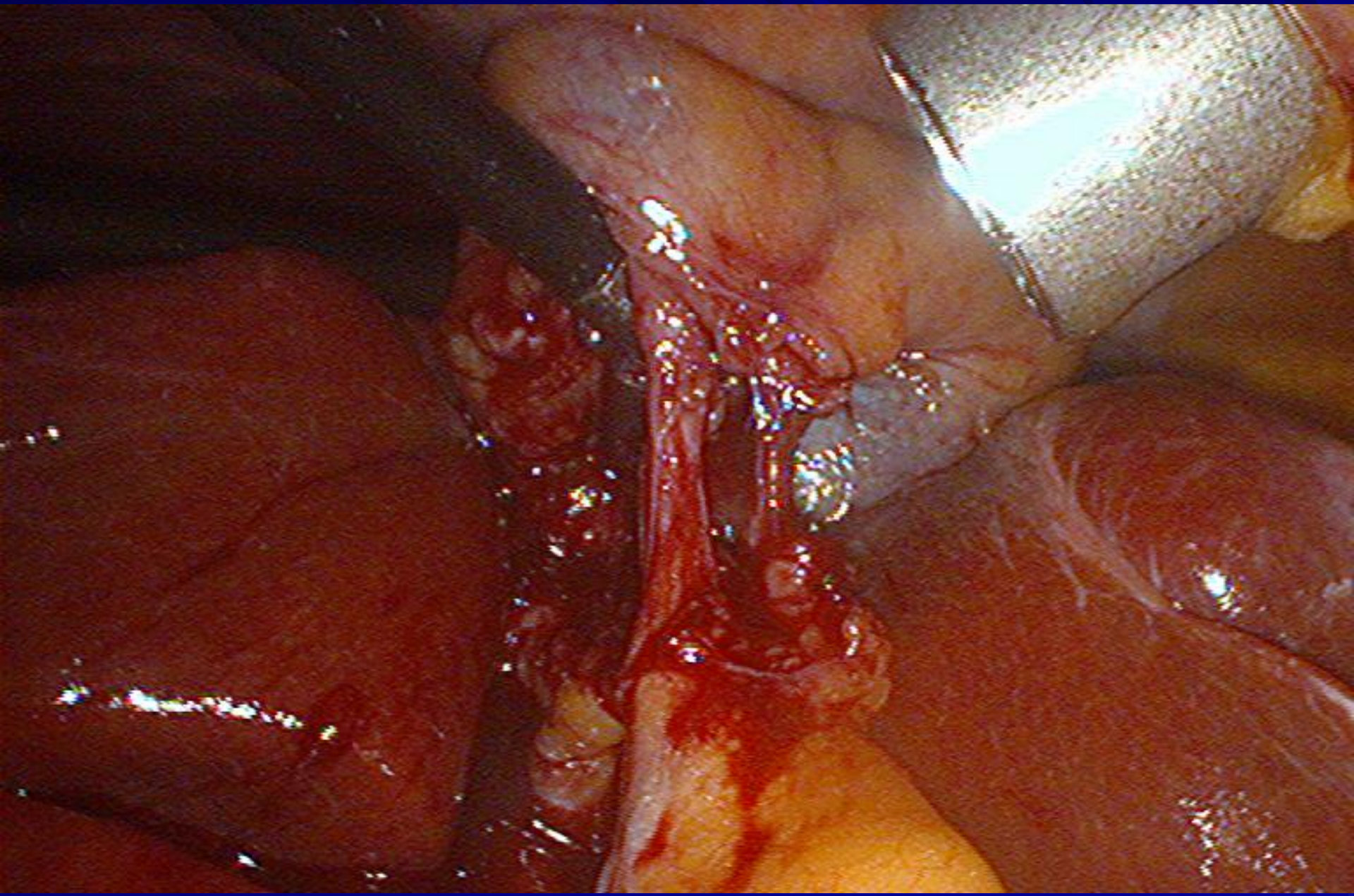


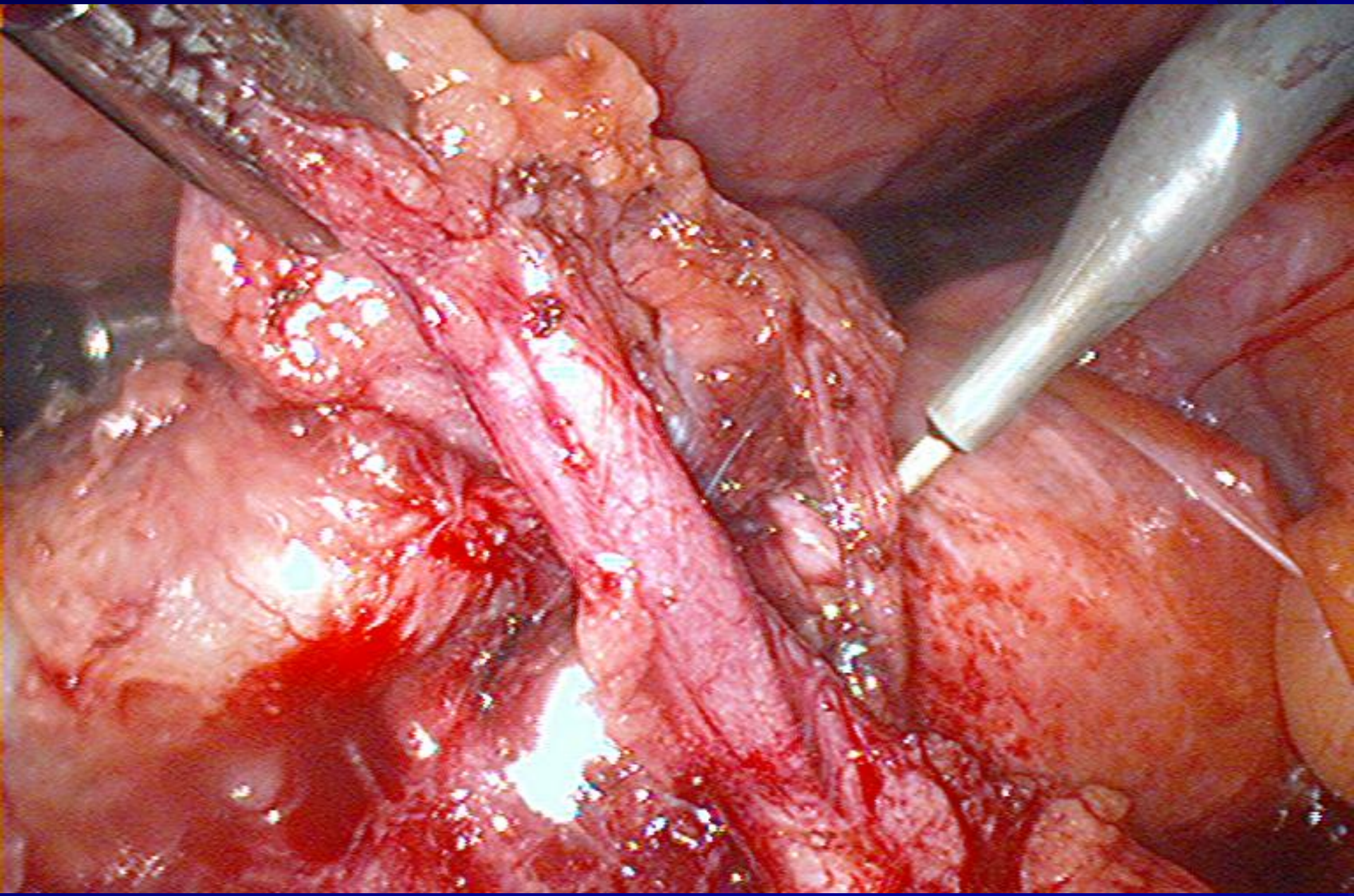


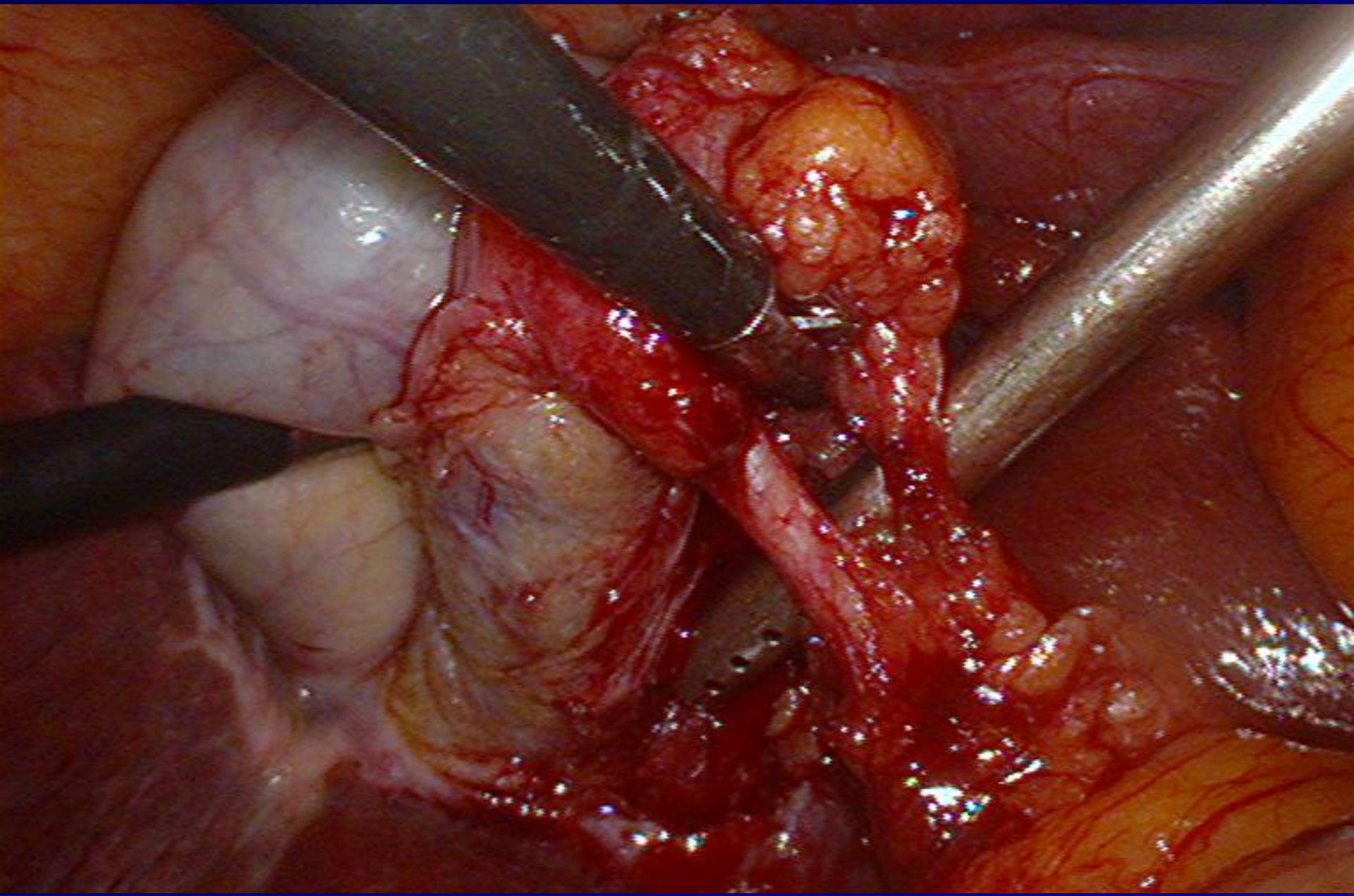


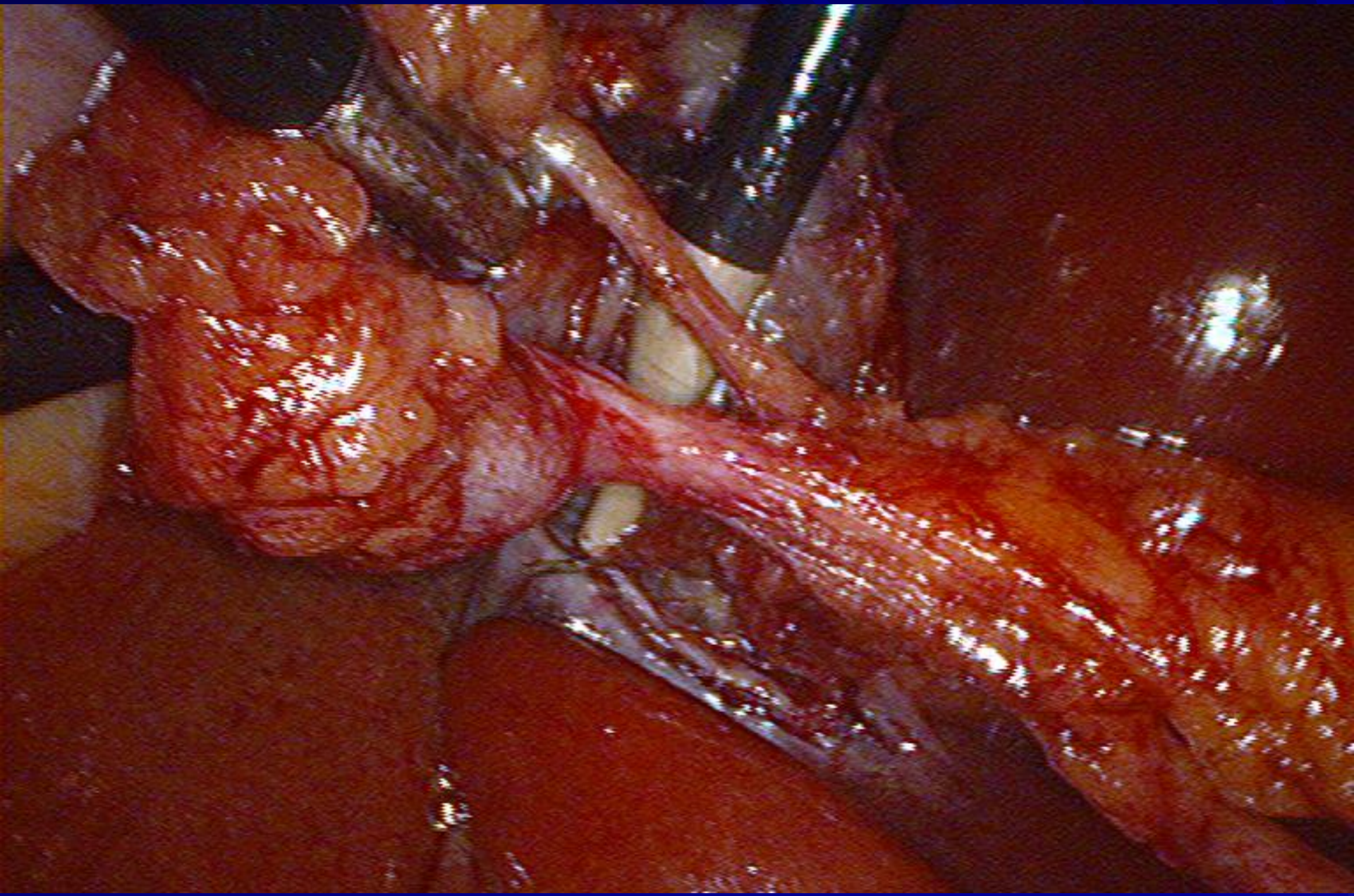


