



# LIDO

## MASTERCLASS

Instruction Laparoscopic  
Donor Nephrectomy

29 June– 1 July, 2022

Robert Minnee

# Conflict of interest

*I declare I have no conflict of interest*

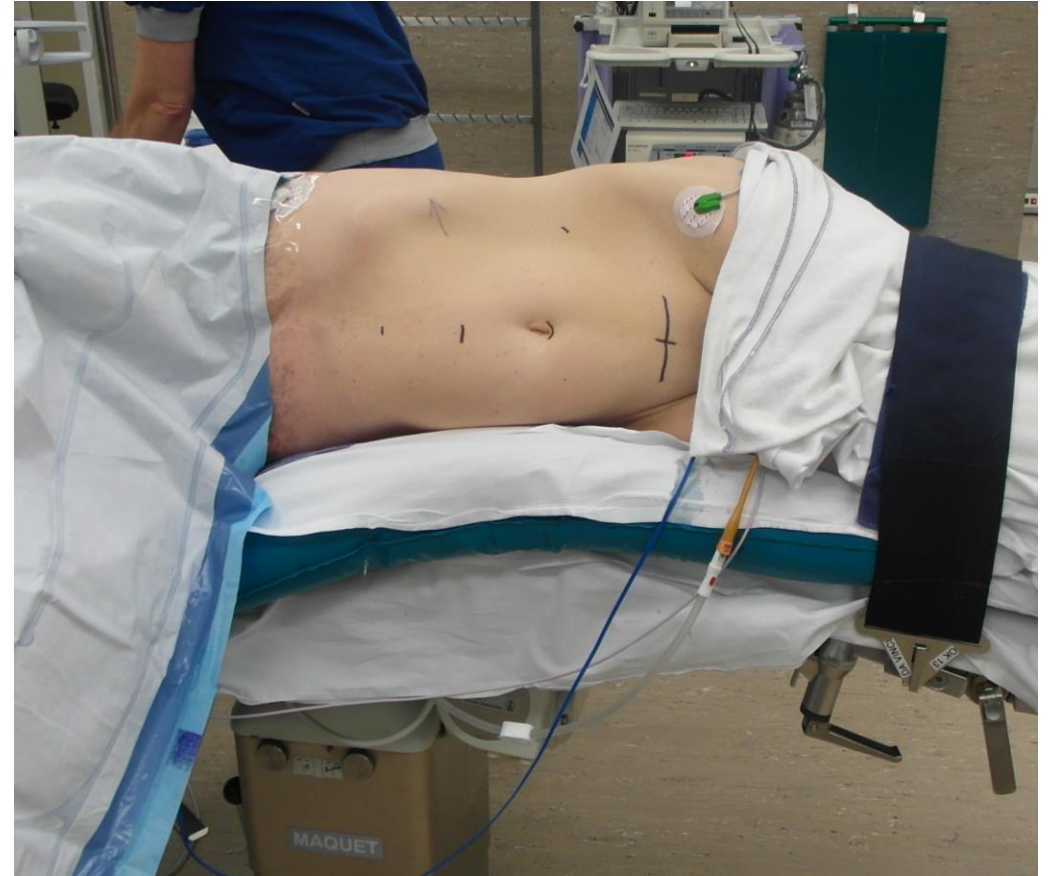
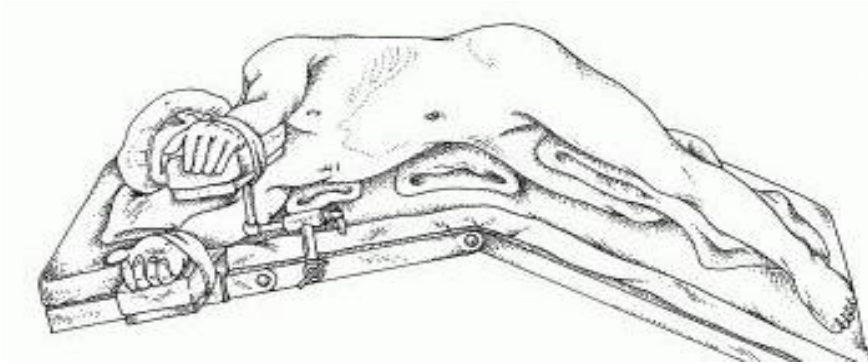
Please do not share this presentation on social media



*Thank you*

# Positioning the patient

- Flank position with operative side up
- Table break at the level of the umbilicus
- Edge of the table
- Vacuum mattress
- Dorsal supports

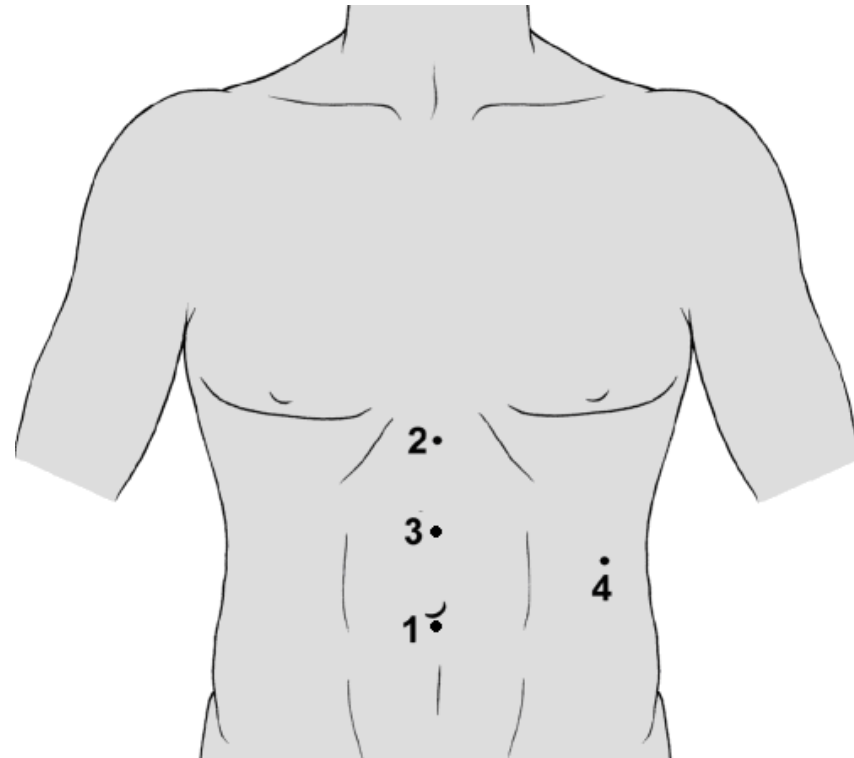


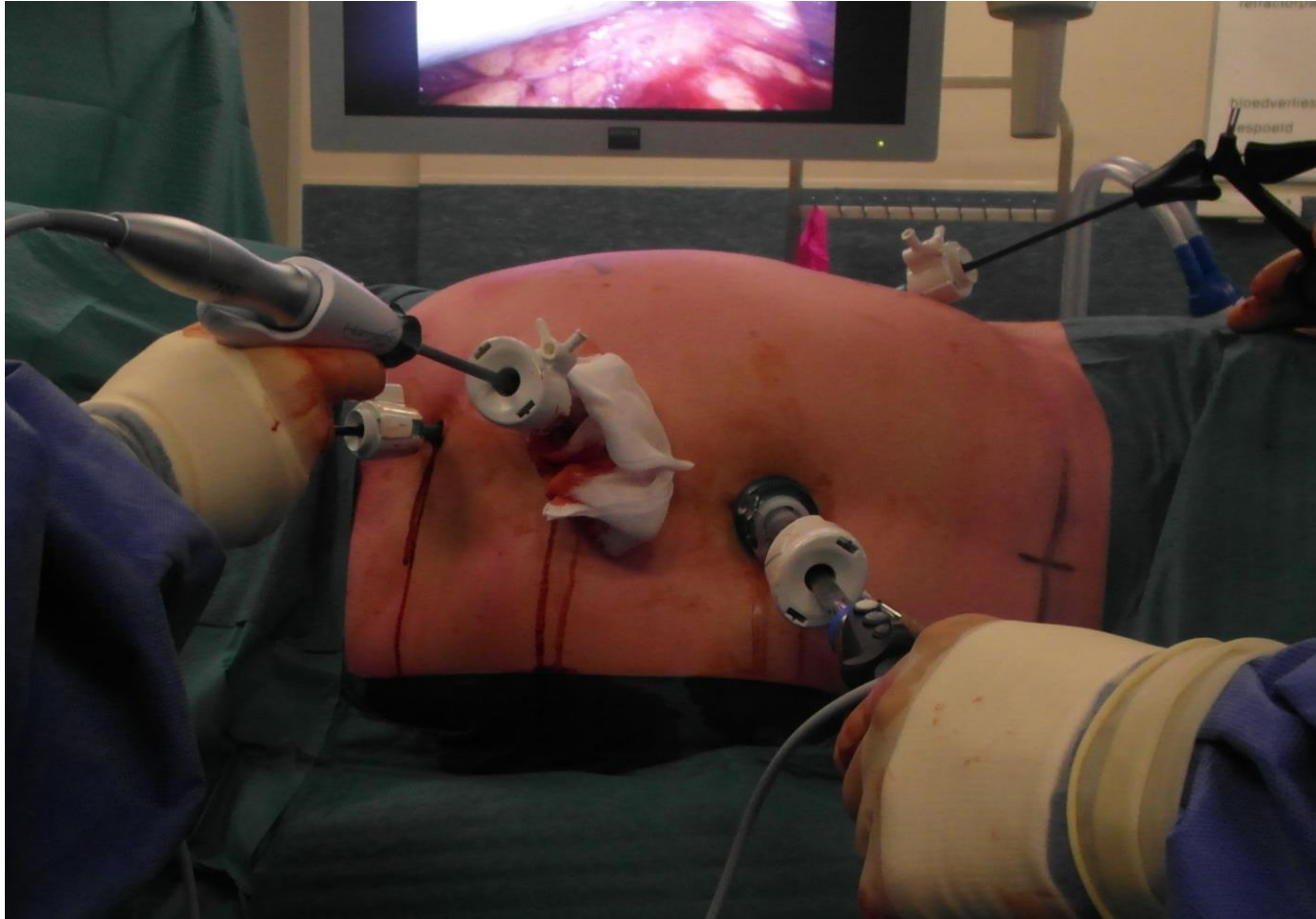
# Positioning the patient



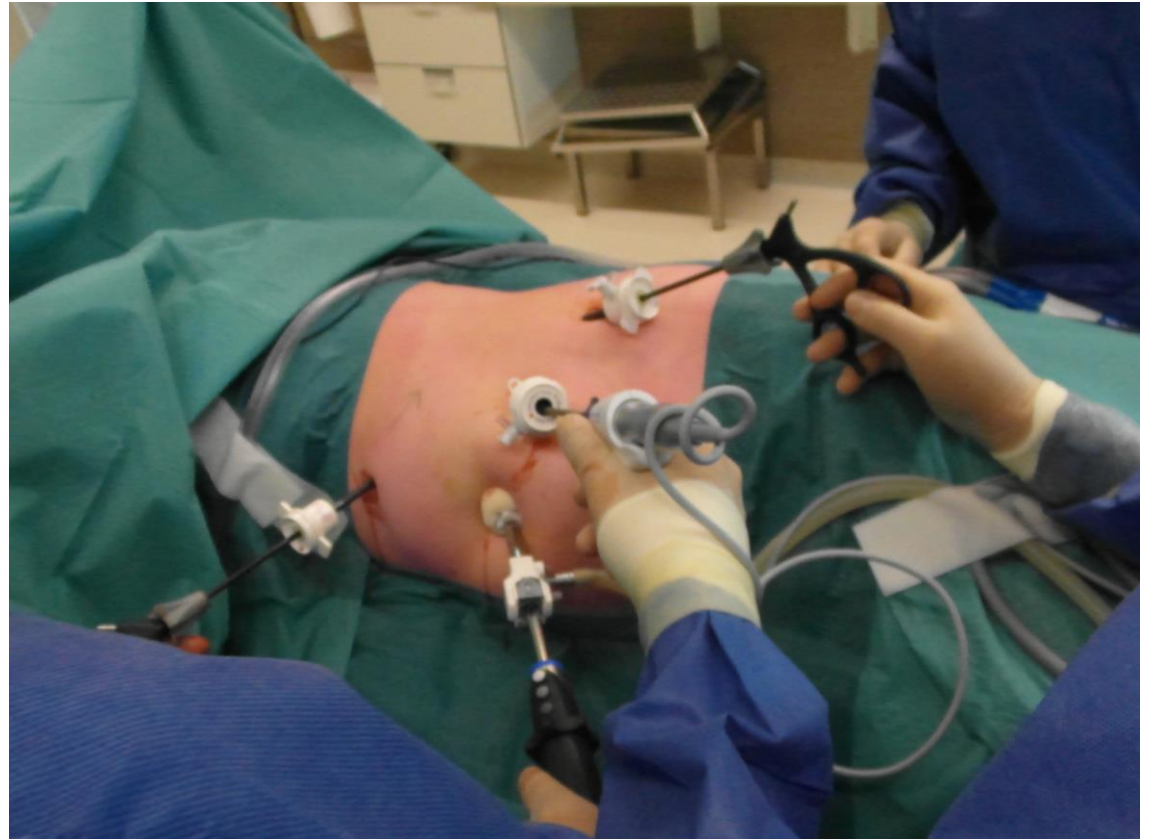
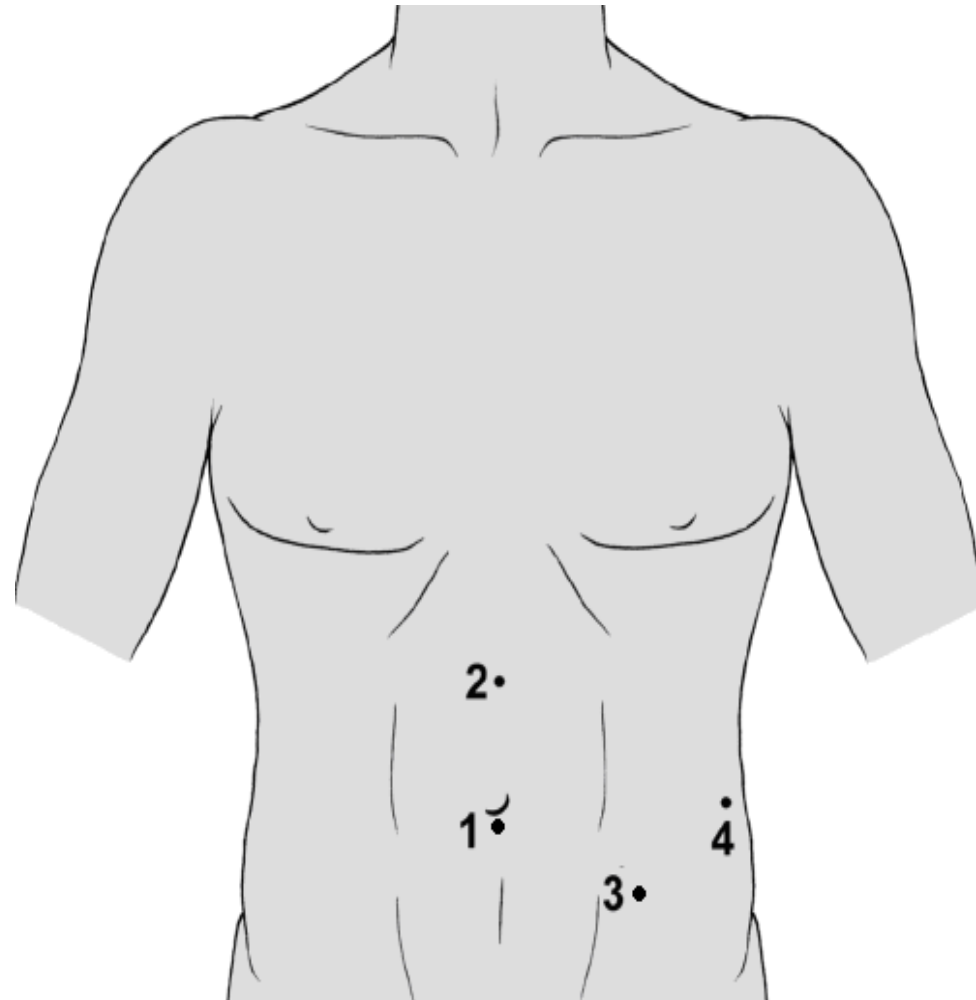
# Trocar placement left-sided nephrectomy

- **Infraumbilical open introduction 10-12 mm blunt tip trocar (1)**
- **5mm and 10 mm trocar in epigastric region (2,3)**
- **5 mm trocar laterally above iliac spine after mobilisation large intestine (4)**
- **In small patients trocar 3 can be placed lateral to the umbilicus**



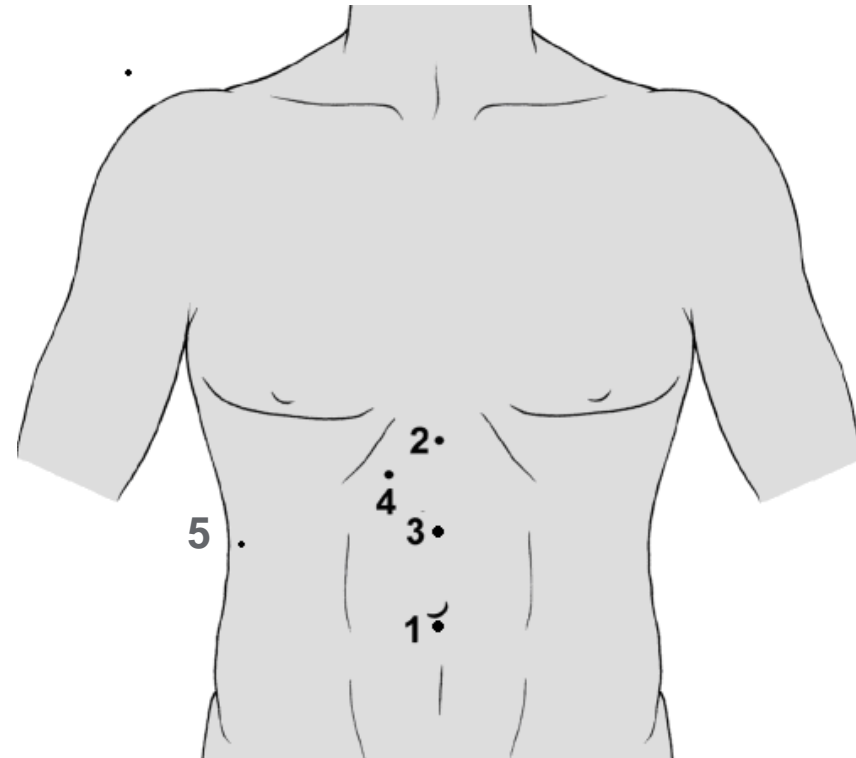


# Alternative Trocar placement



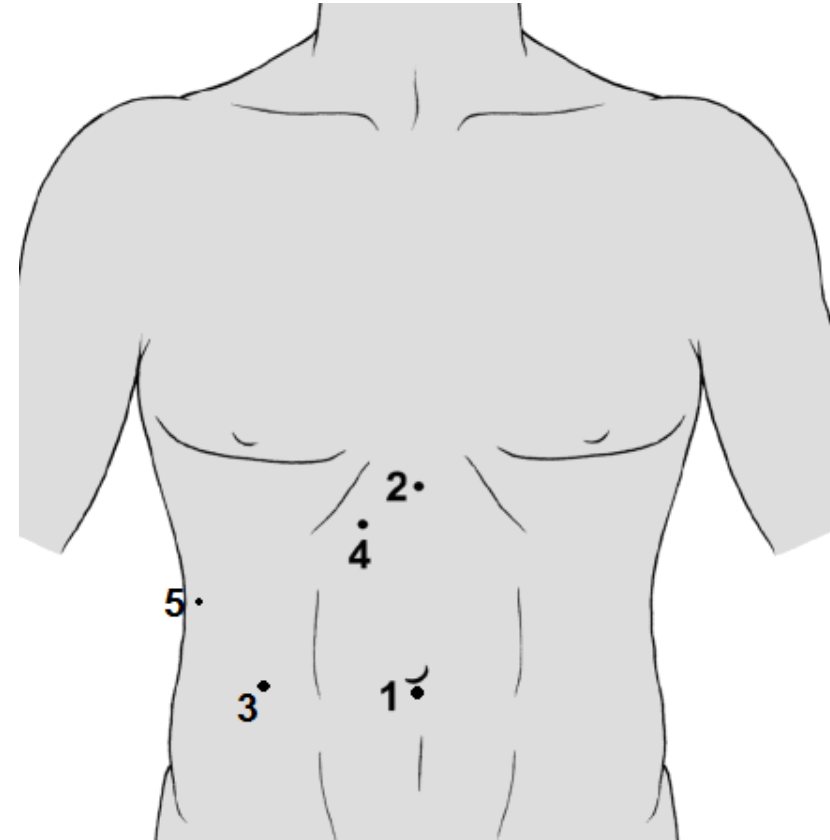
# Trocar placement right-sided nephrectomy

- **Infraumbilical open introduction 10-12 mm blunt tip trocar (1)**
- **5mm (2) and 10 mm (3) trocar in epigastric region**
- **After mobilising liver second 5 mm trocar in epigastric region if necessary(4)**
- **5 mm trocar laterally above iliac spine after mobilisation large intestine (5)**



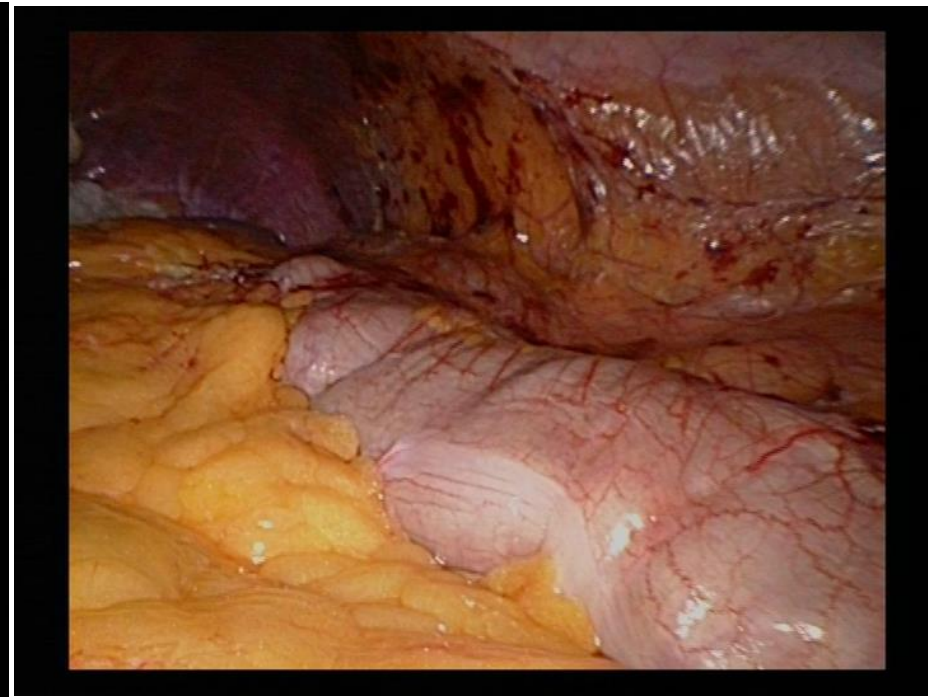
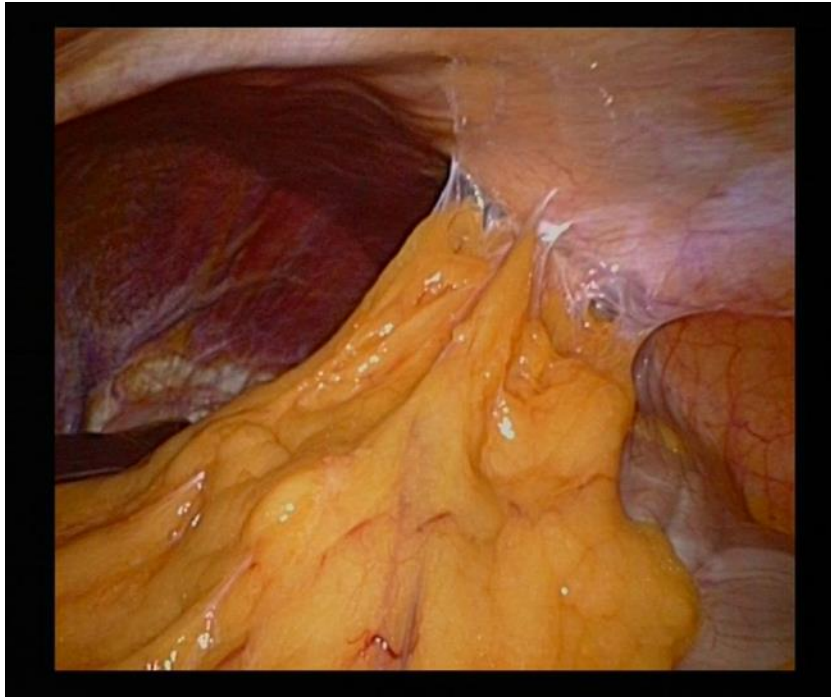
# Alternative trocar placement

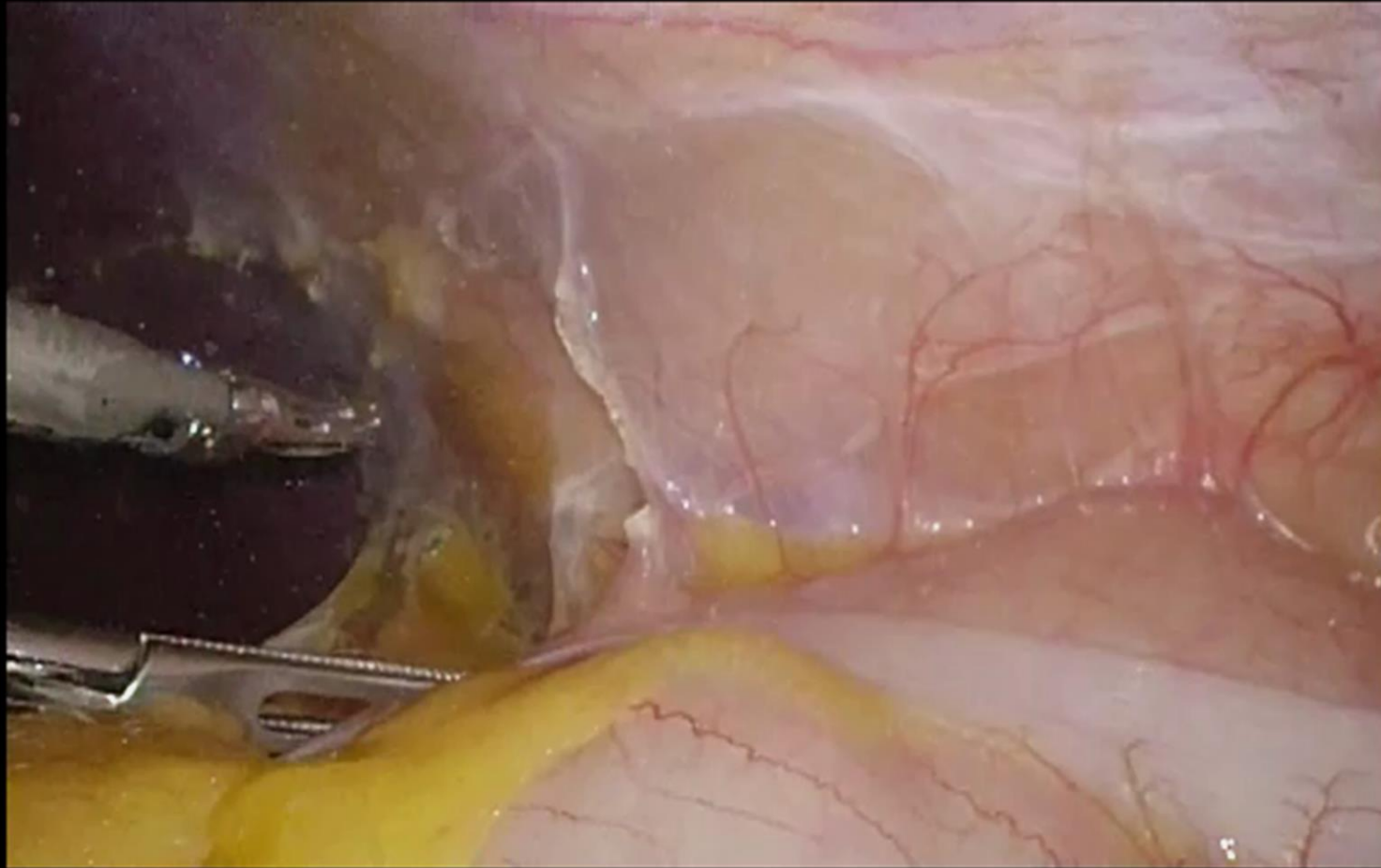
- 10 mm working trocar is placed between the umbilicus and the assistants trocar