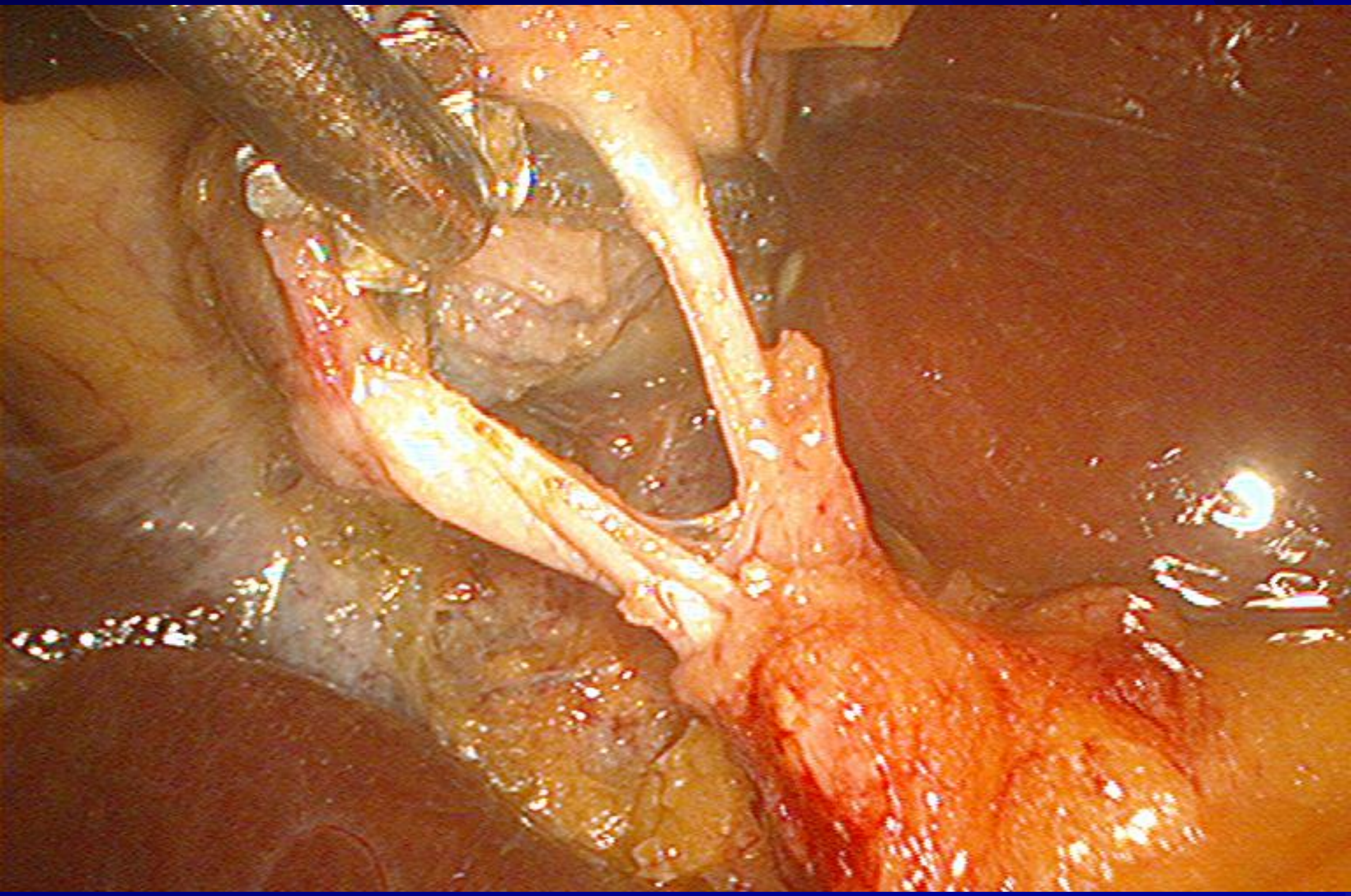


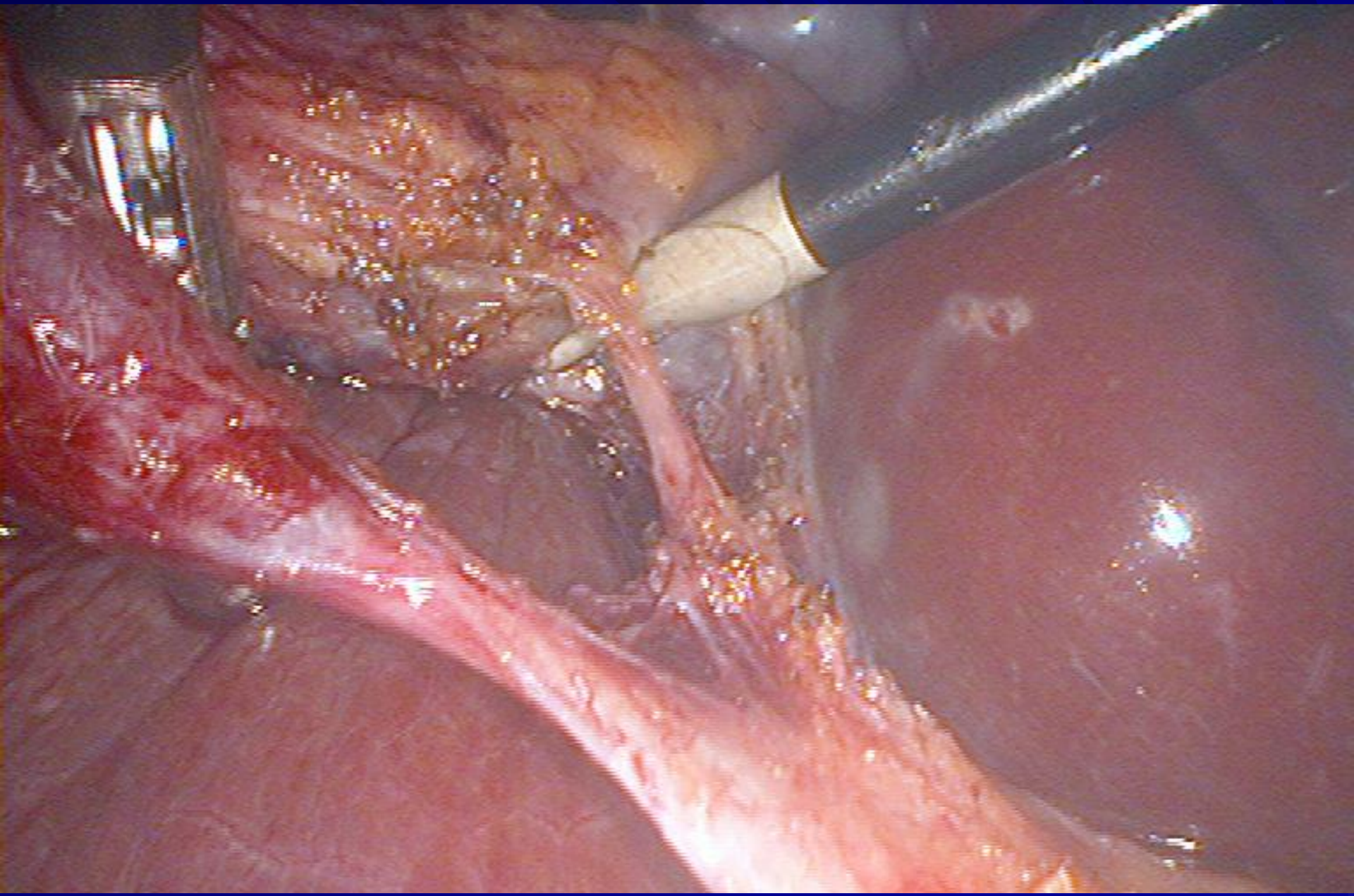


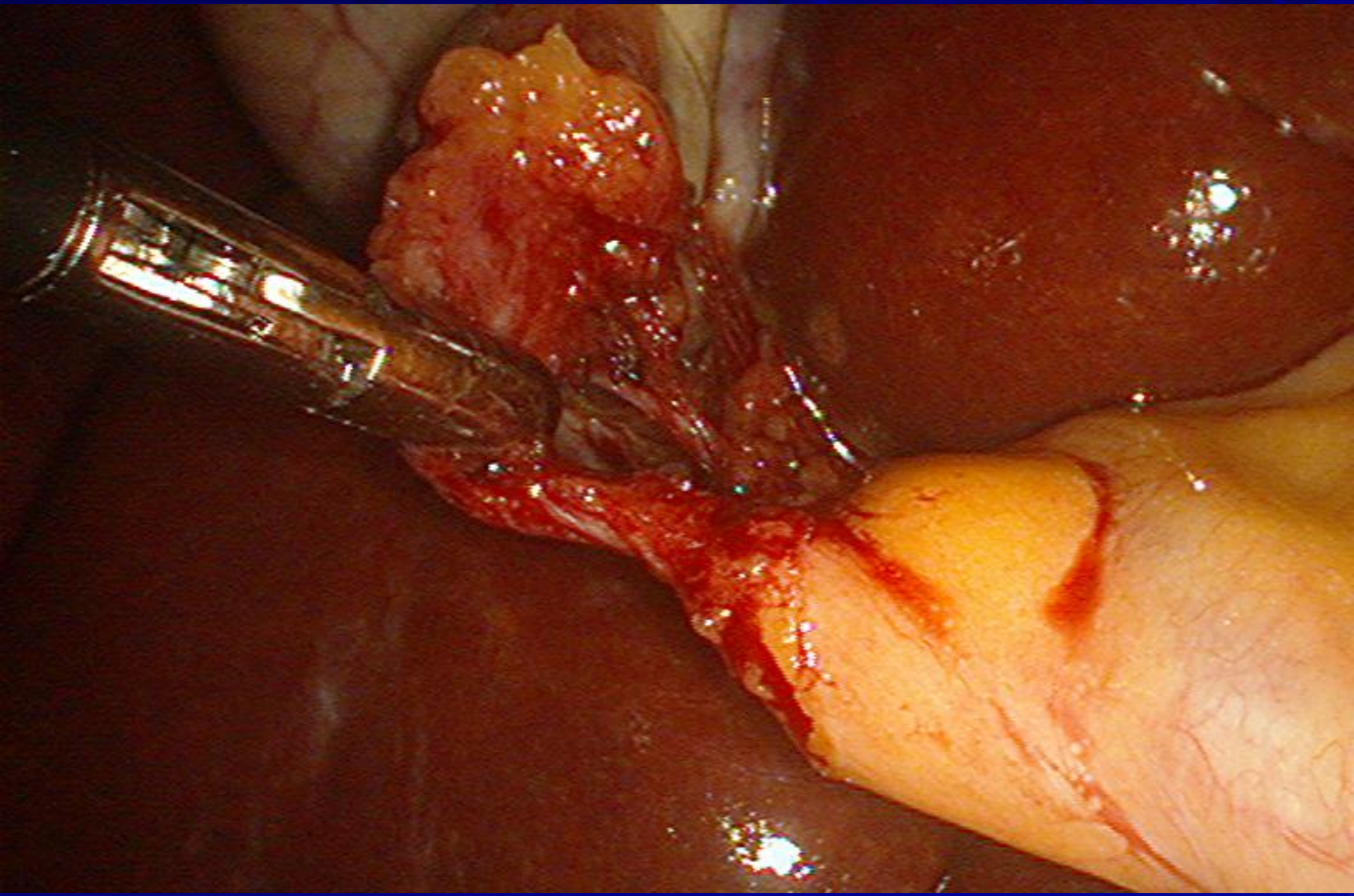


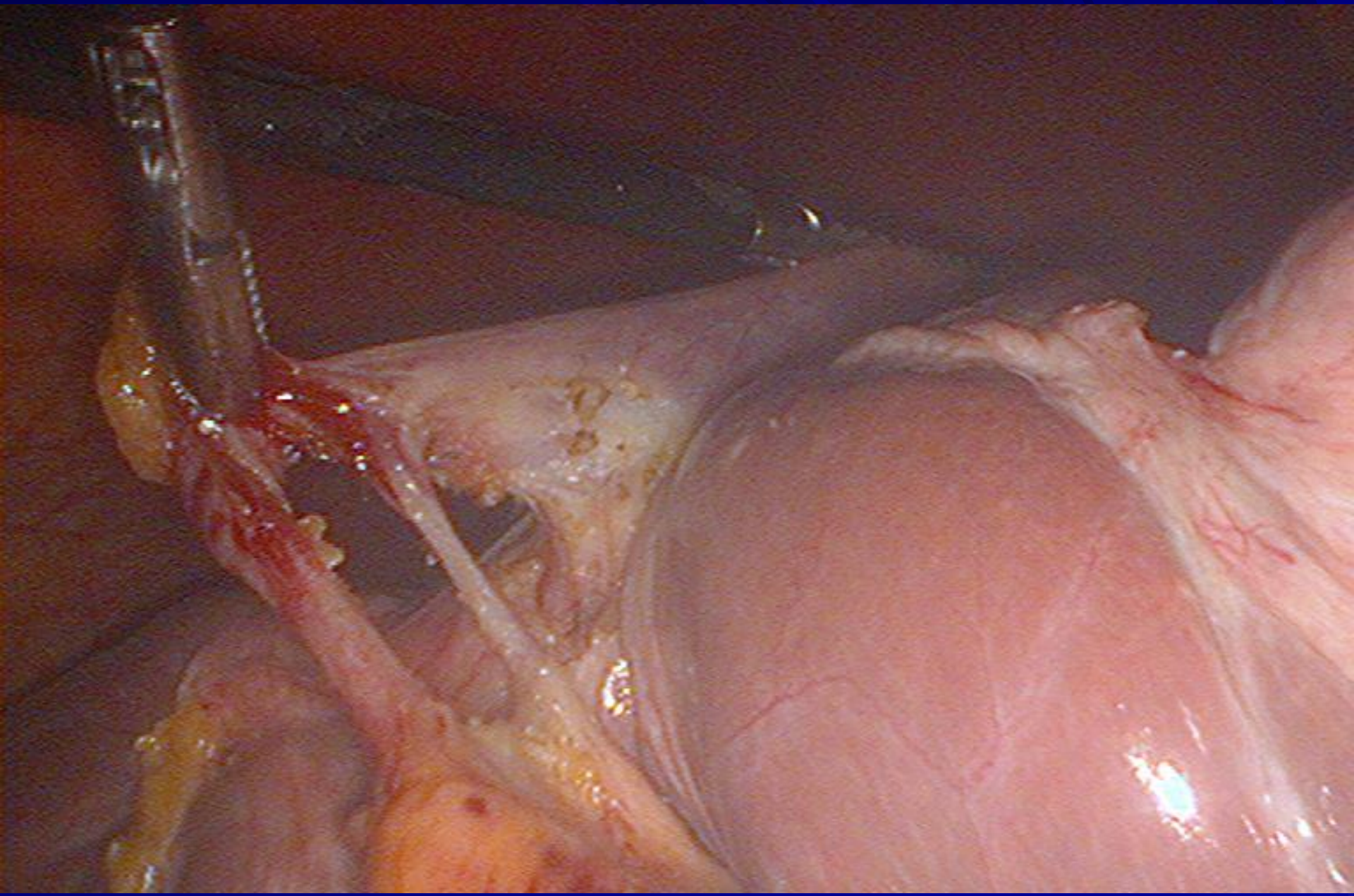


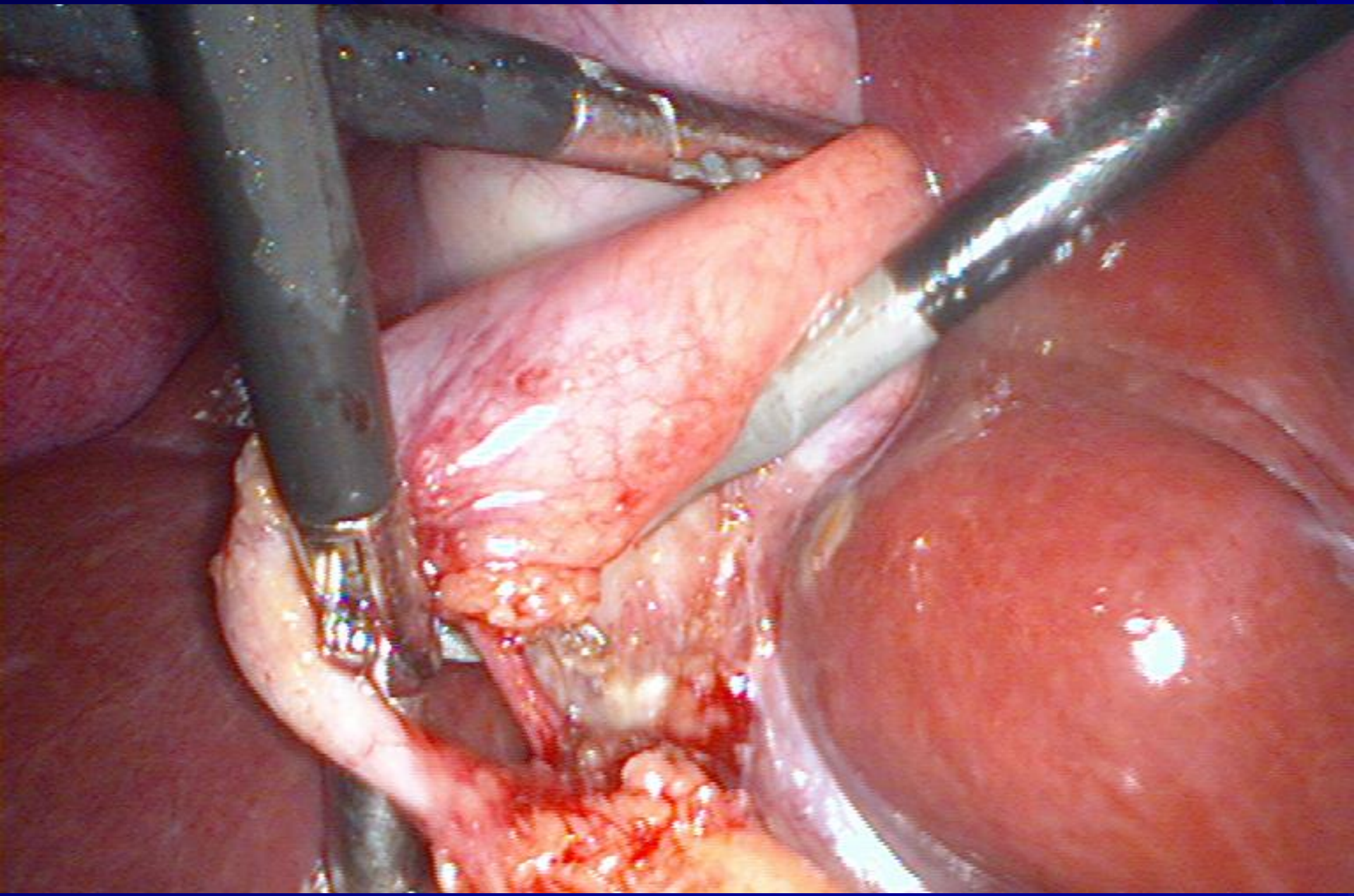


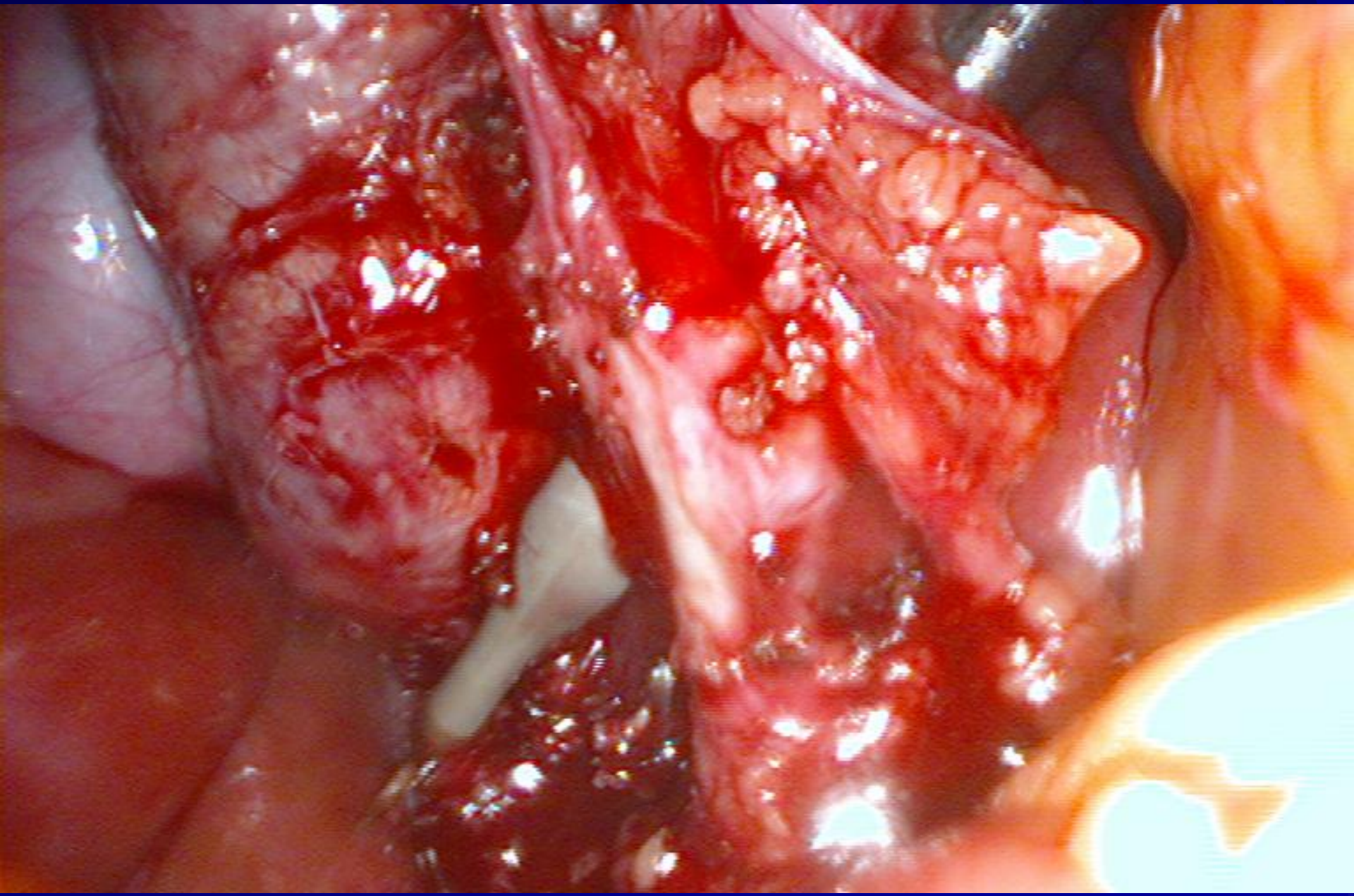


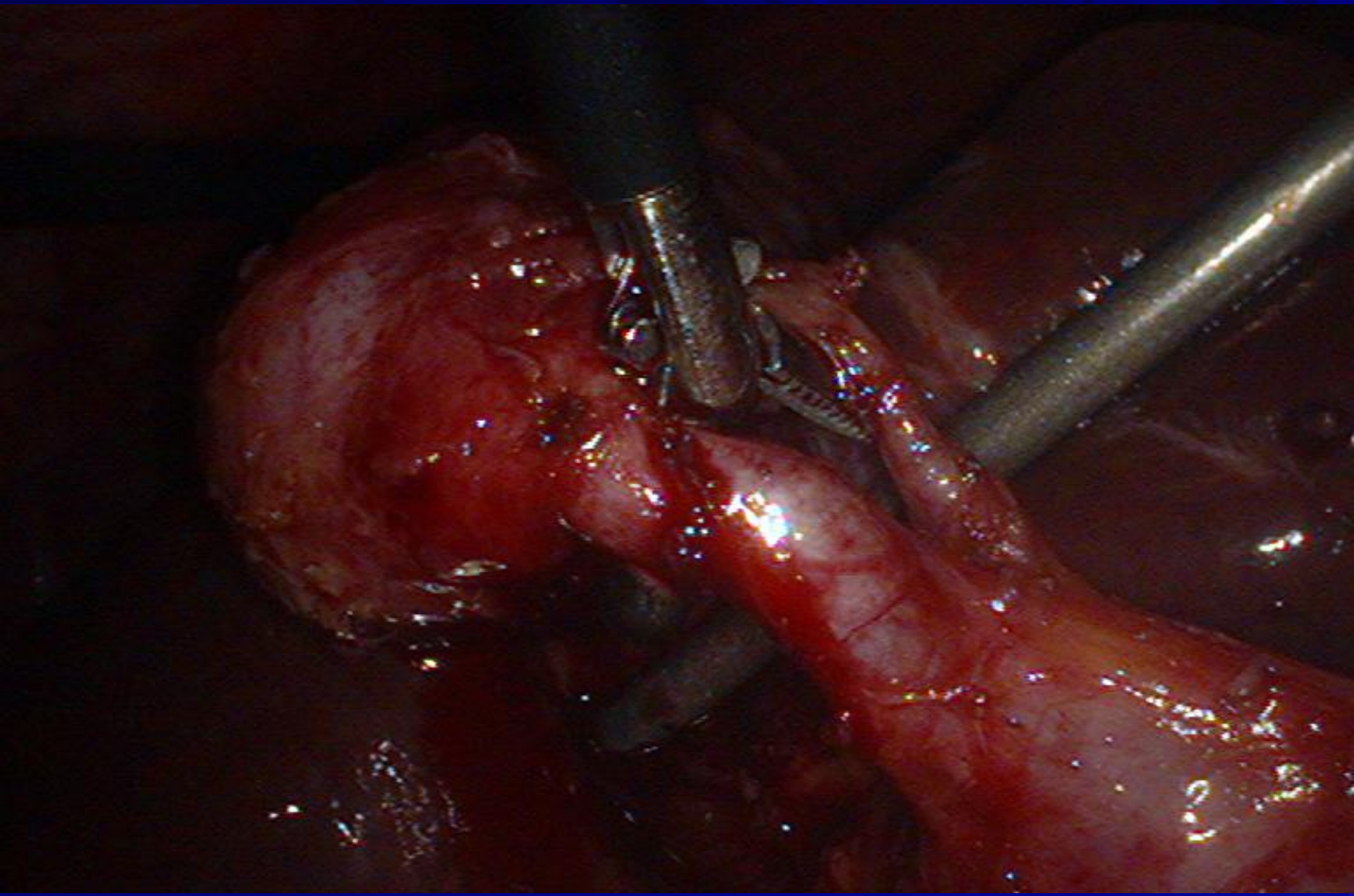


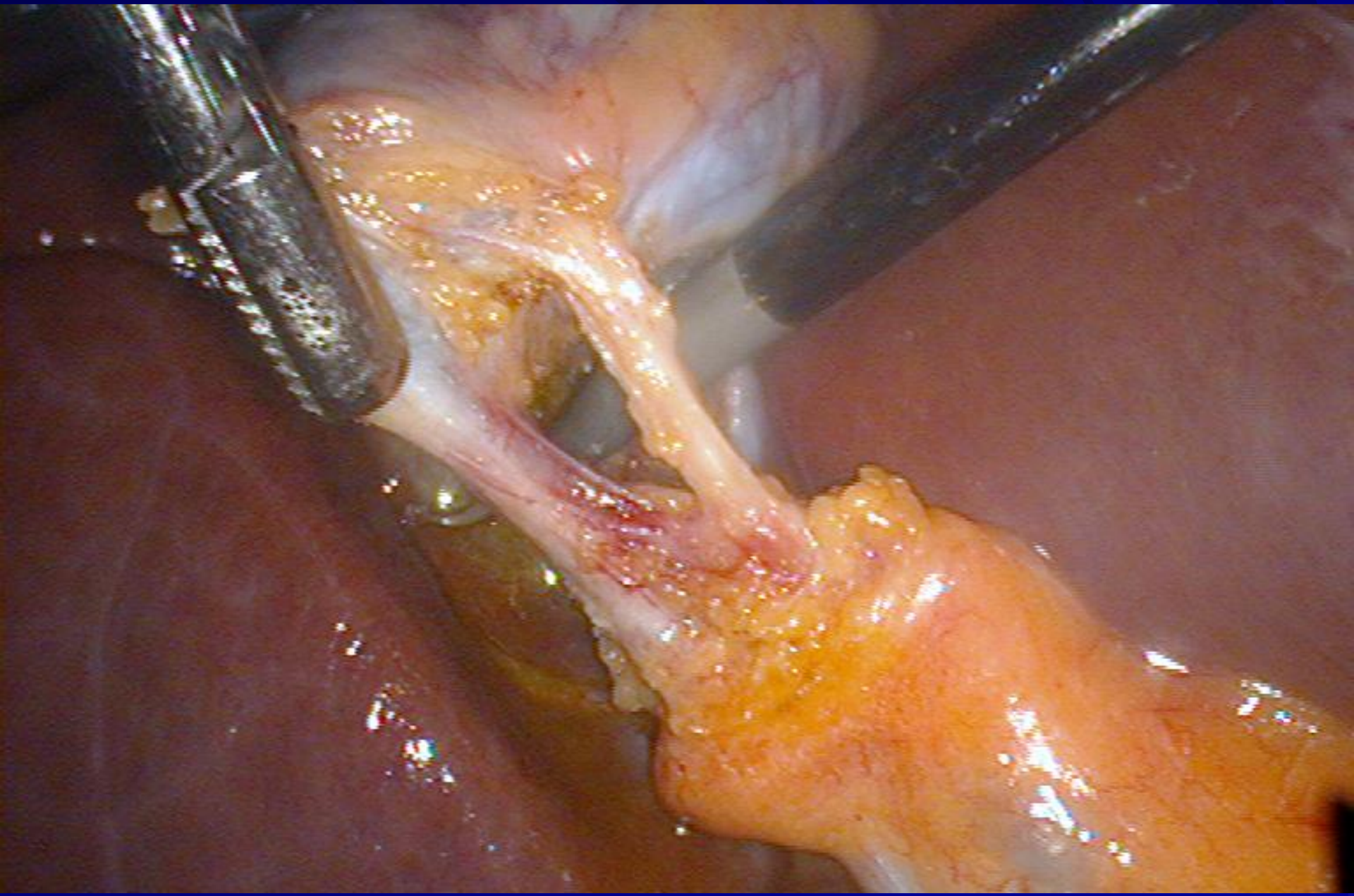


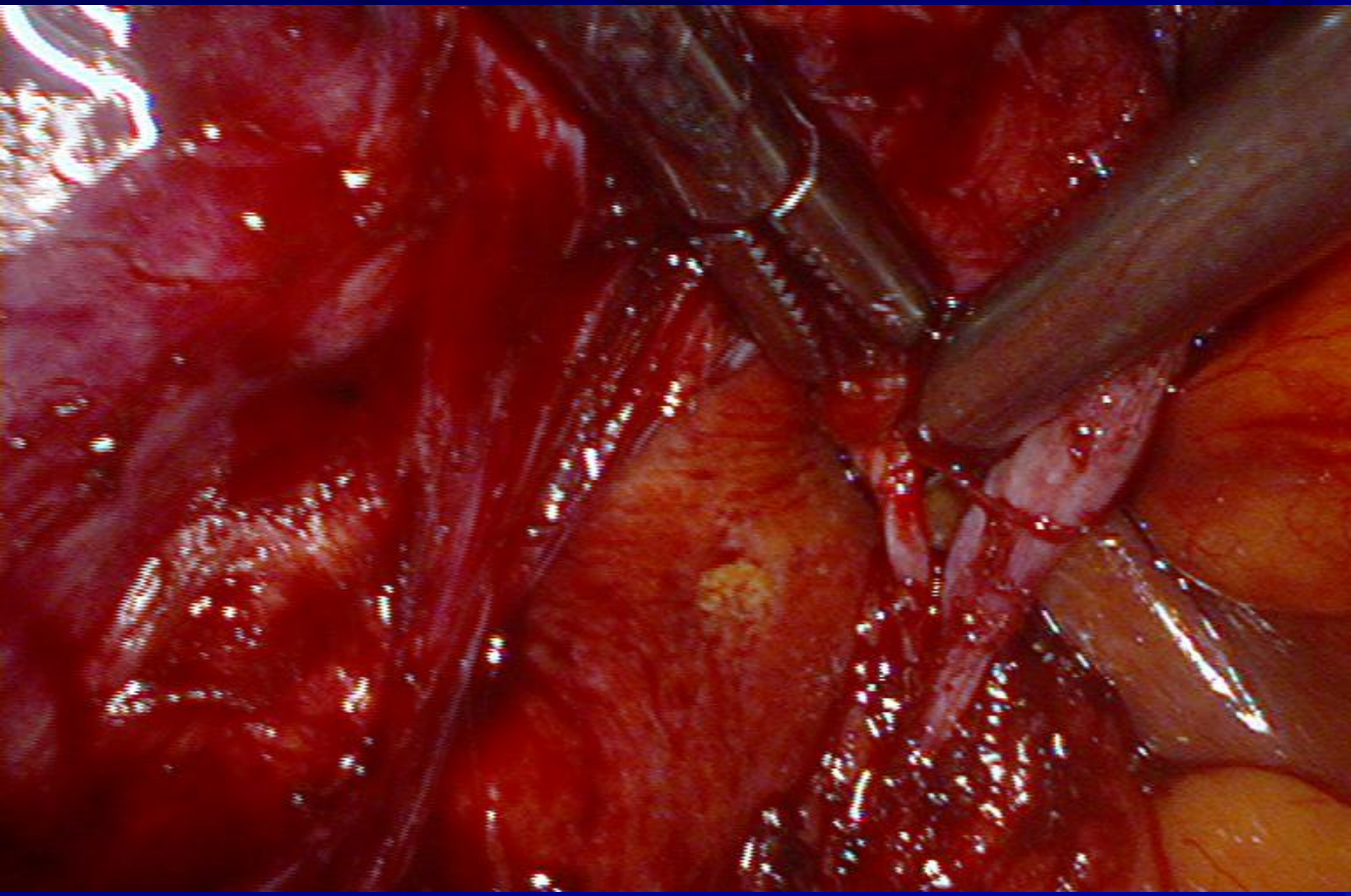