# Exposing the kidney

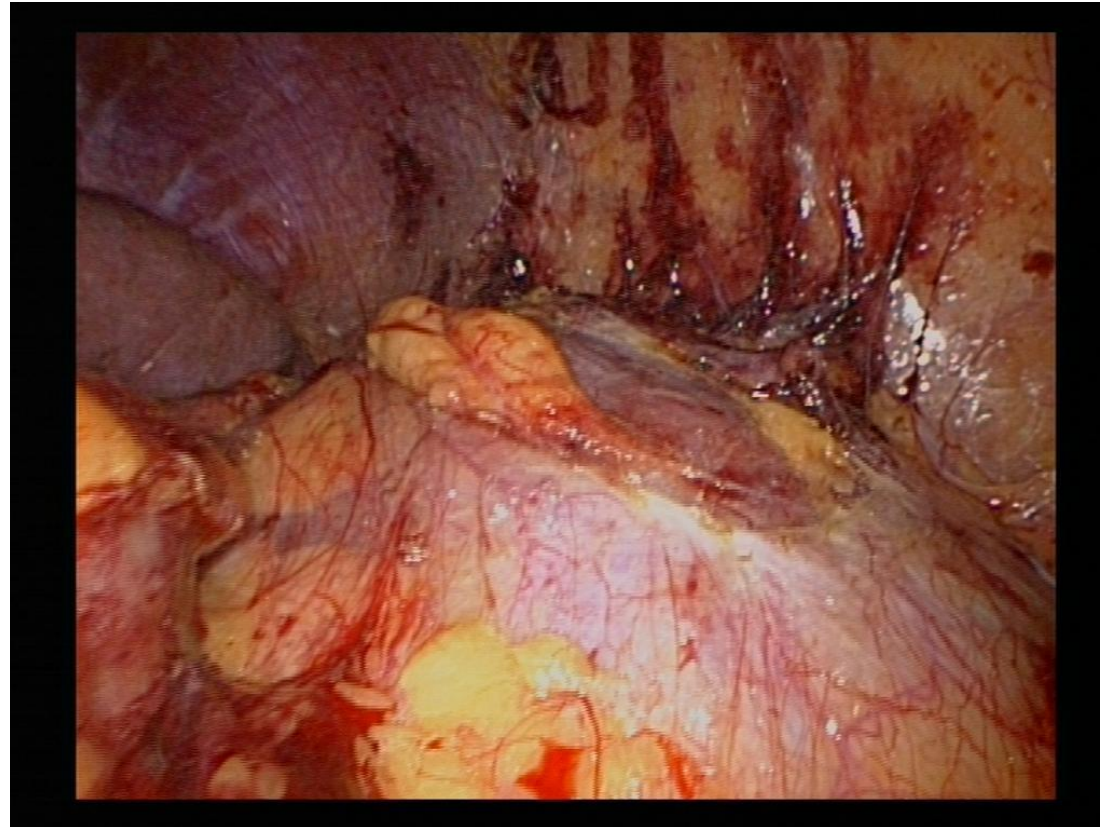
Remove adhesions with anterior abdominal wall