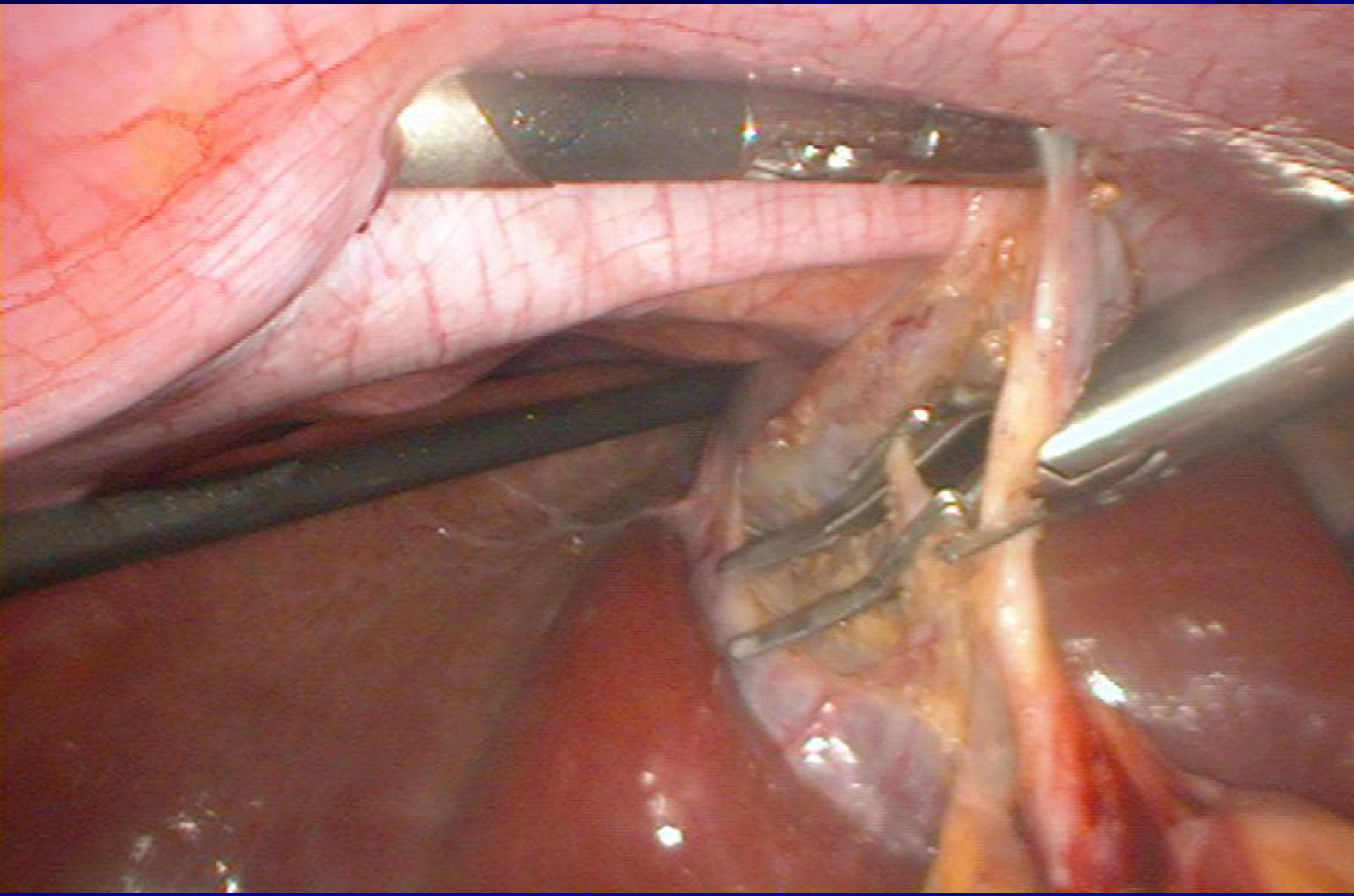


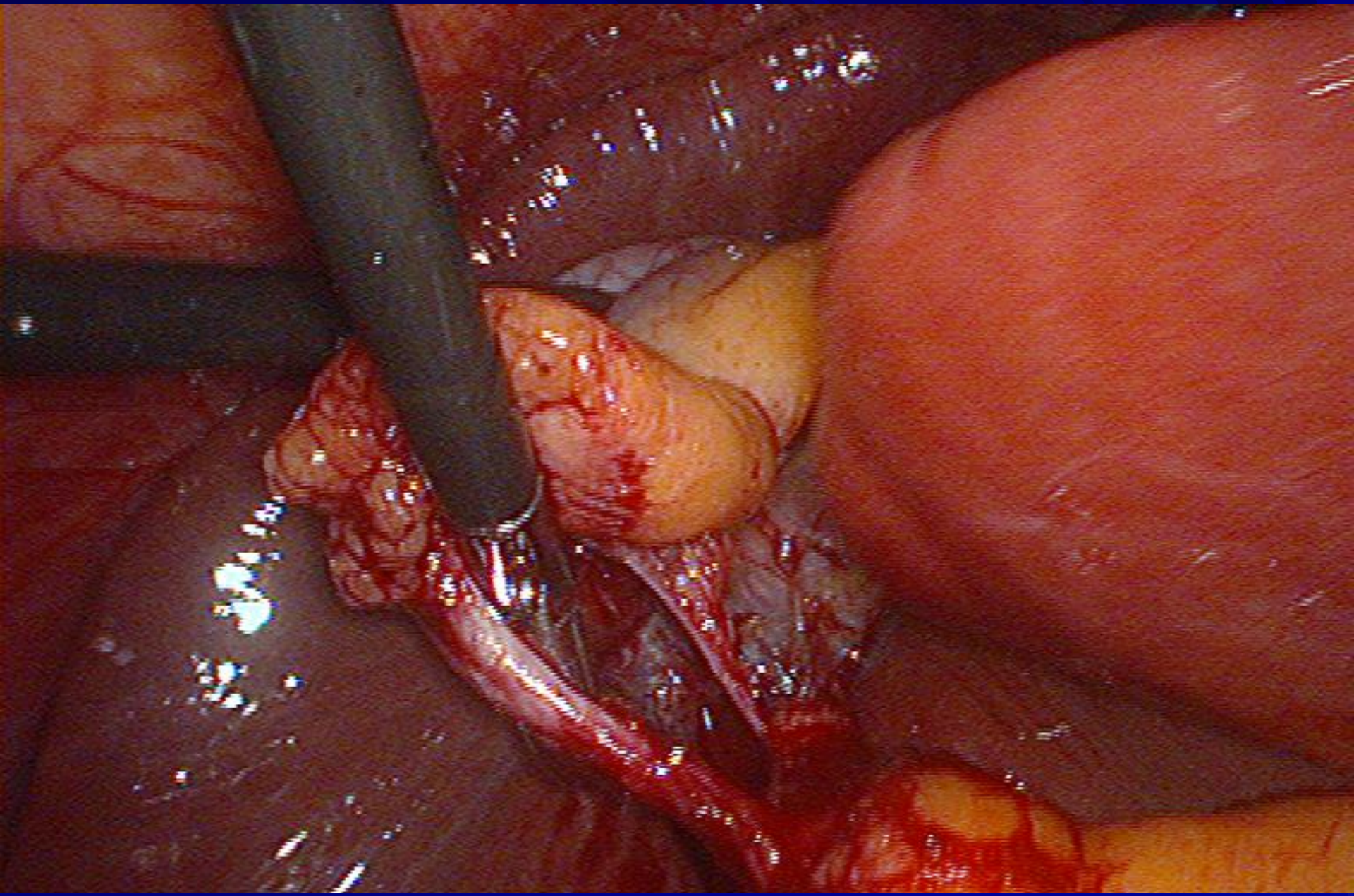


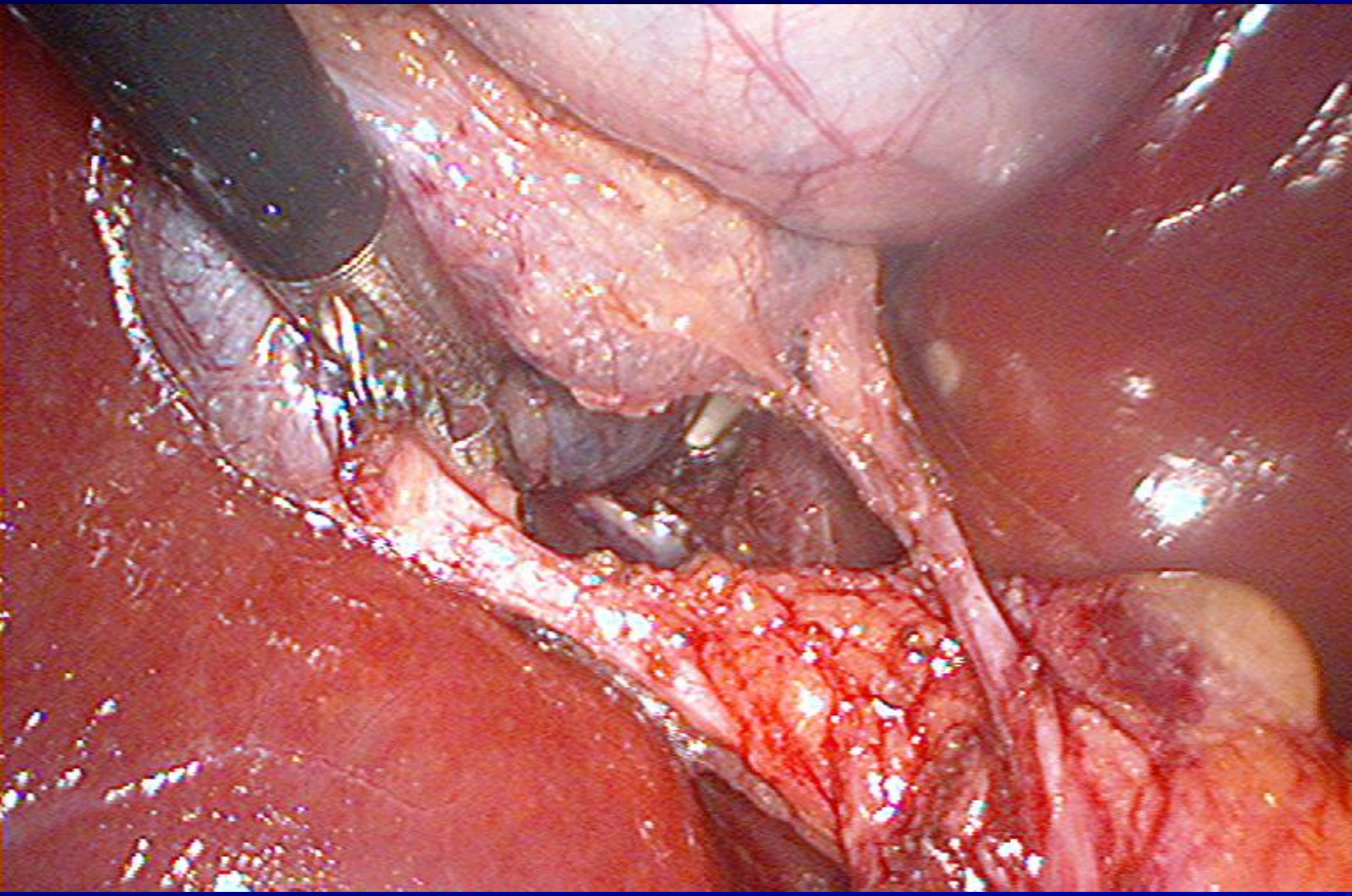


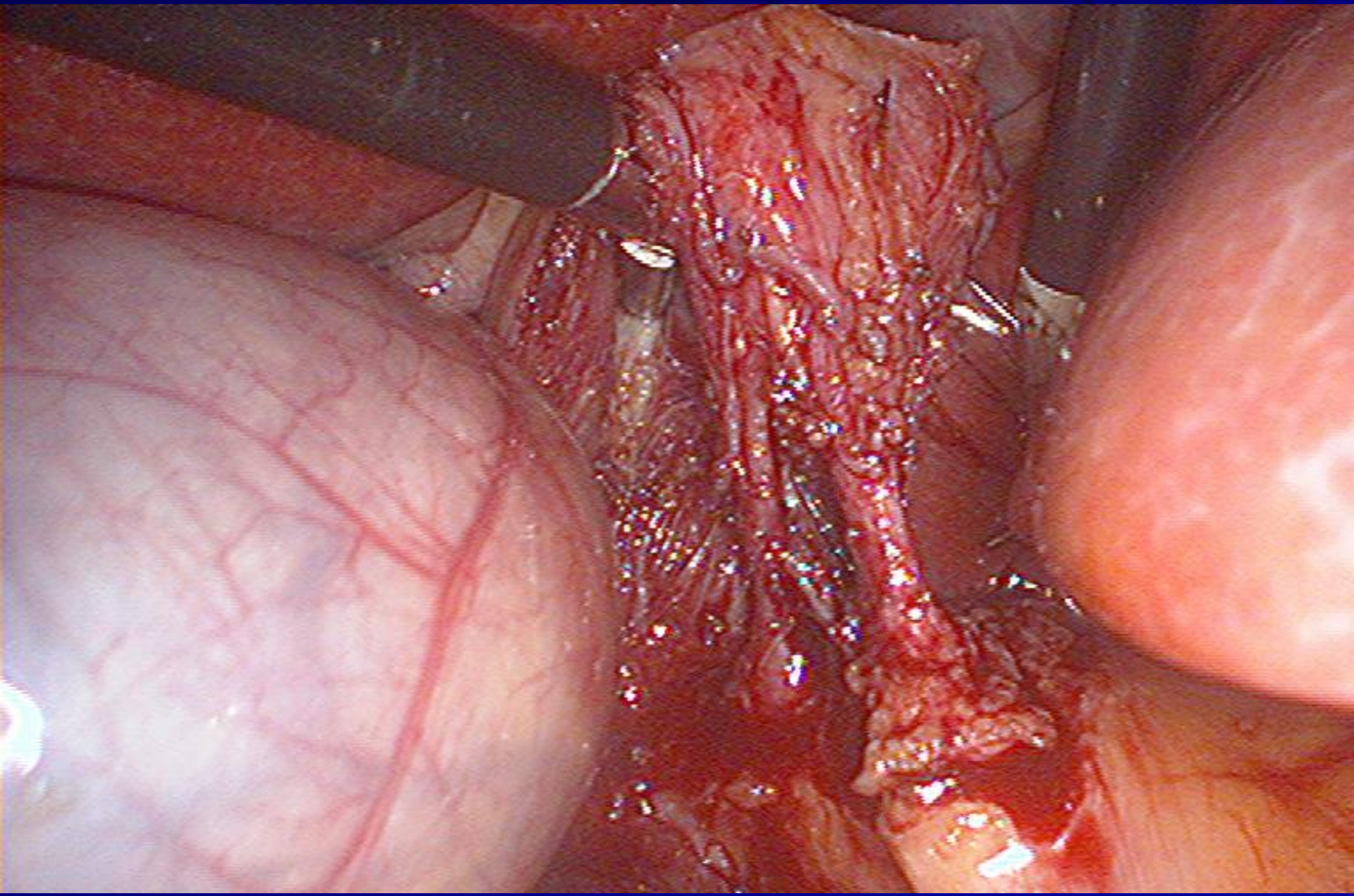


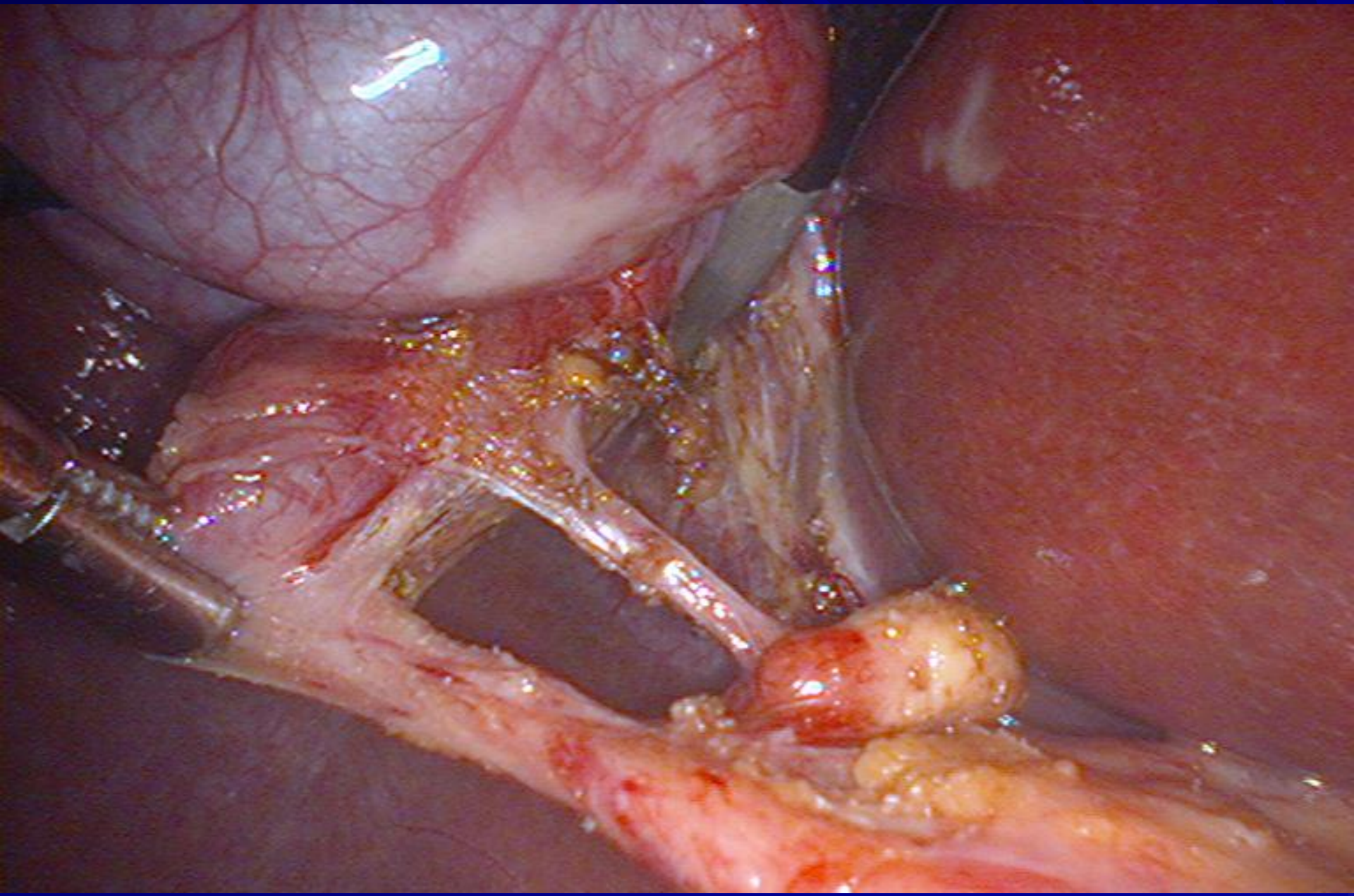