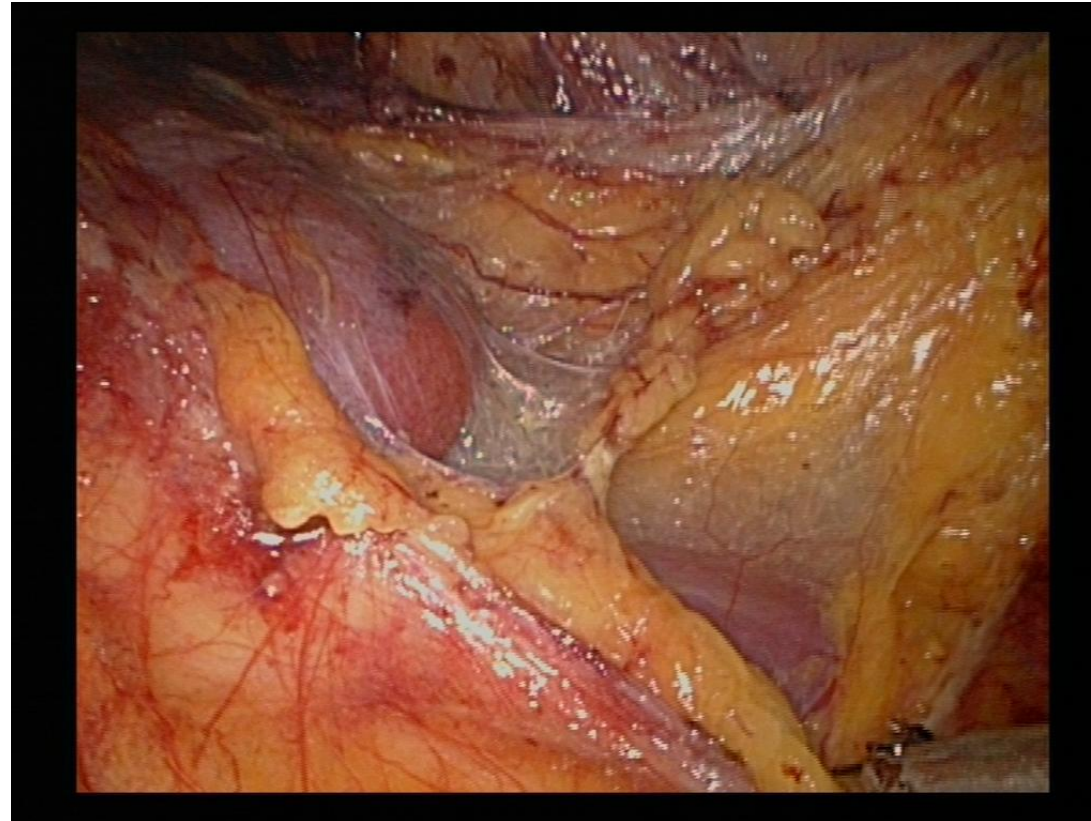
# Exposing the kidney

- Opening Gerota's fascia

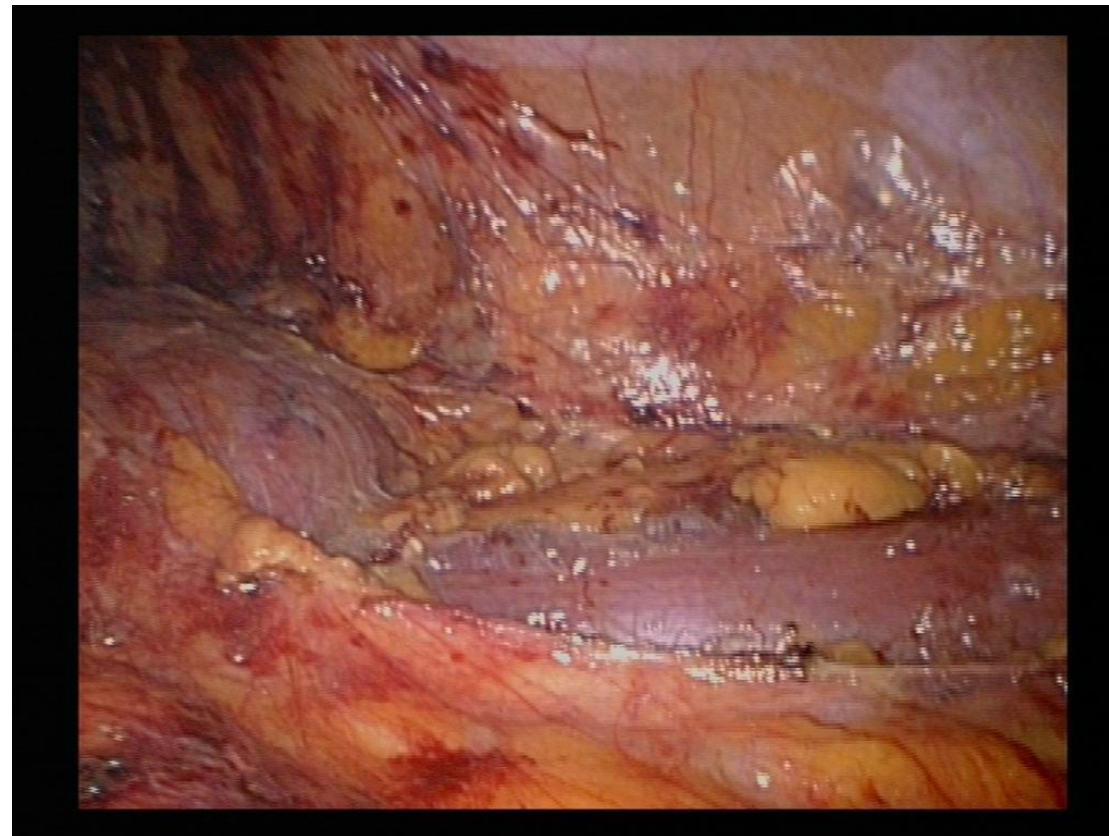


# Exposing the kidney

- **Expose lower pole laterally and dorsally**

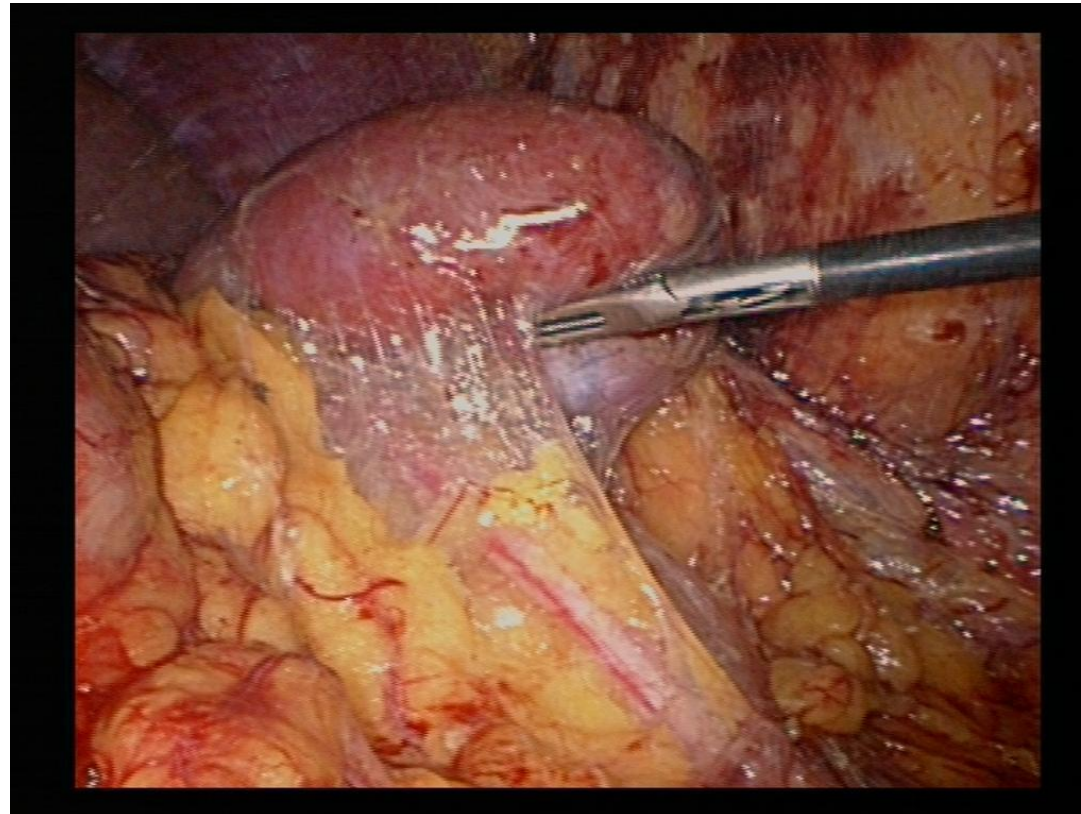


- **Open anterior renal fascia and identify psoas muscle**

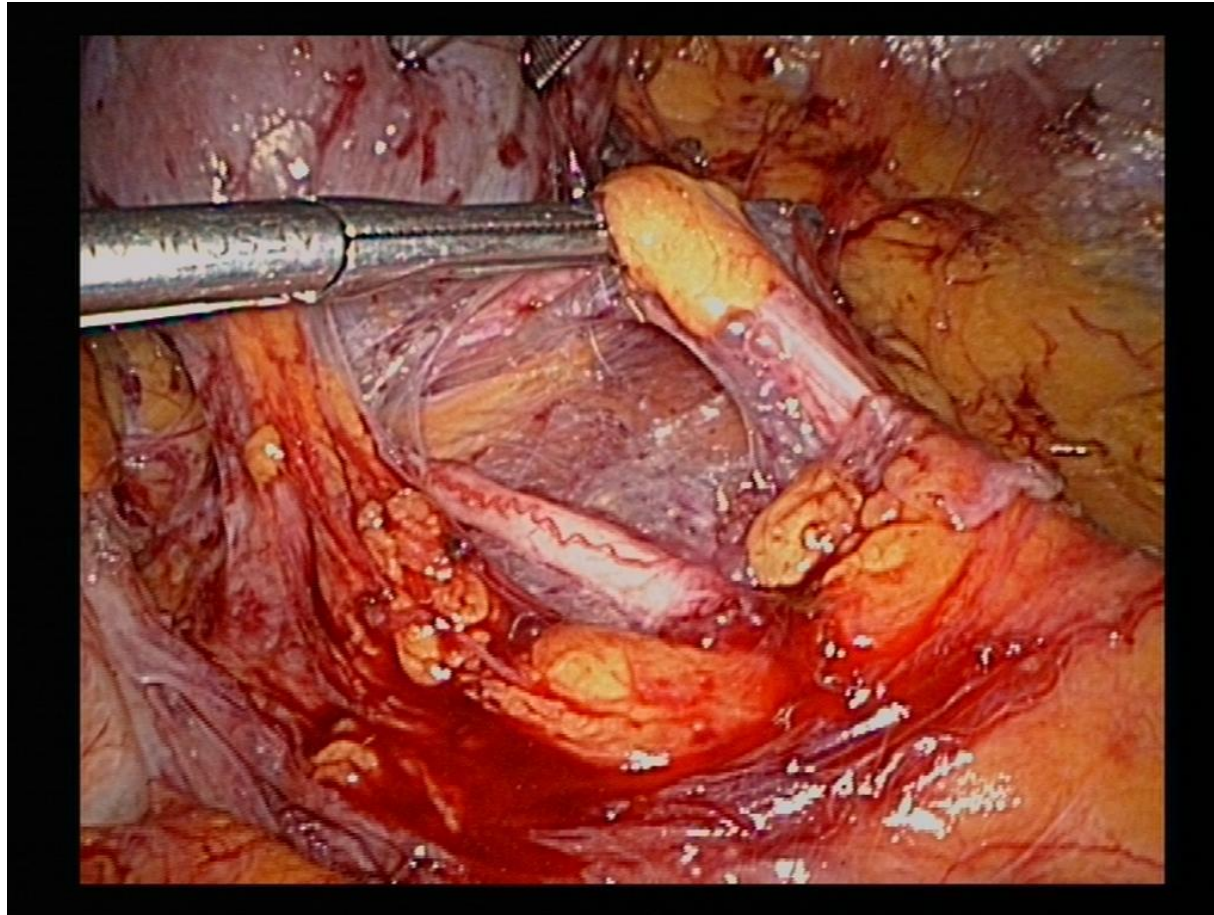


# Dissection ureter

- Free lower pole anteriorly and identify ureter

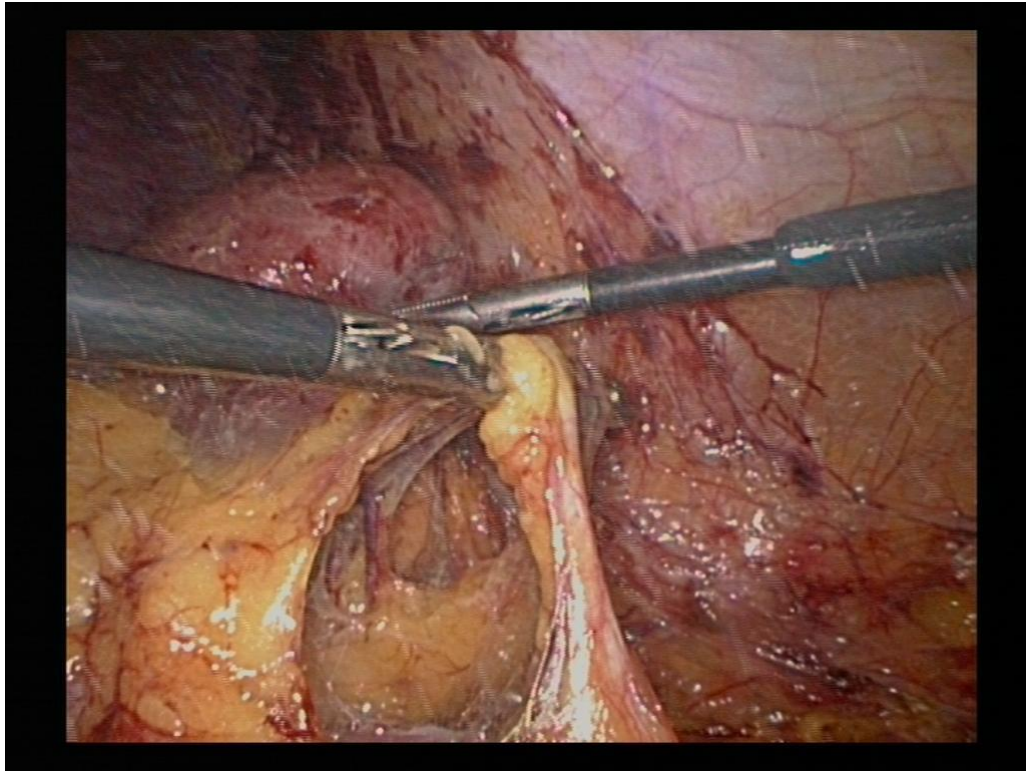


# Beware of multiple ureters

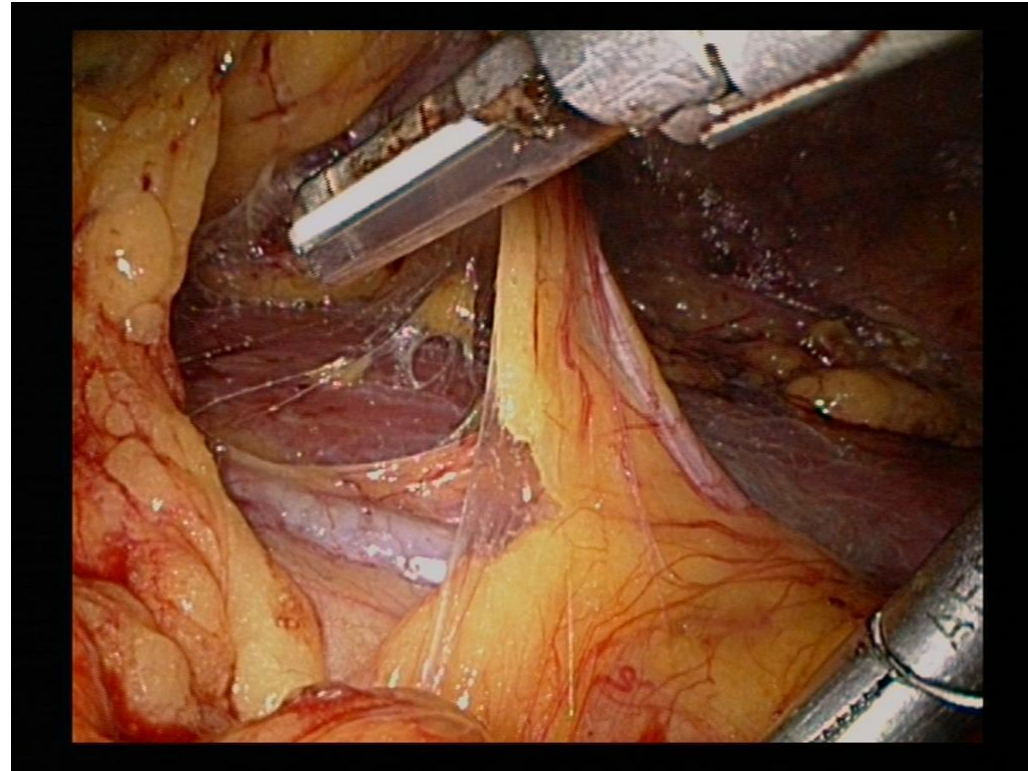


# Dissection ureter

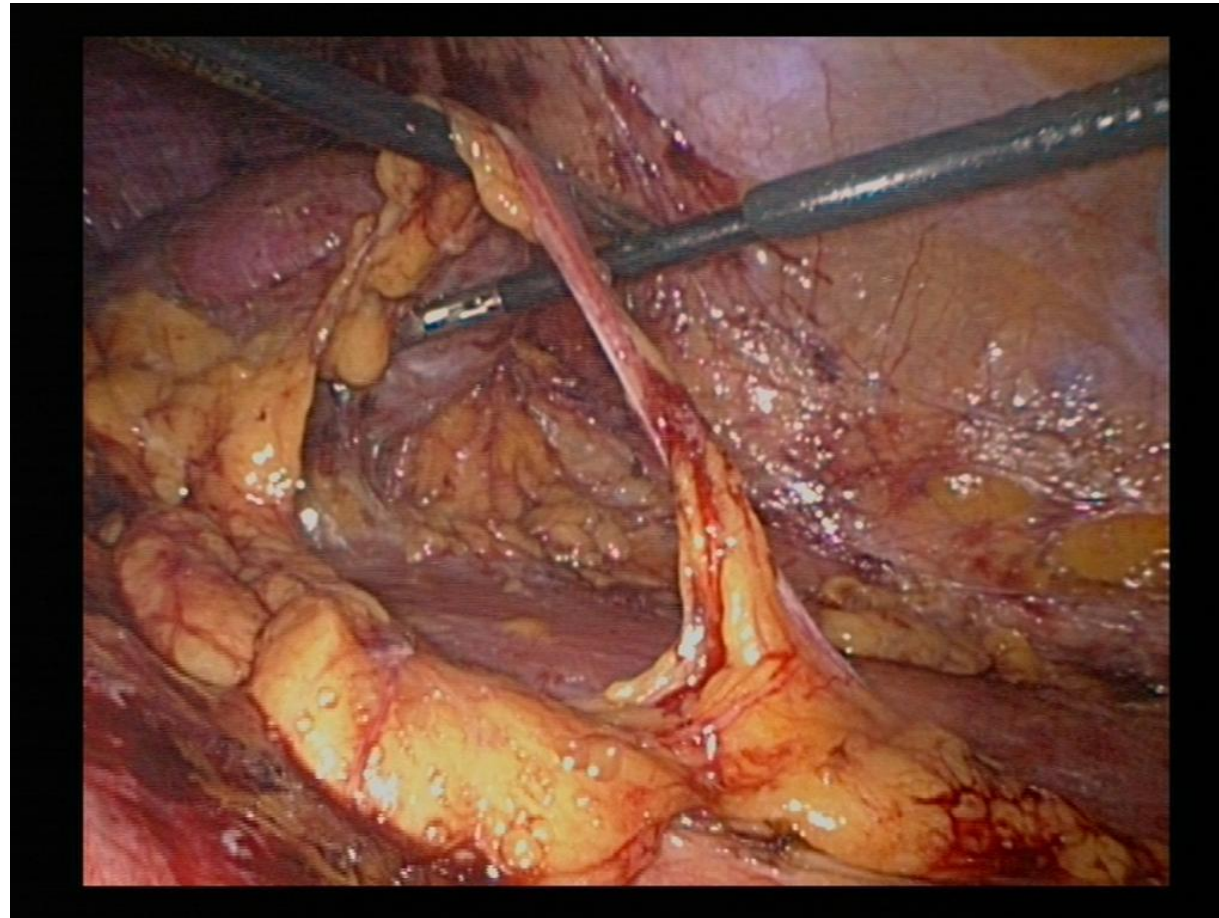
- Tunnel ureter and dissect caudally

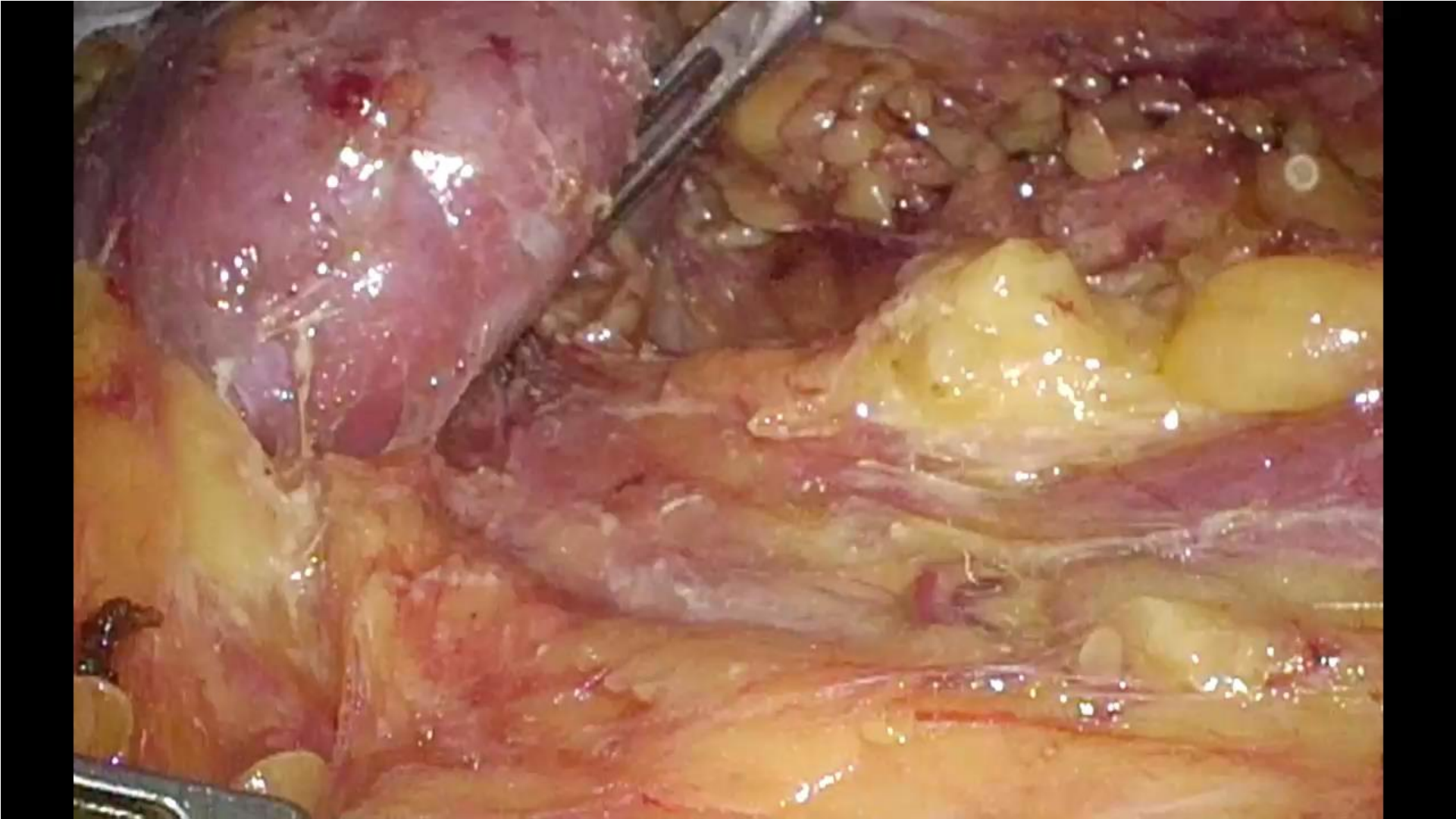


- Identify gonadal vein



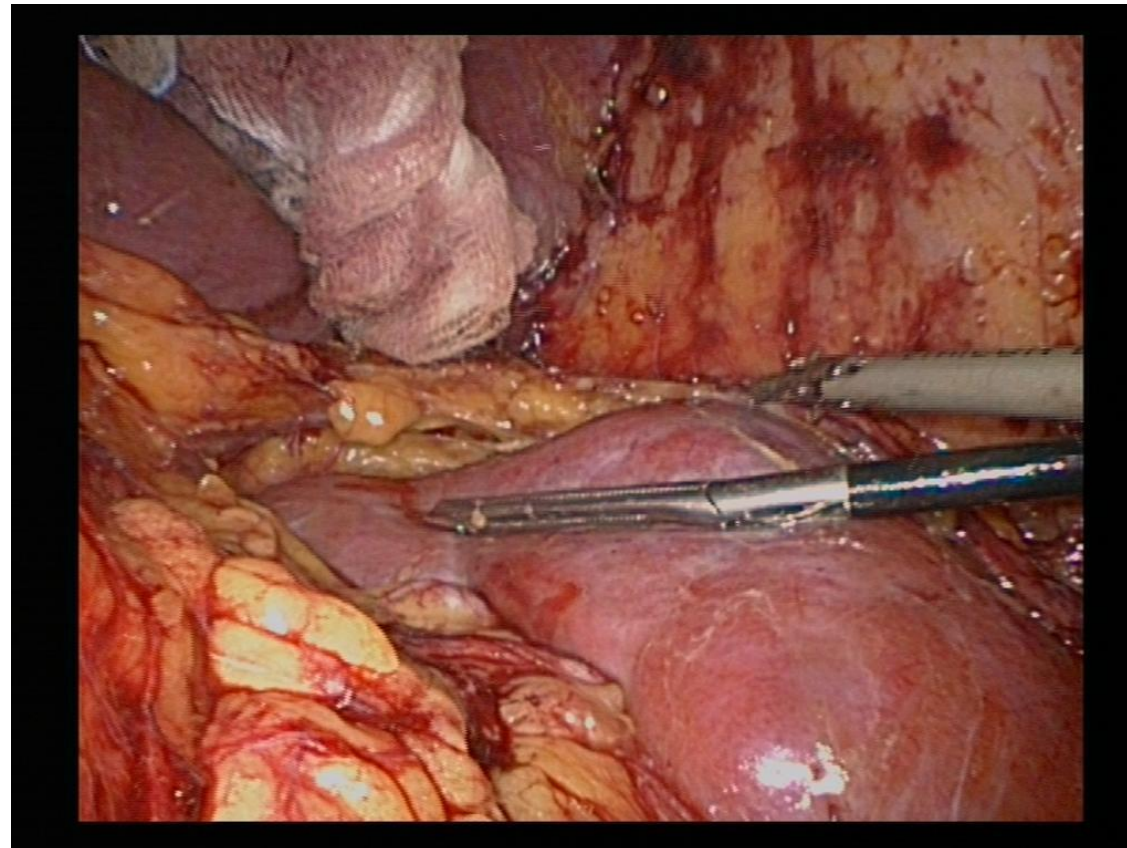
# Dissection ureter





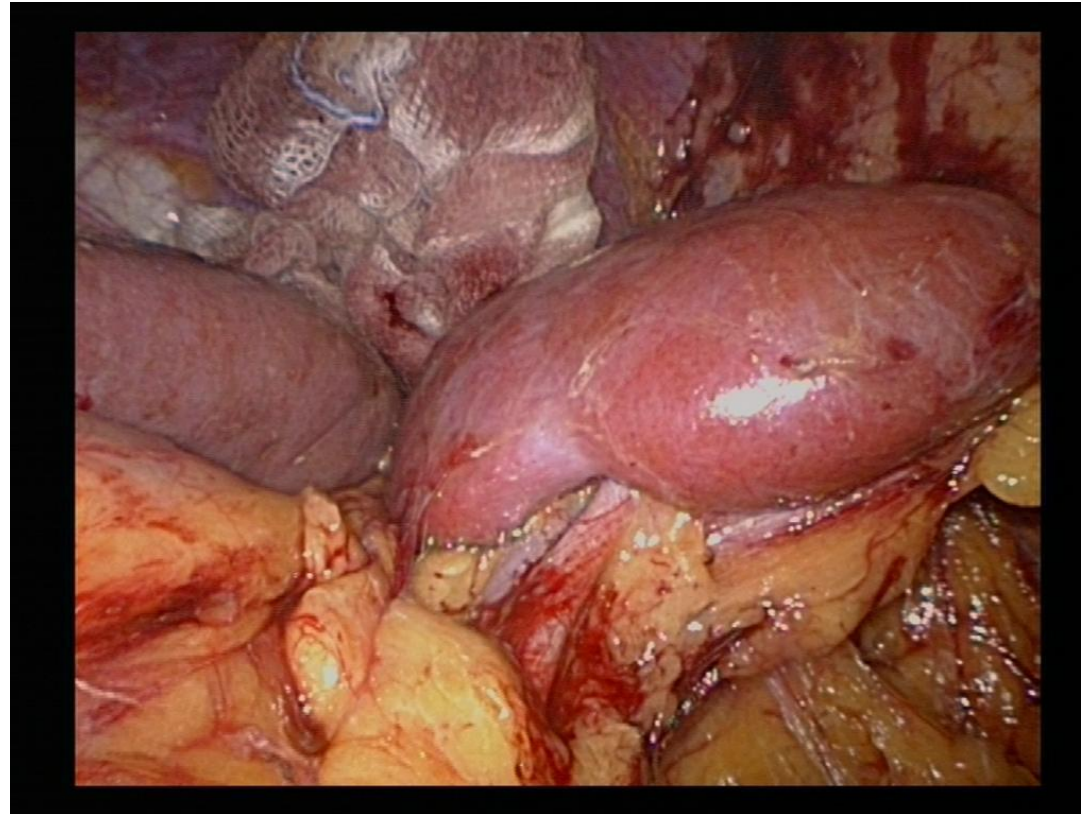
# Exploration hylum

- Free anterior side kidney past upper pole



# Vascular dissection

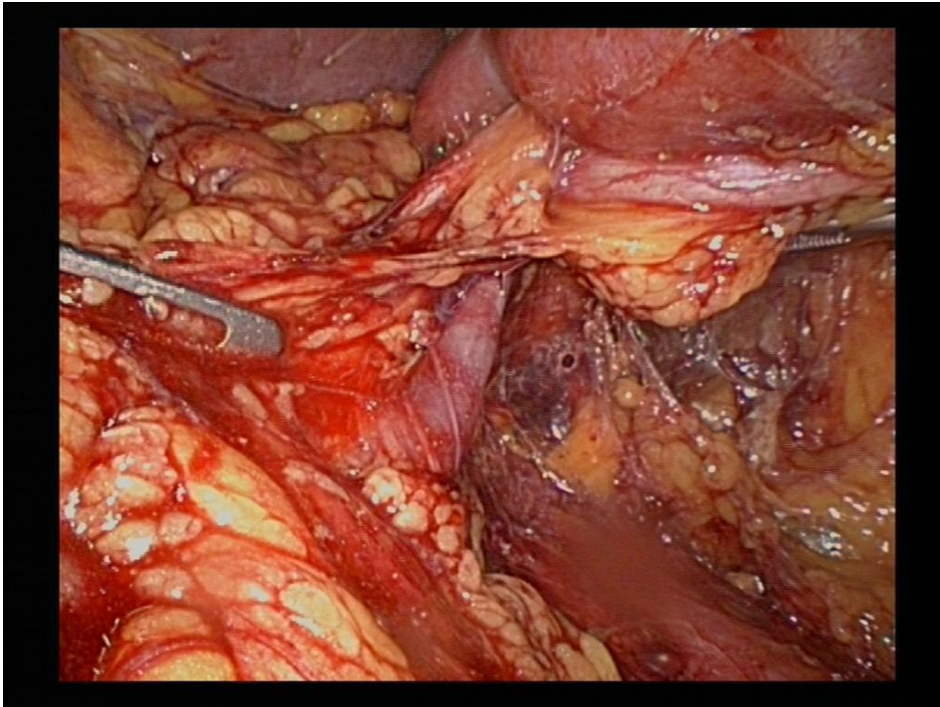
- Lift kidney with ureter laterally to expose hylum and vessels



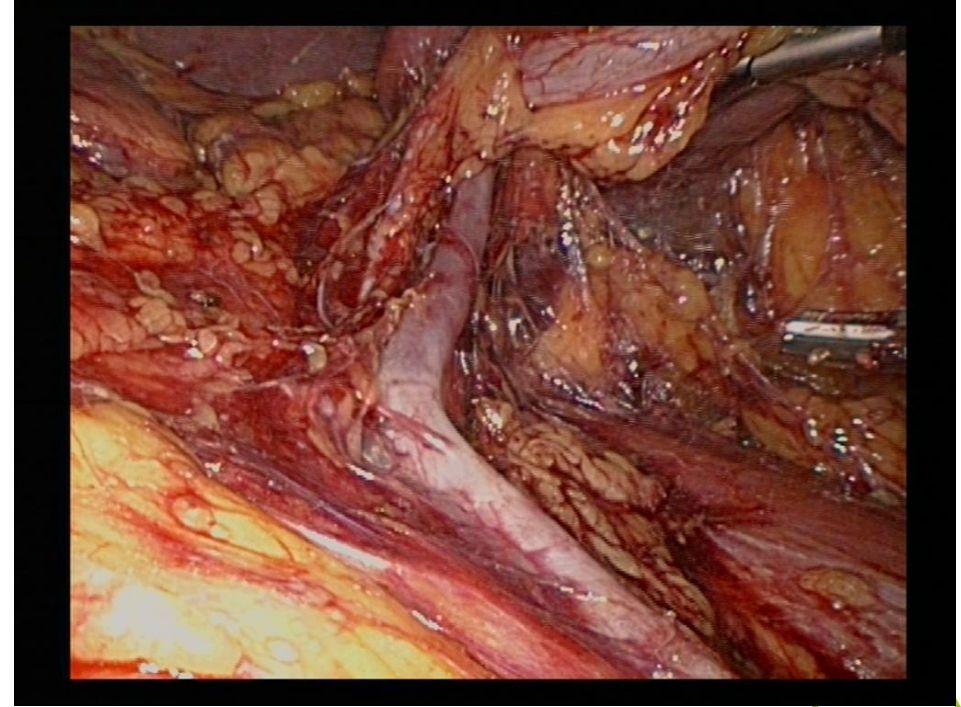


# Vascular dissection

- explore medially towards aorta

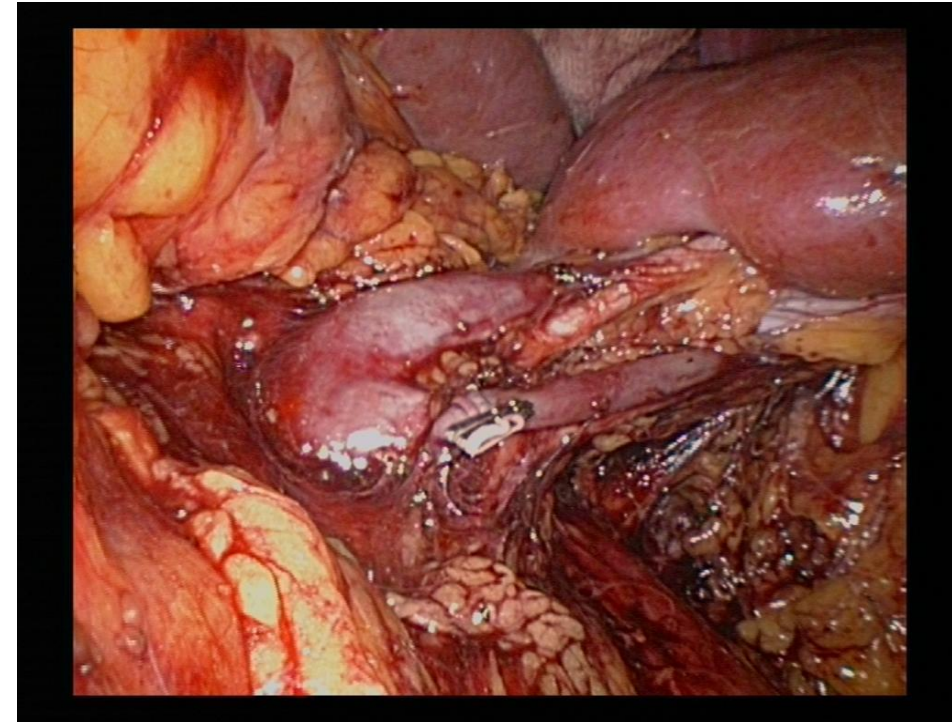
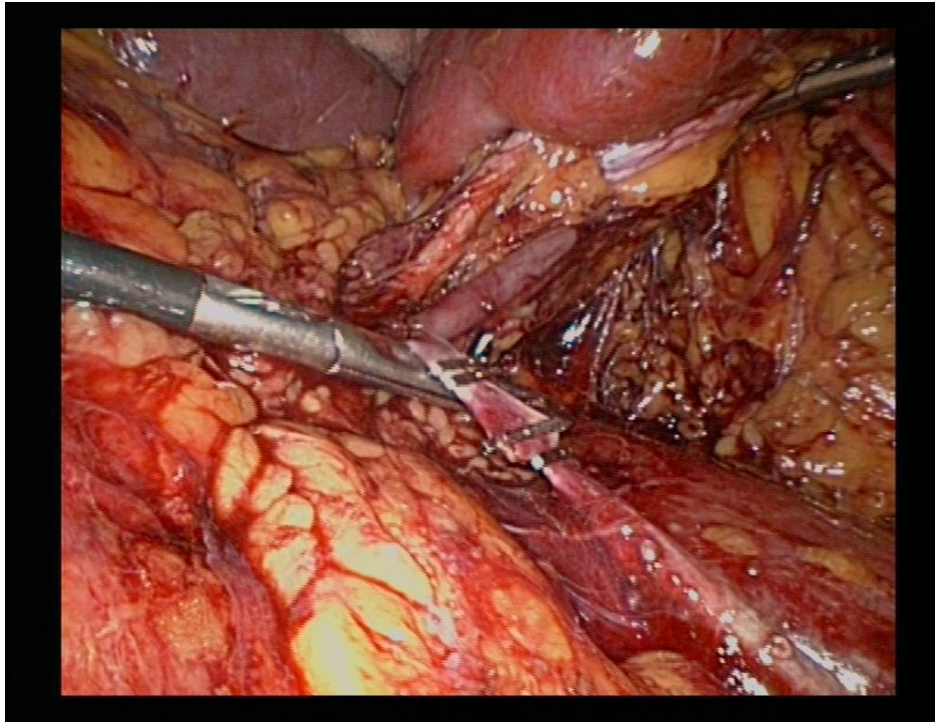