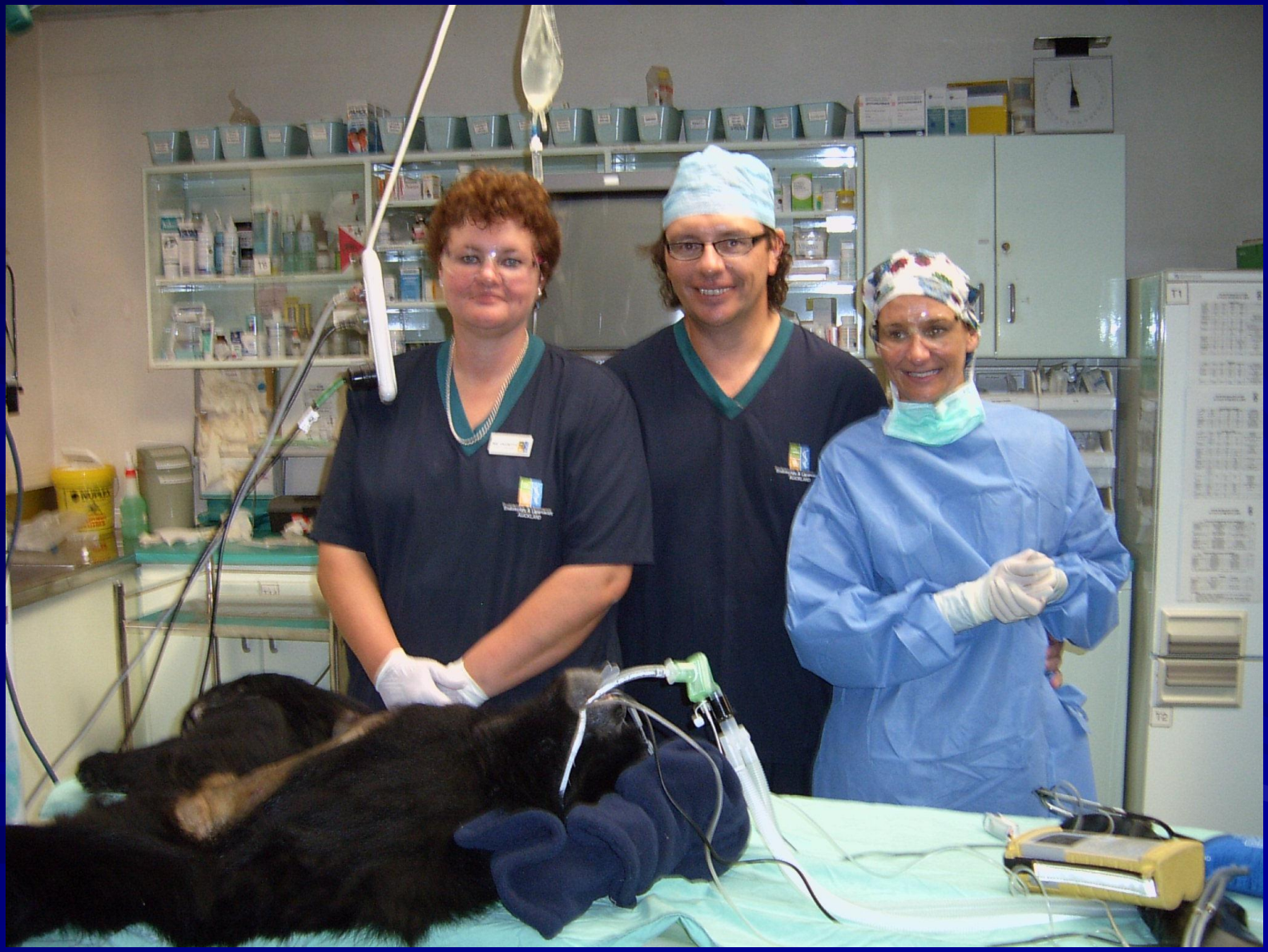


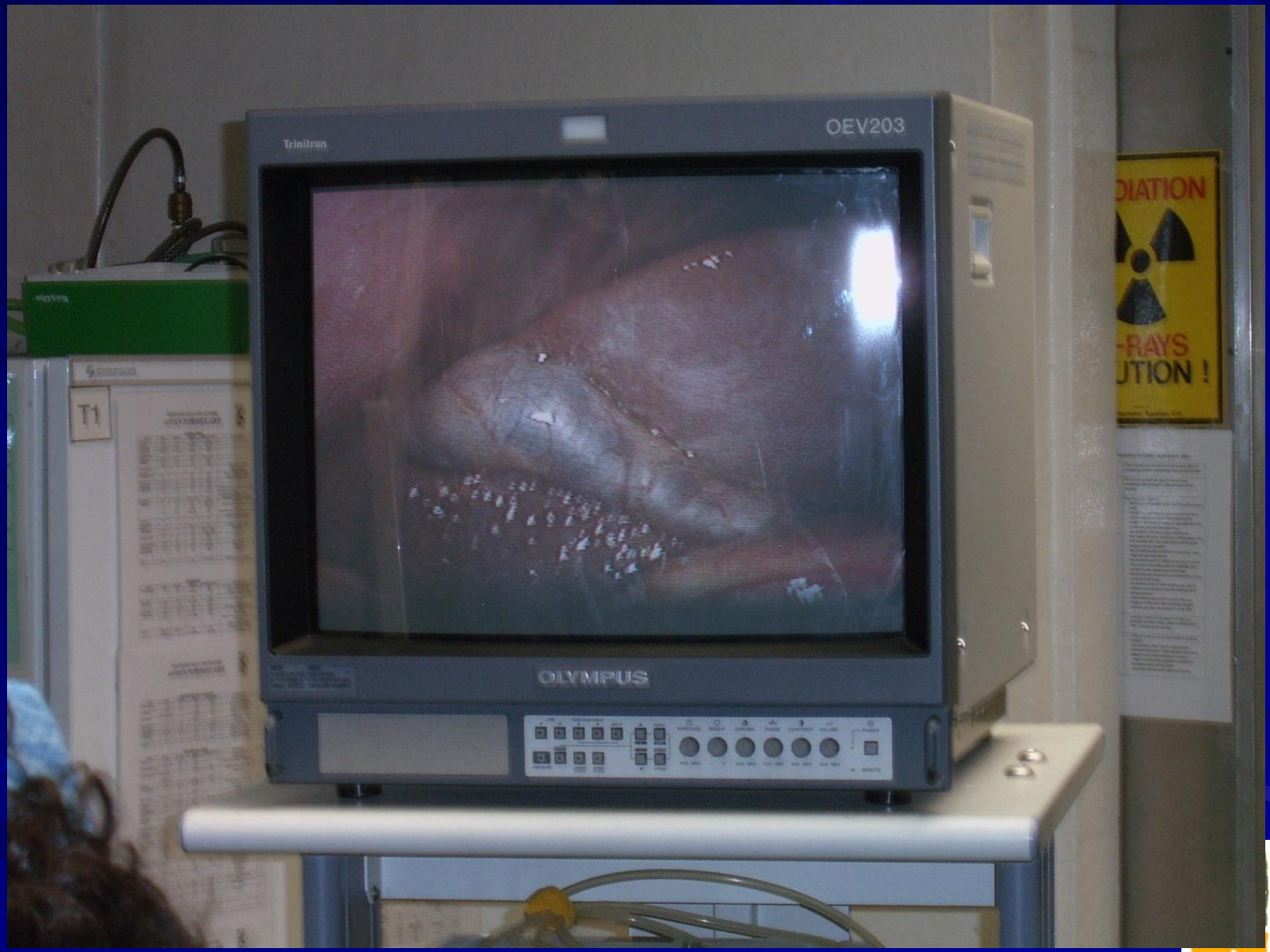


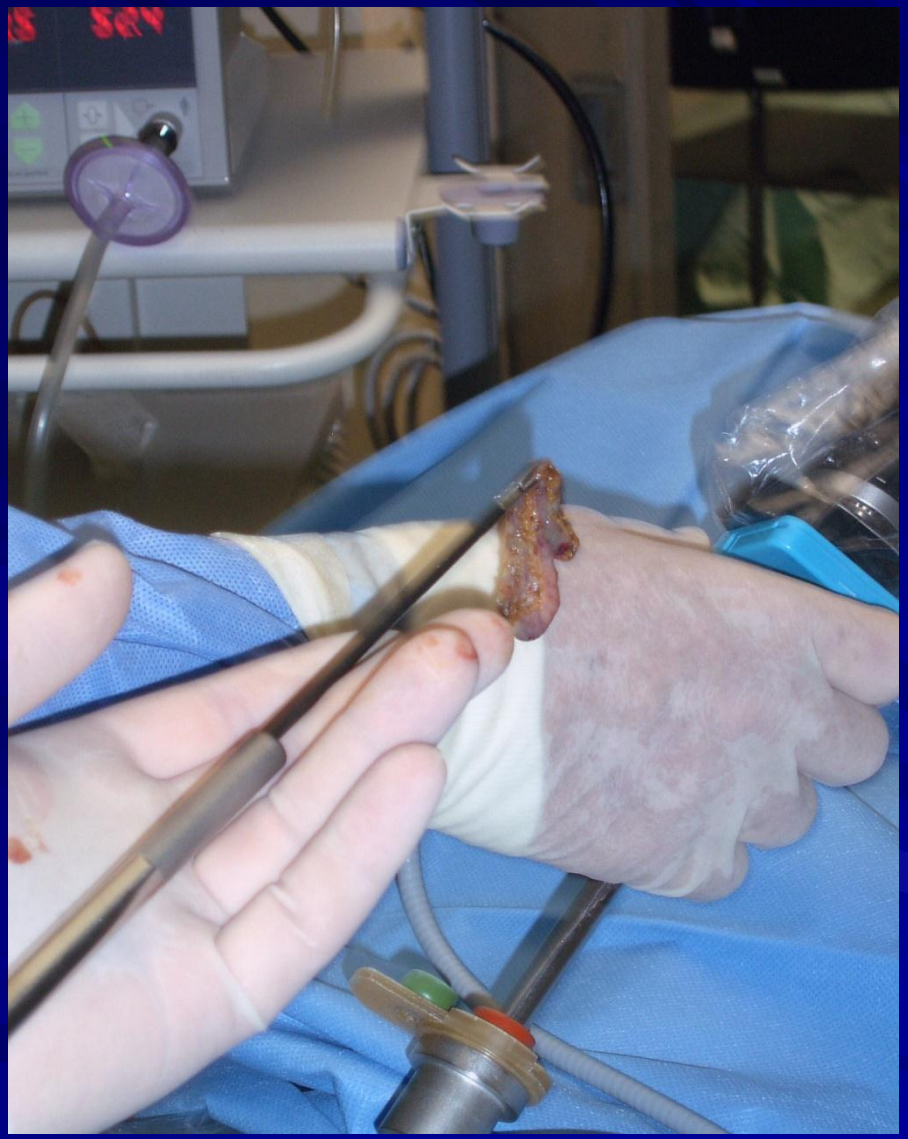


I’VE MADE IT!

- first referral
- GP’s wife/husband