- Identify renal vein & gonadal vein



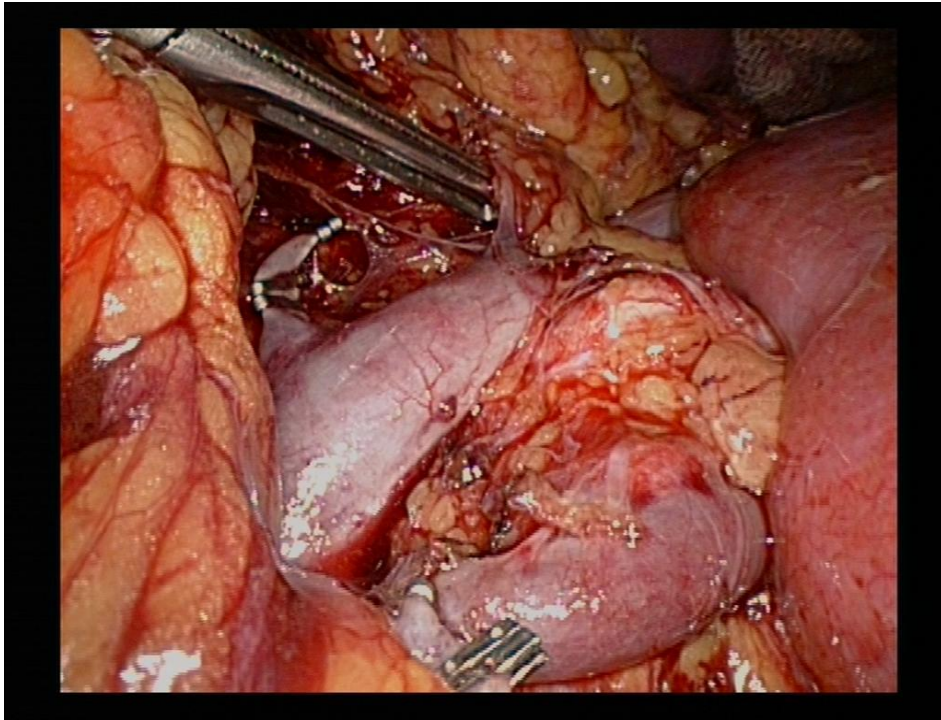
# Vascular dissection

- **Divide gonadal vein**

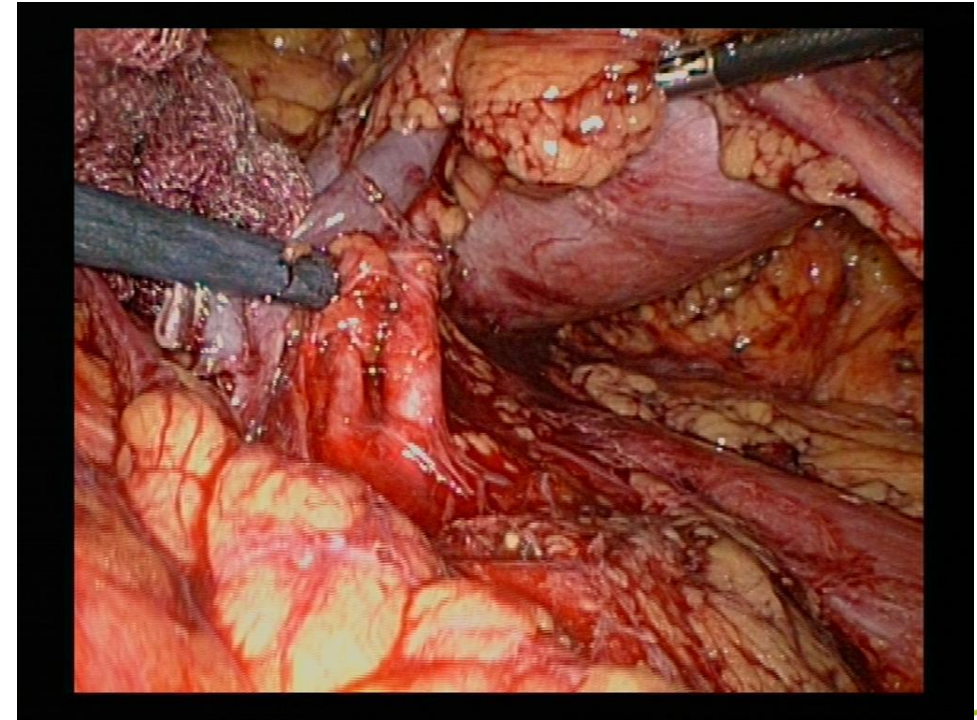


# Vascular dissection

- Identify and ligate adrenal vein(s)

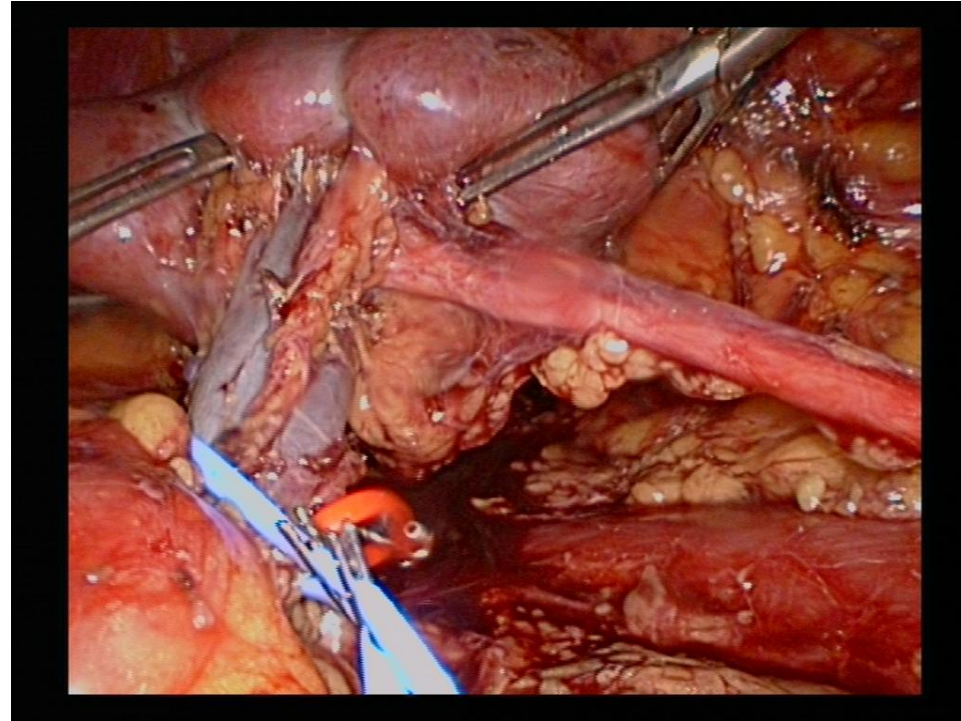
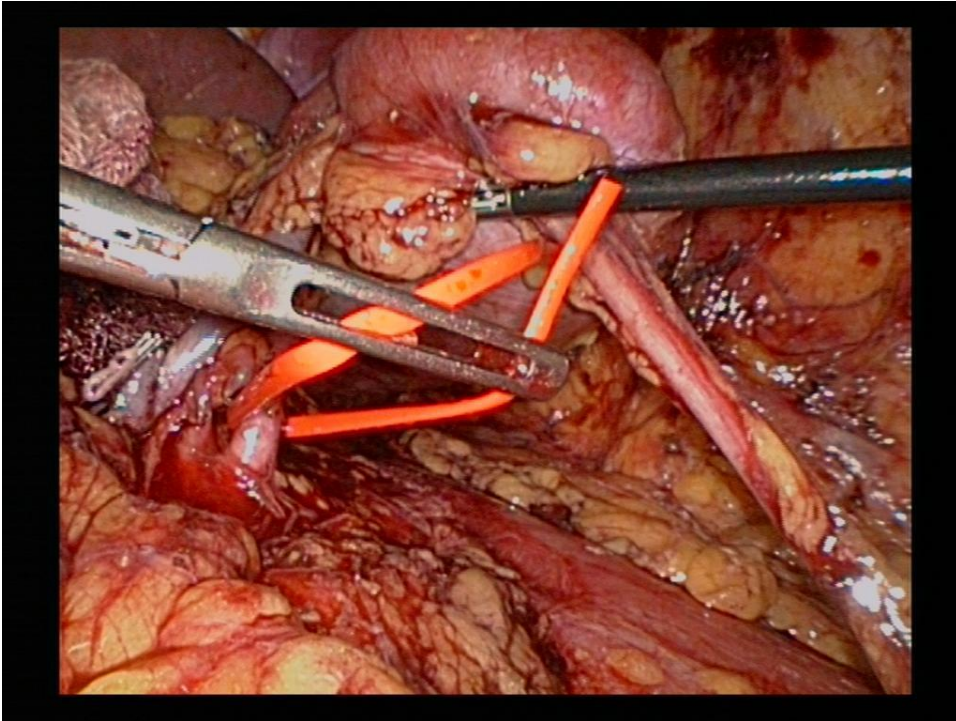


- Identify renal artery



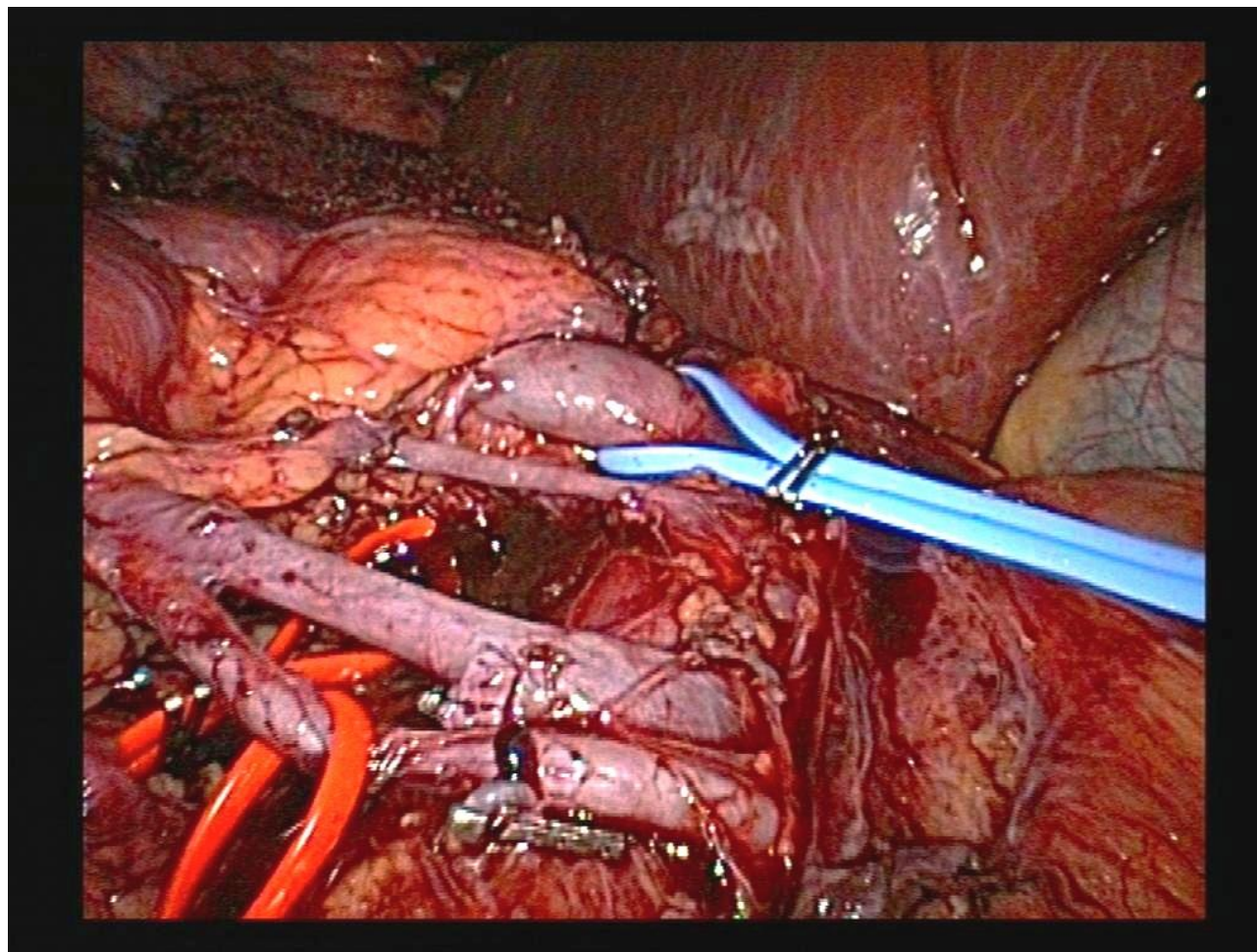
# Vascular dissection

- Mark vessels with vessel loops

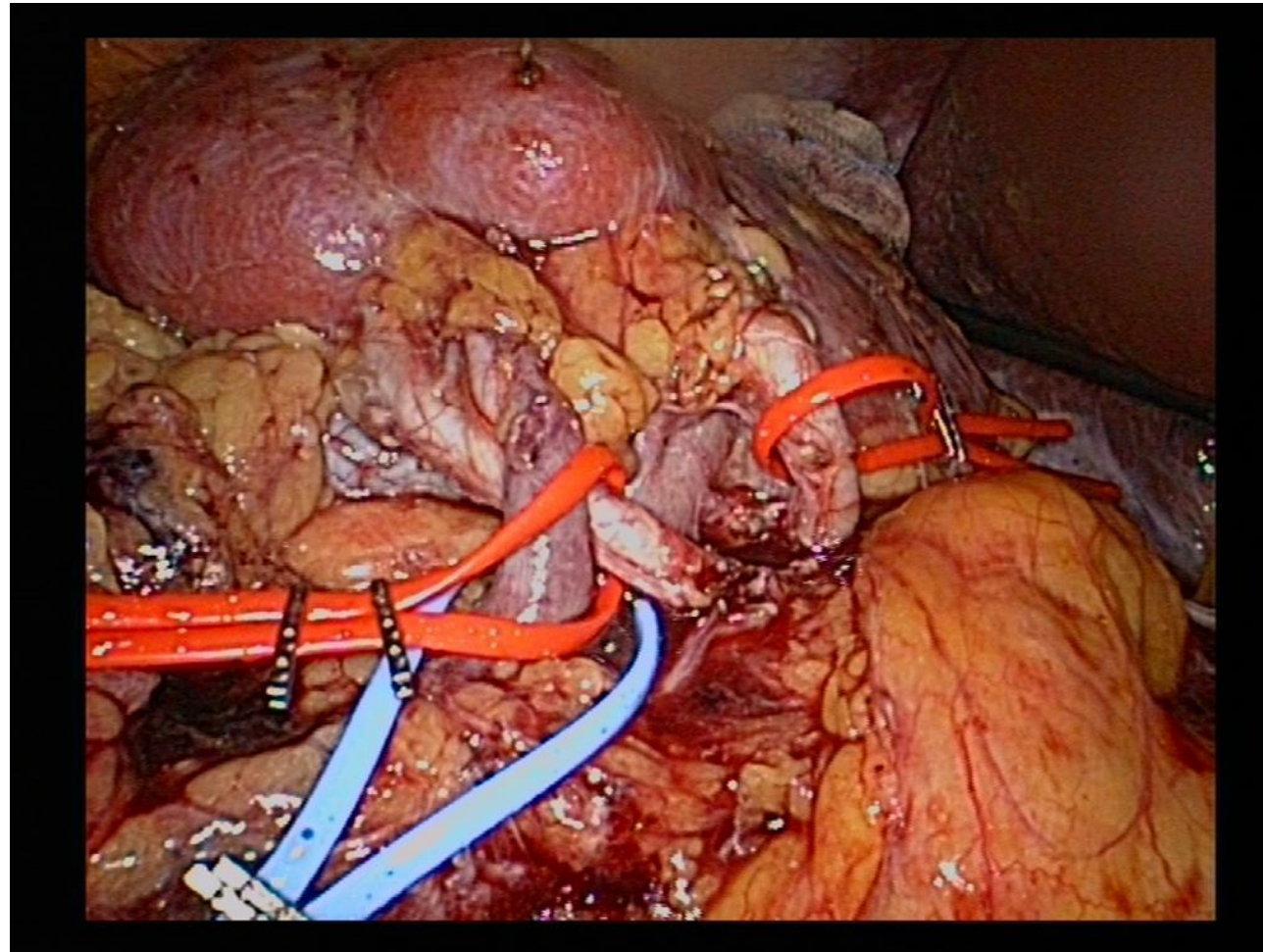




# Multiple vessel anatomy

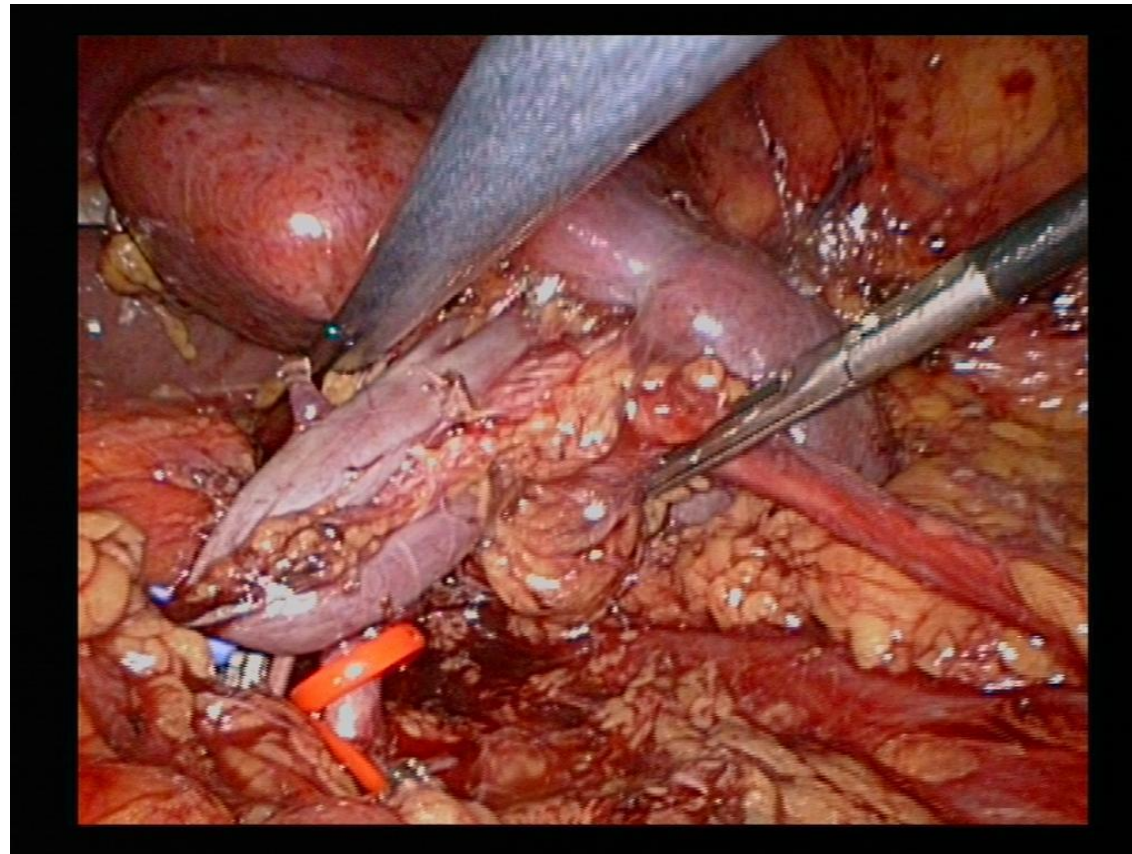


# Multiple vessel anatomy

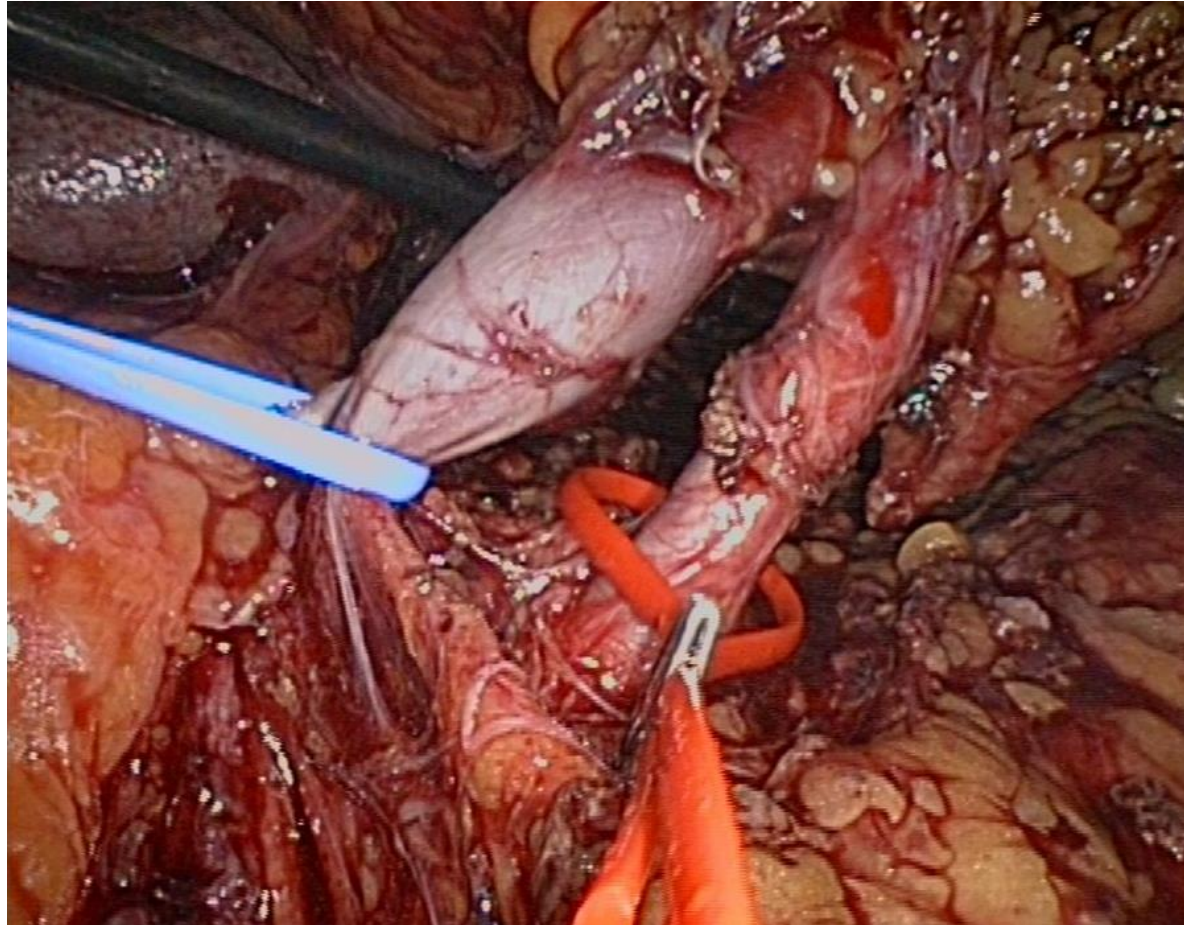


# Releasing the kidney

- Free cranial and dorsal side of the kidney

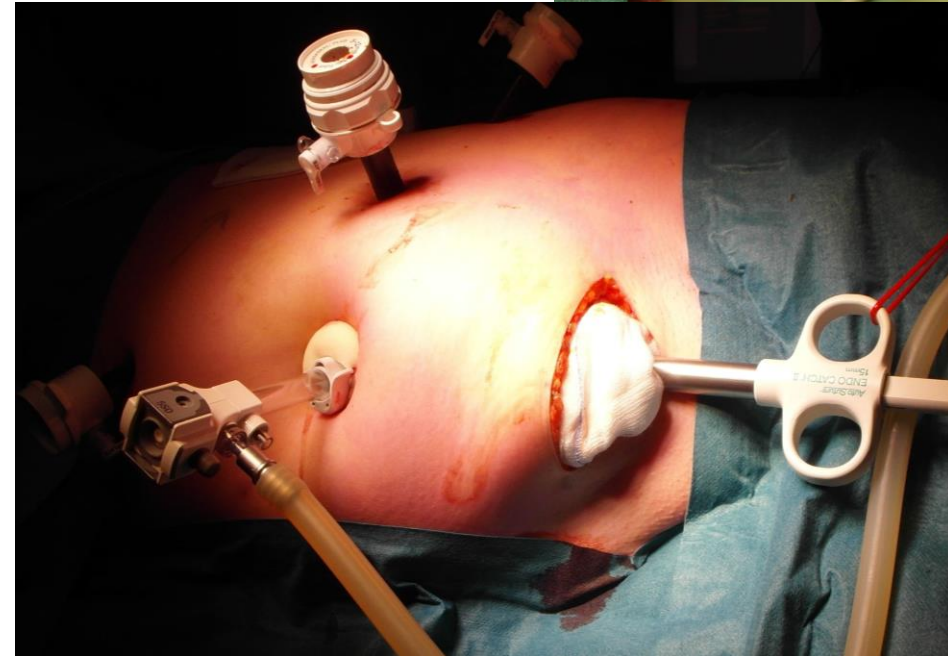
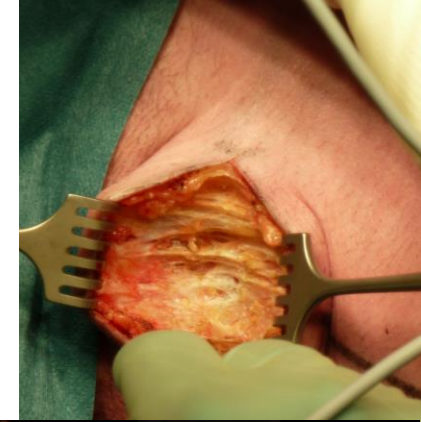