- GP
- Surgeon’s wife/husband
- Surgeon
- Gibbon

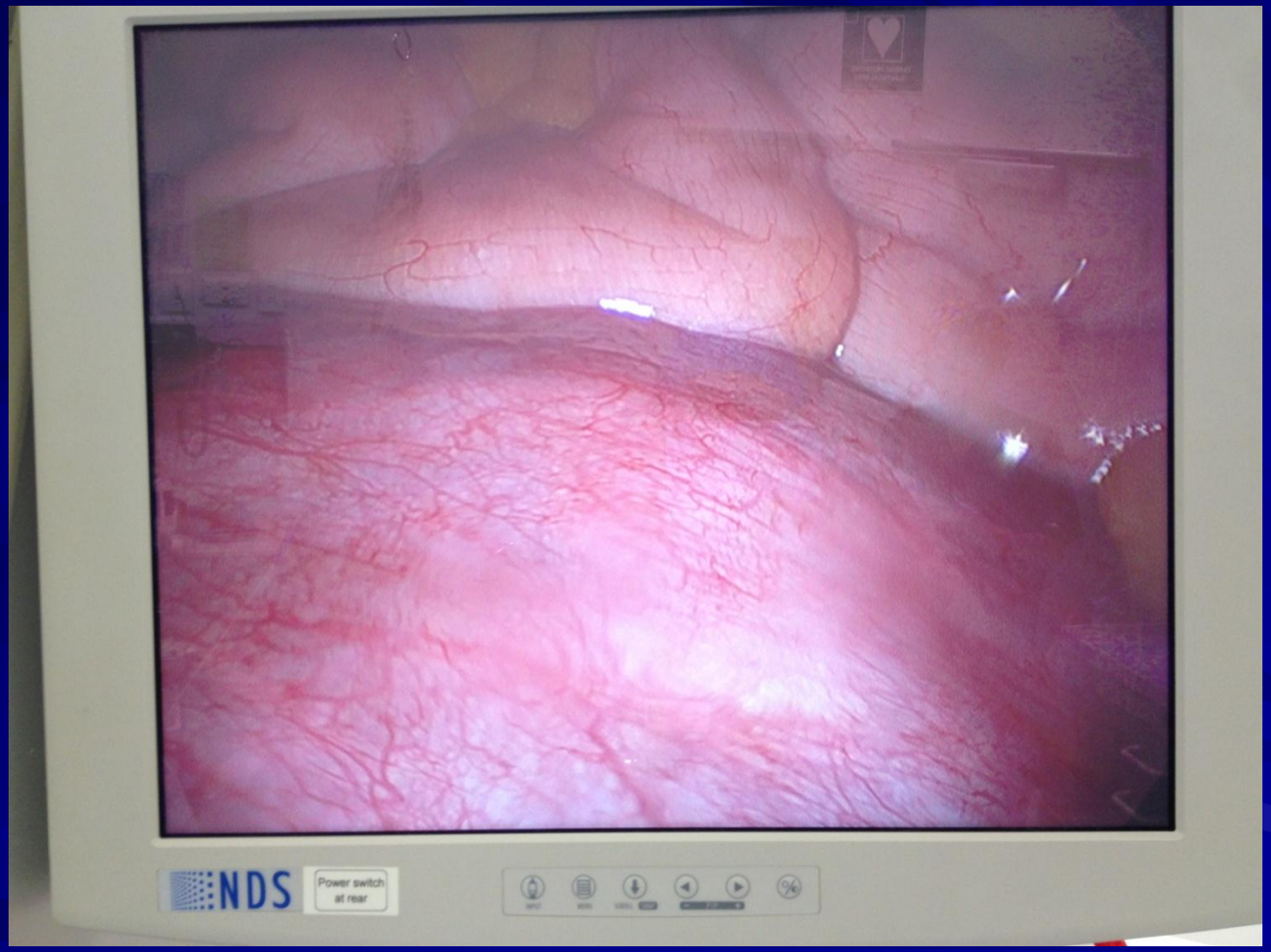


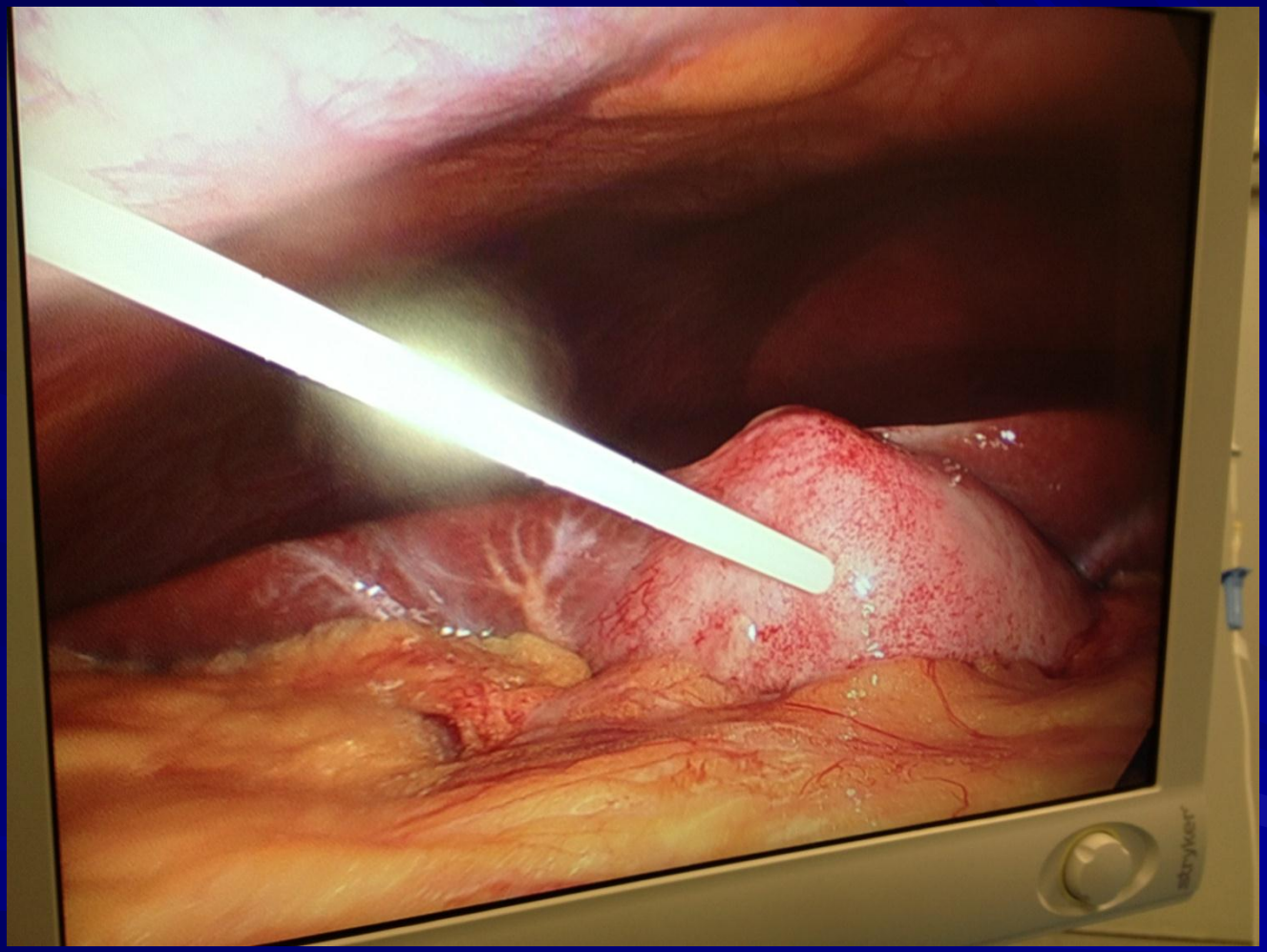

Trinitron
OEV203
OLYMPUS
T1
DIATION
-RAYS
UTION !

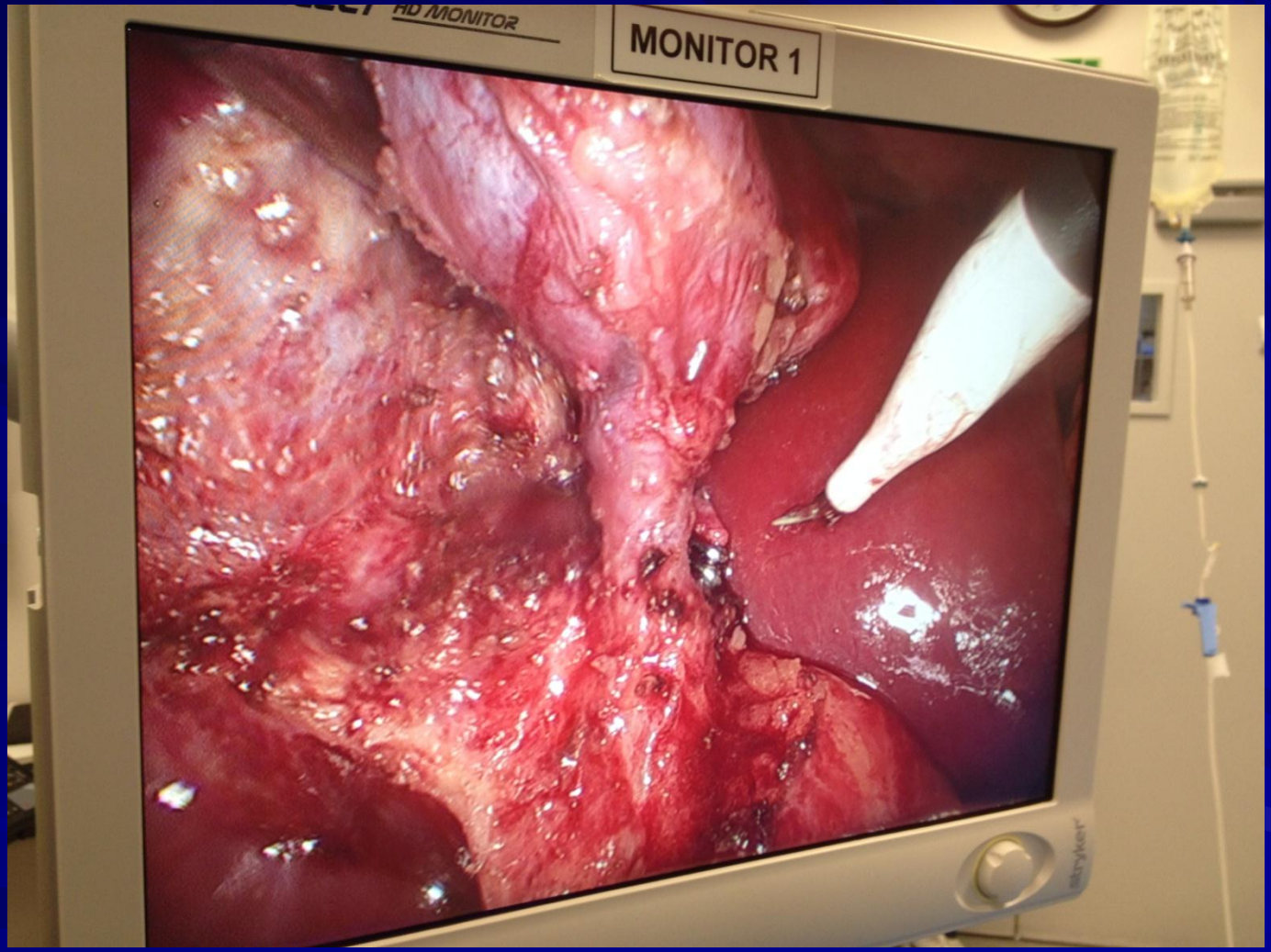


SPECIAL (1) PREGNANCY

- During
  - Operate!
  - 2nd trimester best
  - 22 cases, 0 complications
- After
  - Operate!
  - Form during pregnancy
  - Present 6 weeks post partum
  - Breastfeed

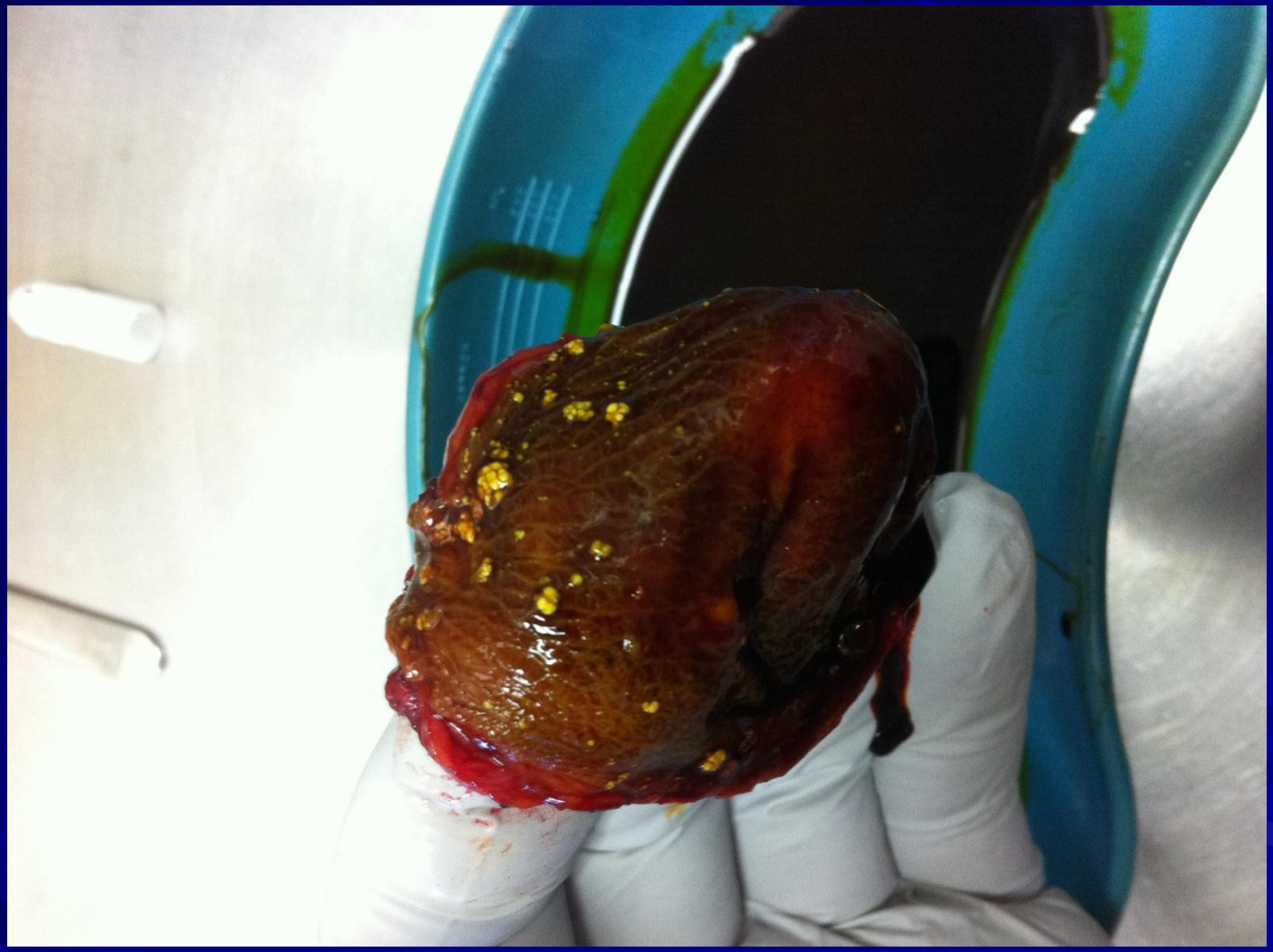

NDS
Power switch
at rear


Stryker


HD MONITOR
MONITOR 1

SPECIAL (2)
SYMPTOMS NO STONES

- good story
- family history
- gastroscopy negative
- HIDA waste of time
- operate!
- polyps, crystals, cholesterolosis
- microlithiasis



SPECIAL (3)
STONES NO SYMPTOMS

- Are you sure?

- “Young”
- Travel
- Diabetic

- Cancer
- 50% crook in 10 years
- Operate!

SPECIAL (4)
POLYPS

- Cholesterol
- Adenomas (rare)
- 10 mm, growing
- Symptoms
- Operate!

COMPLICATIONS (1)

- Biliary colic – operate!
  (severe, restless, vomit)
- Acute cholecystitis – operate (acutely)!
  (constant, tender, fever)

- Chronic cholecystitis
  (histological term)

COMPLICATIONS (2) MUCOCELE

- large solitary stone
- back pain, predominant or exclusive
- nausea (morning)
- subtle symptoms
- depigmented bile

COMPLICATIONS (3) OBSTRUCTIVE JAUNDICE

- short history
- painful
- younger patient
- mild/subtle
- dark urine > pale stool
- recurrent attacks
- ALP > AST (kind of)
- Mirizzi's syndrome


calculus>>
<< dilated
Intrahepatic
biliary tree
GB

OBSTRUCTIVE JAUNDICE BENIGN

- Gallstones
- Iatrogenic stricture
- Primary sclerosing cholangitis
- Flukes
- Ascariasis

OBSTRUCTIVE JAUNDICE MALIGNANT

- Ca pancreas
- Cholangiocarcinoma
- Periampullary Ca
- Duodenal Ca
- External compression