No tissue left between and behind vessels

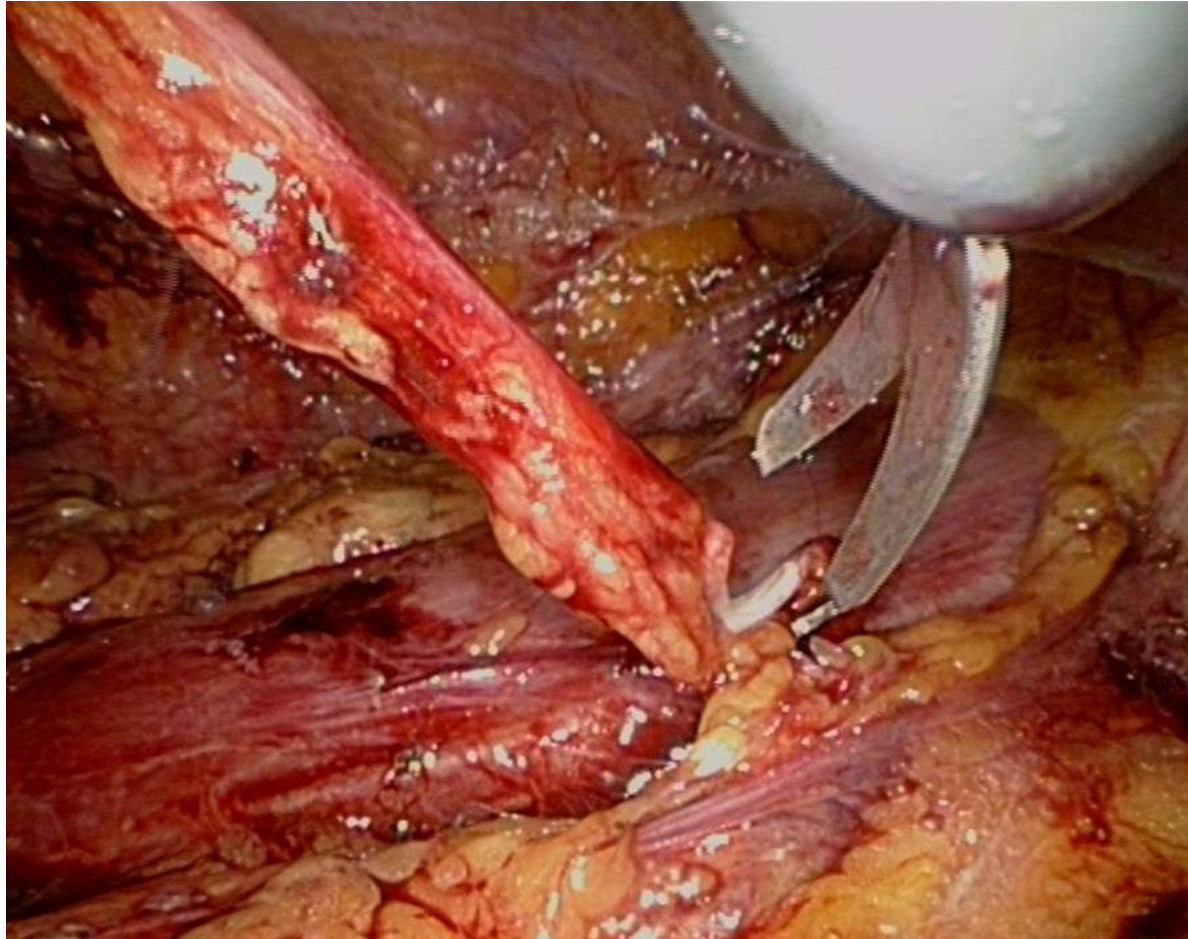


# Pfannenstiel incision

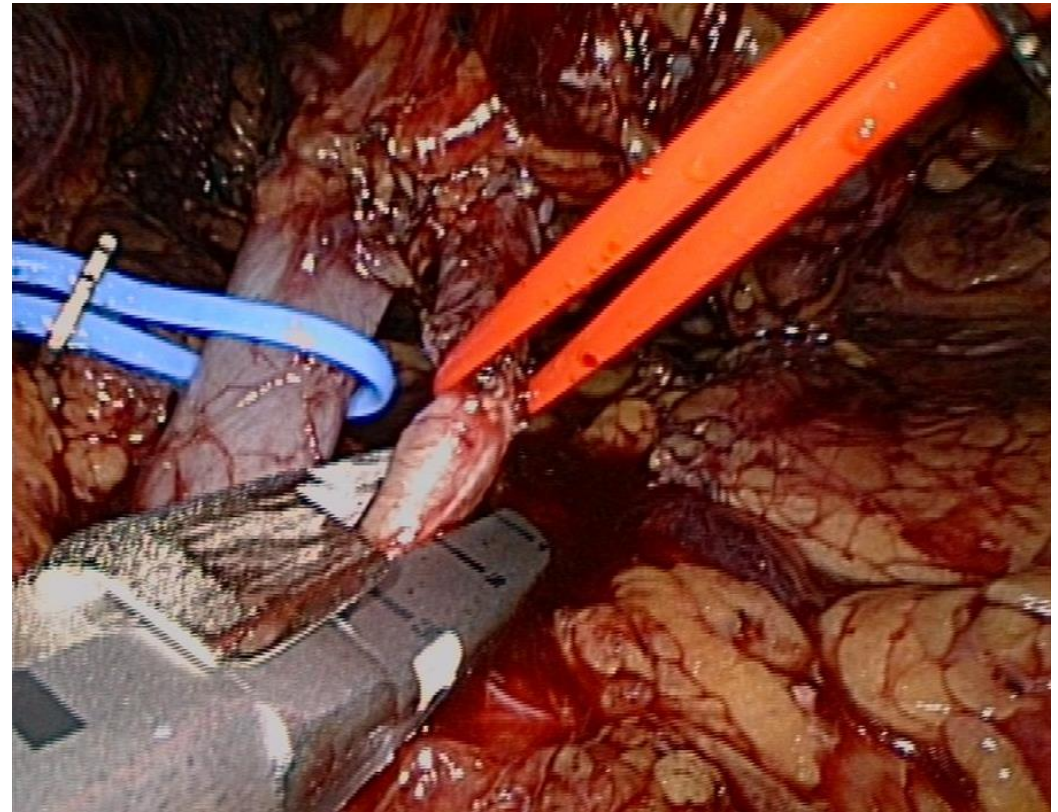
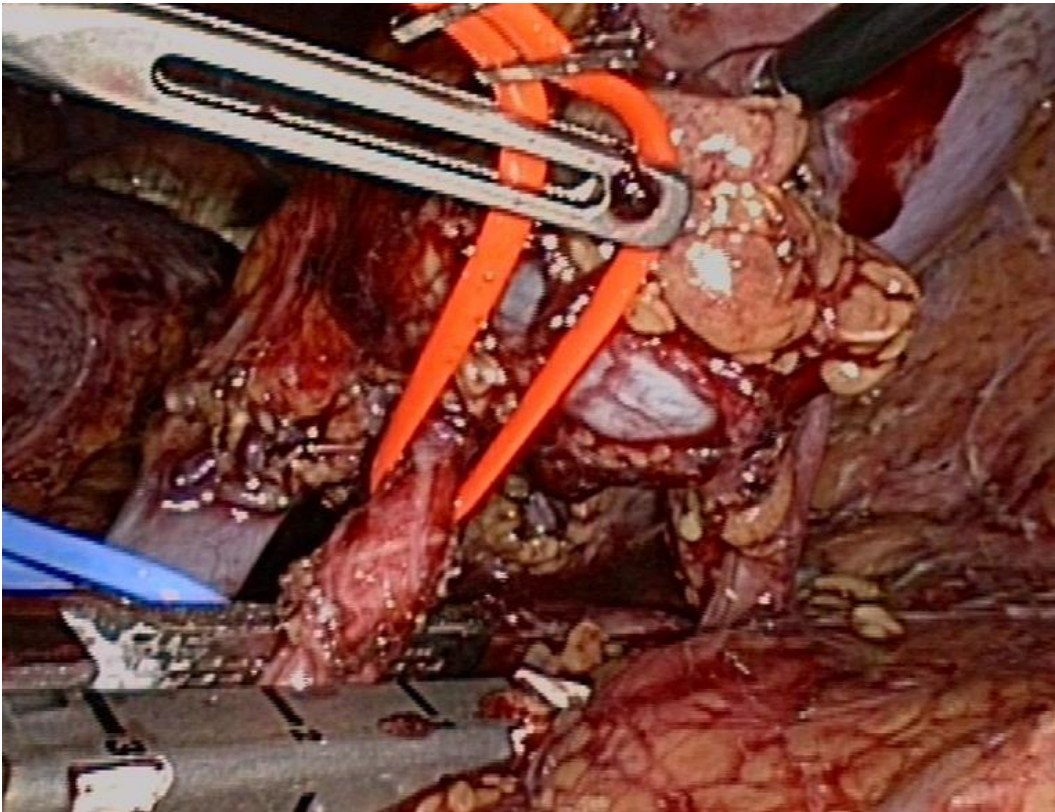
- Open fascia wide enough
- Open linea alba wide enough
- Only open peritoneum for approximately 1 cm to insert endocatch
- Insert gauze to stop leakage of CO<sub>2</sub>

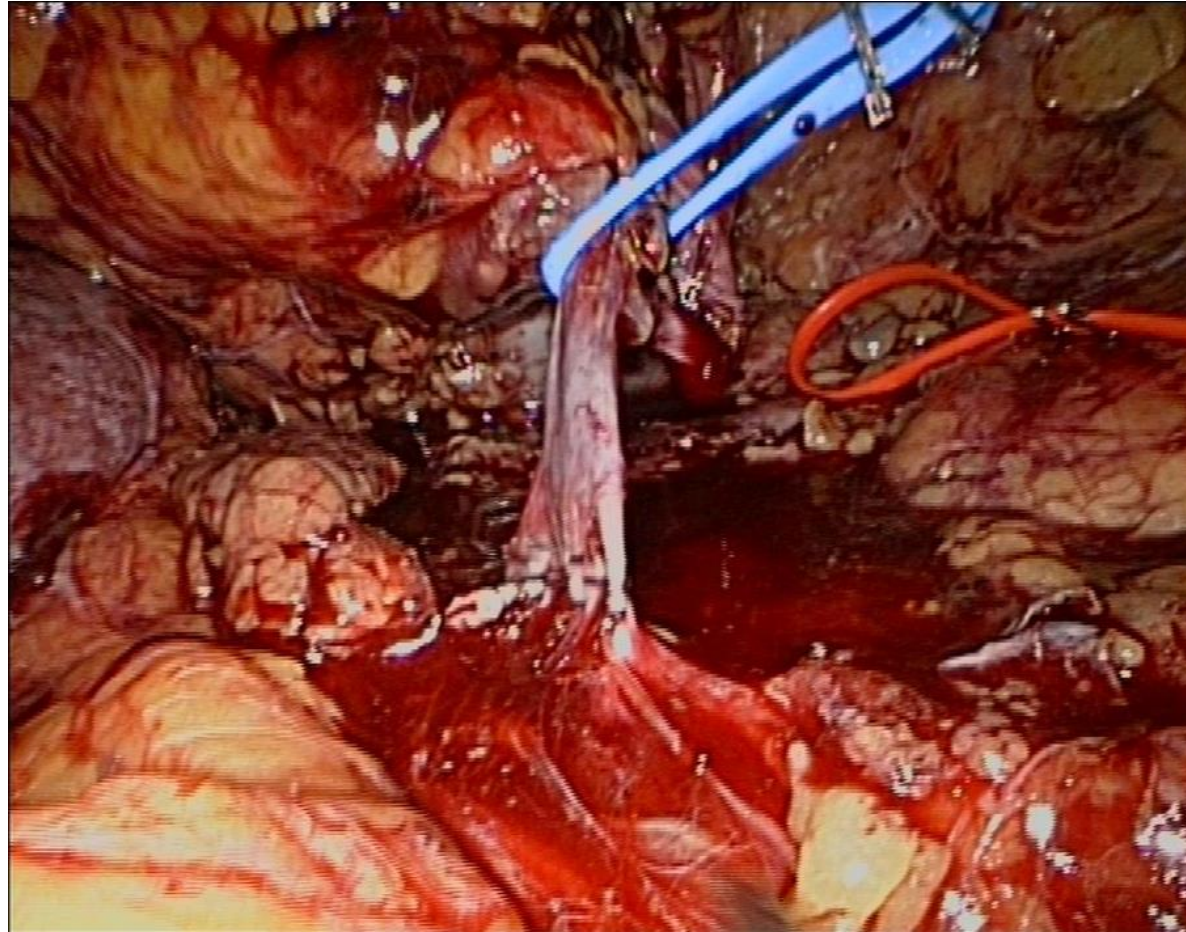


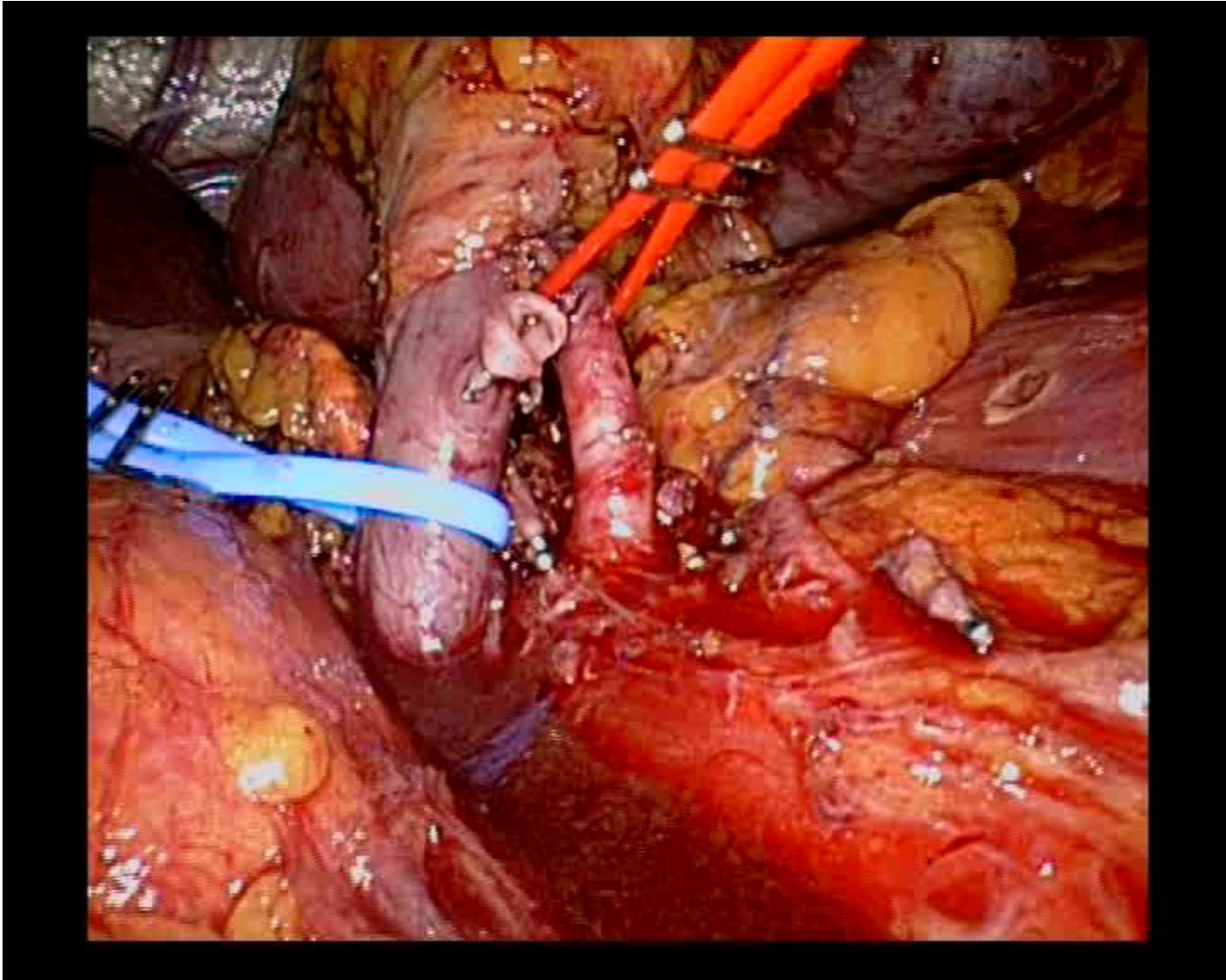
# Ligate ureter



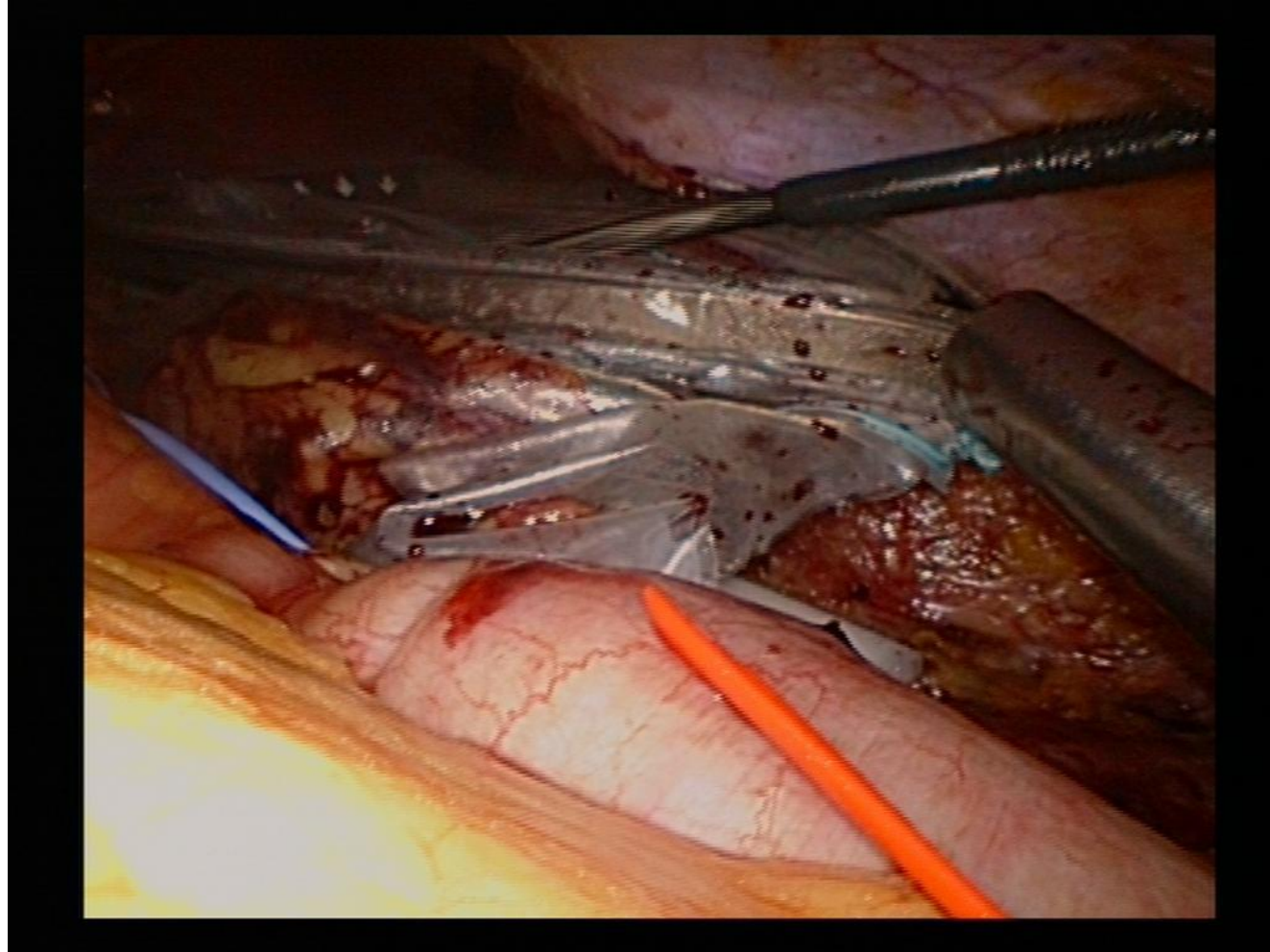
# Stapling the vessels







# Extracting the kidney







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Thank you