COMPLICATIONS (4) CHOLANGITIS

Virchow's Triad

- pain
- jaundice
- fever/rigors

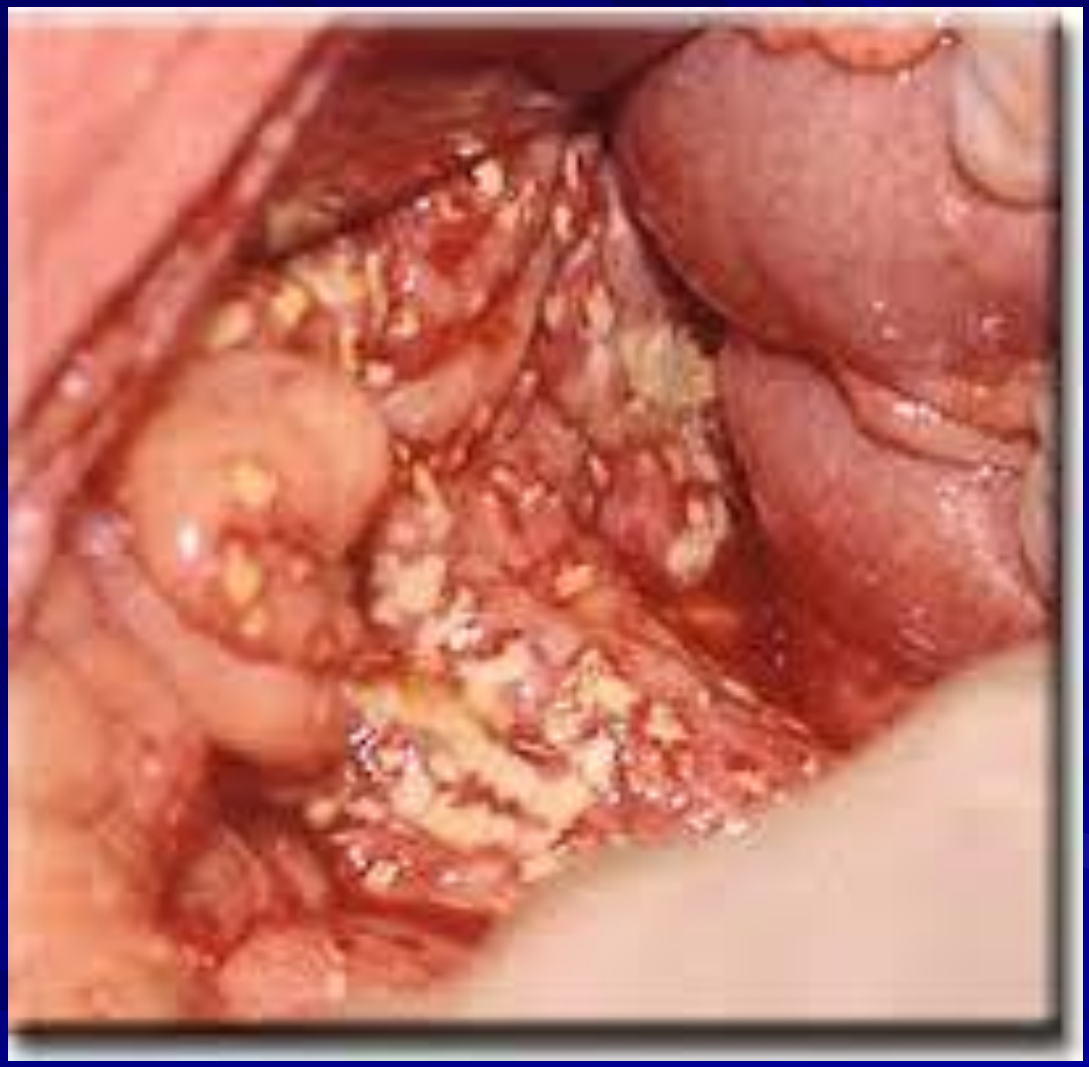
Treat

- gram neg shock
- E coli → gentamycin

COMPLICATIONS (5) PANCREATITIS

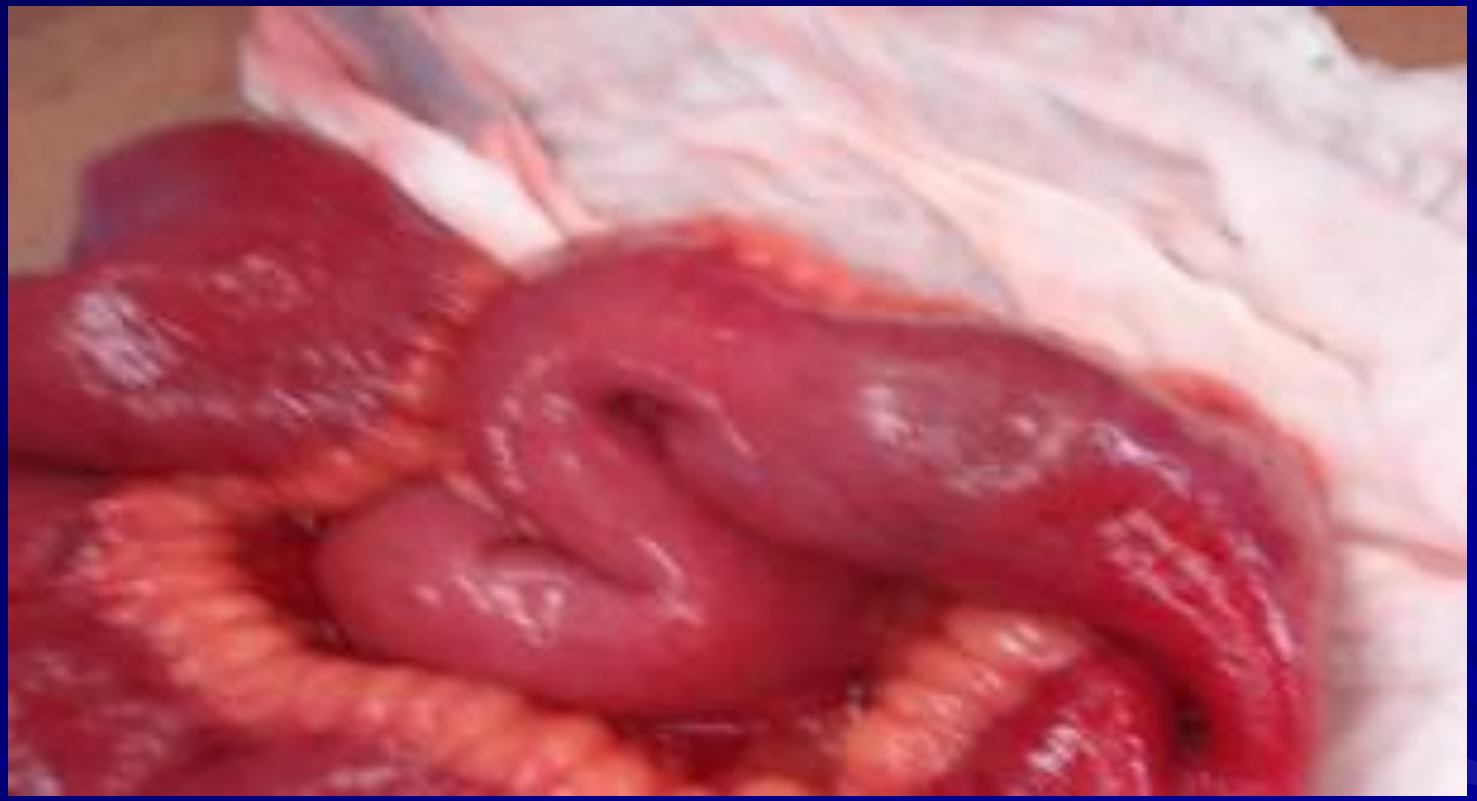
- mild to severe
- ERCP (not acute)
- fluid support
- necrosis/pseudocysts
- no stones → operate!
- lap chole same admission

- ? cooling



COMPLICATIONS (6) FISTULATION

- duodenum
- gallstone ileus
- colon



COMPLICATIONS (7)

- empyema (rare)
- perforation (rare)
- cancer (1% ?less)

I HATE

- fat, female, fertile, forty
- “wait 6 weeks”
- “wait for another attack”
- “increase your losec”
- “I need to do open surgery”
- “you can’t eat fat again”
- “surgery is dangerous”
- “it’s not your stones”
- “they’re only little”
- “you’re too old for surgery”

CASE STUDY (1)

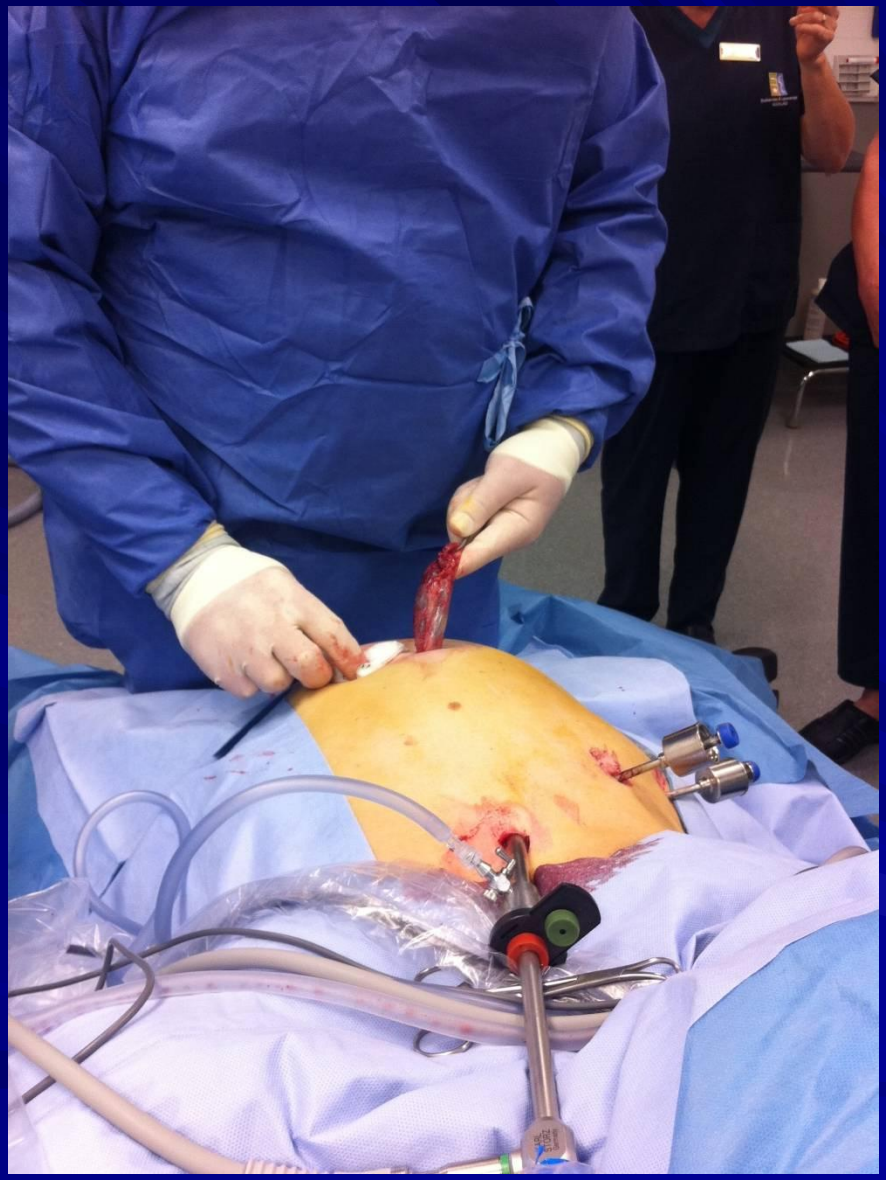
- Hilary 79y
- 8d intermittent colic
- Dark urine
- Severe MVR
- Recent mastectomy
- Recent bereavement

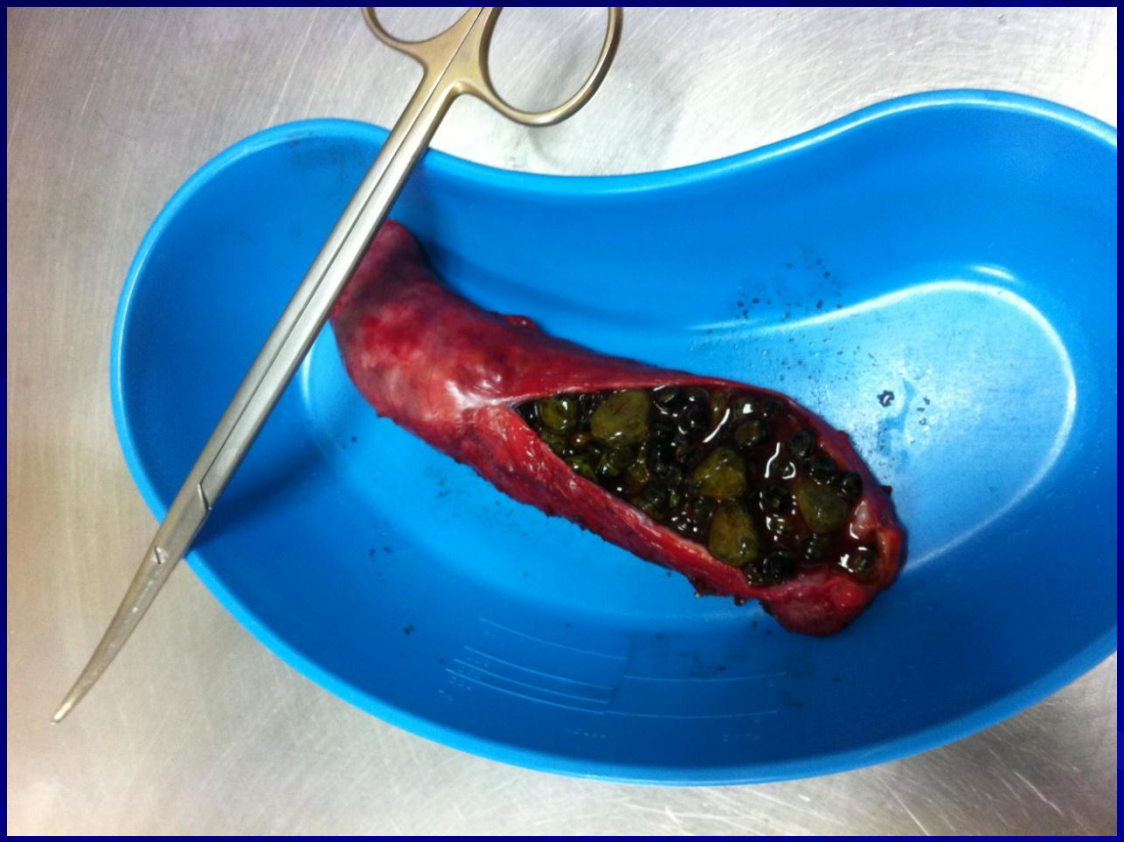
CASE STUDY (2)

- Bili 58
- ALP 379
- AST 441
- GGT 580
- U/S stones ++
- CBD 8 mm

CASE STUDY (3)

- ERCP + sphincterotomy Monday
- Lap chole Tuesday
- Home Wednesday





TAKE HOME (1)

- gallstones are DANGEROUS
- gallstones are COMMON
- high index of suspicion

TAKE HOME (2)

- pain is midline
- sometimes only back
- restlessness & vomiting
- get ultrasound FIRST
- beware negative ultrasound
- beware “no symptoms”
- colic is cystic duct obstruction

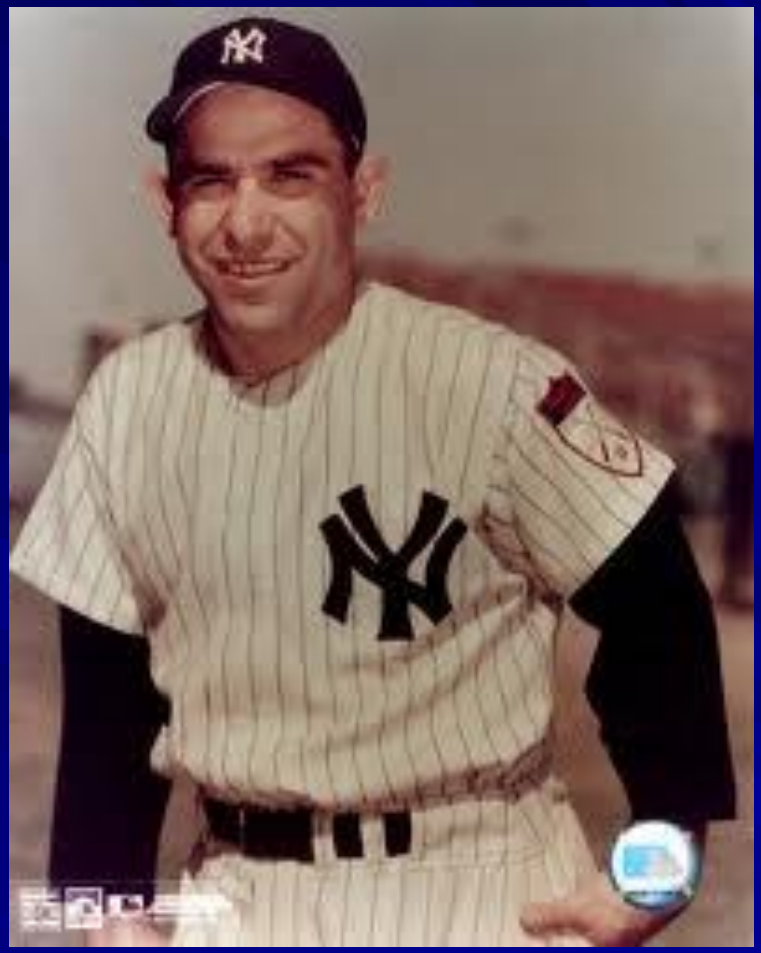
TAKE HOME (3)

- jaundice/pancreatitis refer
- MRCP/ERCP surgical decision
- beware cholangitis → gentamycin
- pancreatitis = lap chole EARLY
- acute cholecystitis = lap chole EARLY

TAKE HOME (4)

- use NSAIDs (not IM) or narcotics
- small stones more dangerous then big stones
- don’t agonise – OPERATE!
- laparoscopy is bloody great

0800 SURGEON



“When you come to a fork in the road – take it”