Checklist for Optimal Cytoreduction

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No conflicts of interest to declare

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Surgical technology to achieve a complete response

Peritonectomy procedures

- Anterior parietal
- Right subphrenic
- Left subphrenic
- Pelvic
- Omental bursa
- Mesenteric

Visceral resections

- Greater omentum
- Spleen
- Uterus and ovaries
- Rectosigmoid colon
- Right colon
- Lesser omentum
- Stomach

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Skin traction sutures

1. Contribute to a complete removal of the old abdominal incision.
2. Facilitate an incision that does not deviate from the linea alba.
3. Minimize damage to small bowel loops adherent to the anterior abdominal wall.
4. Allow the construction of a peritoneal window.
5. Facilitate the initial 5-10 cm of the anterior peritoneal peritonectomy.
6. Provide a reservoir for open HIPEC with vapor barrier.

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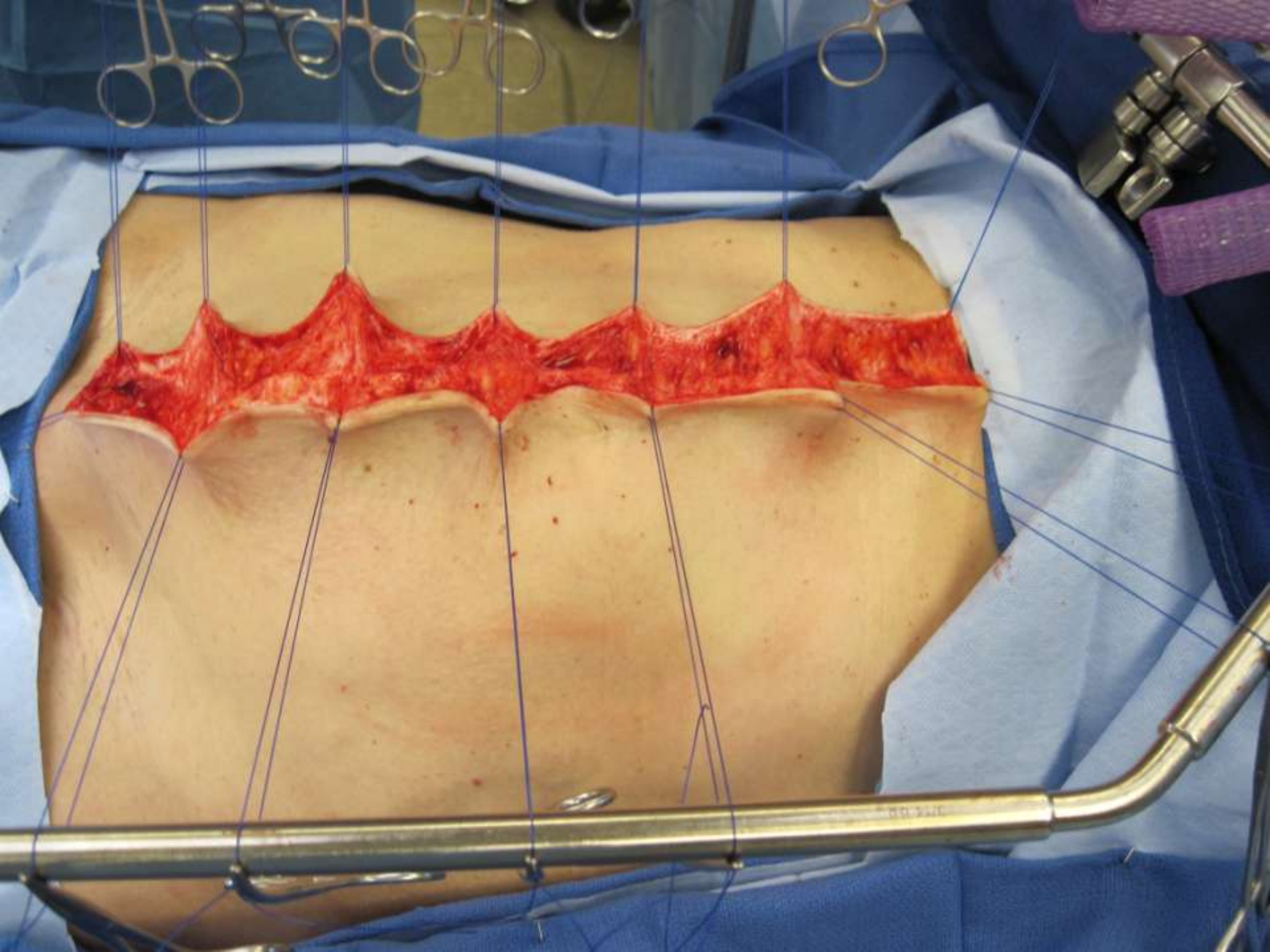
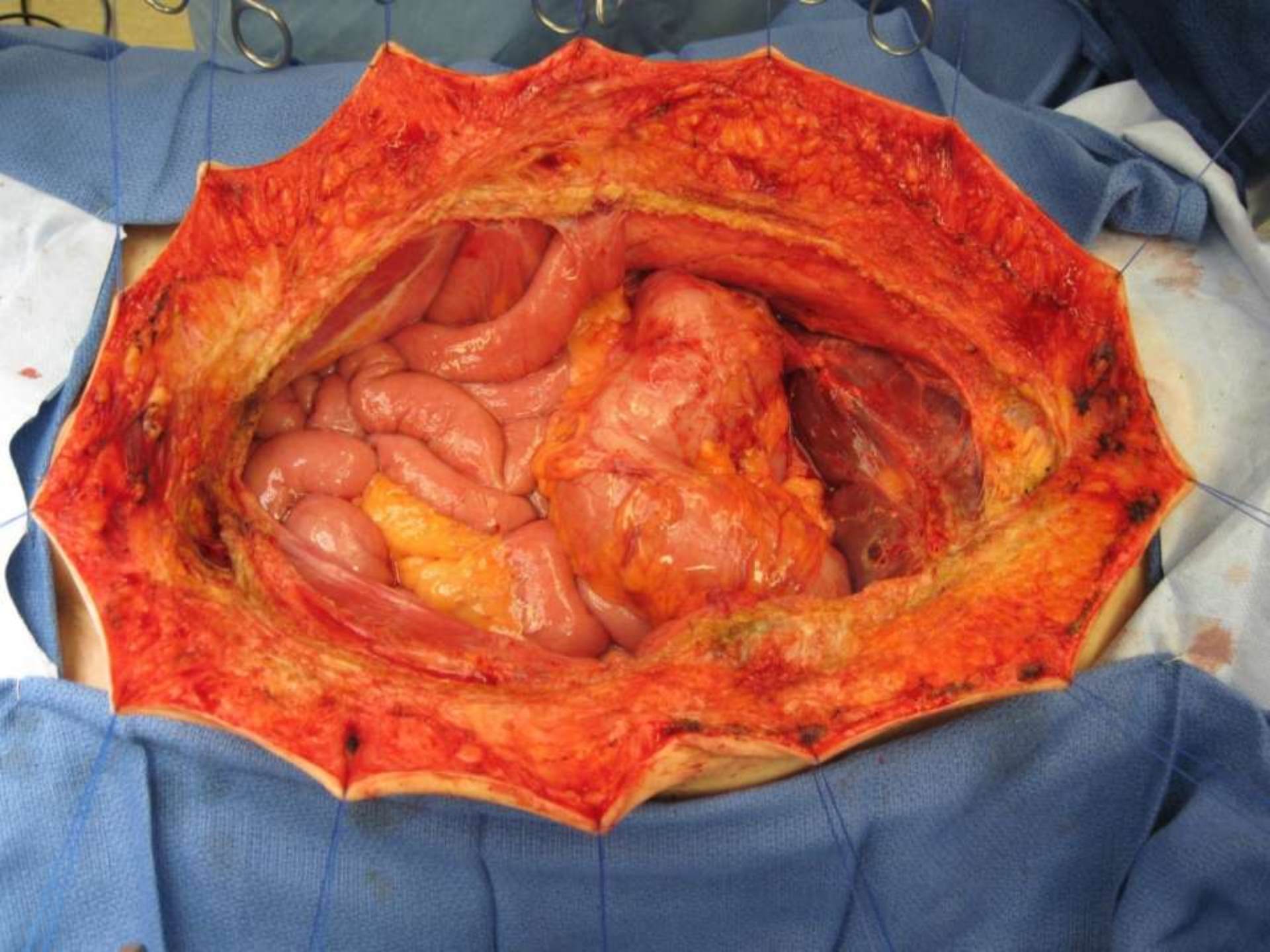
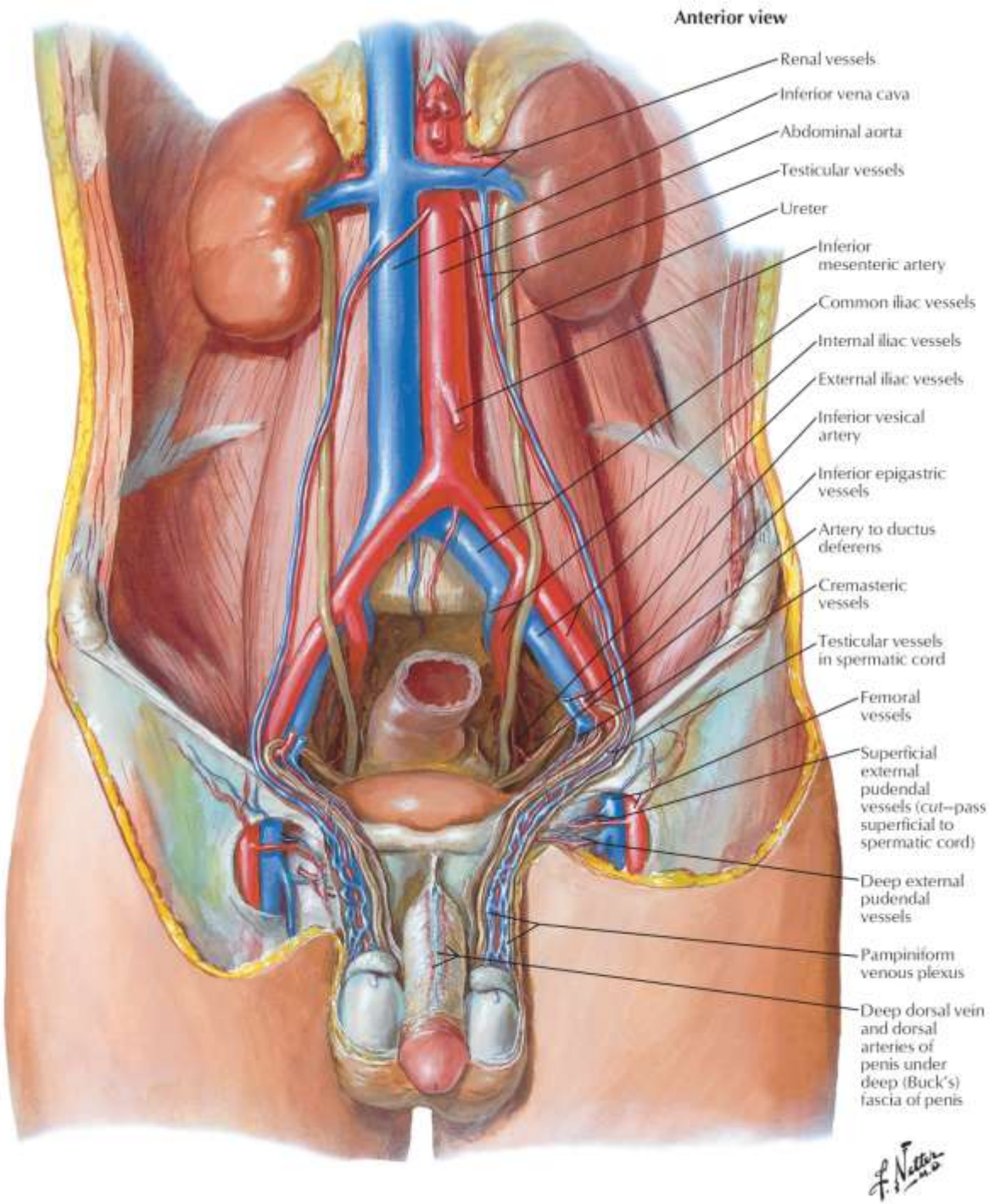




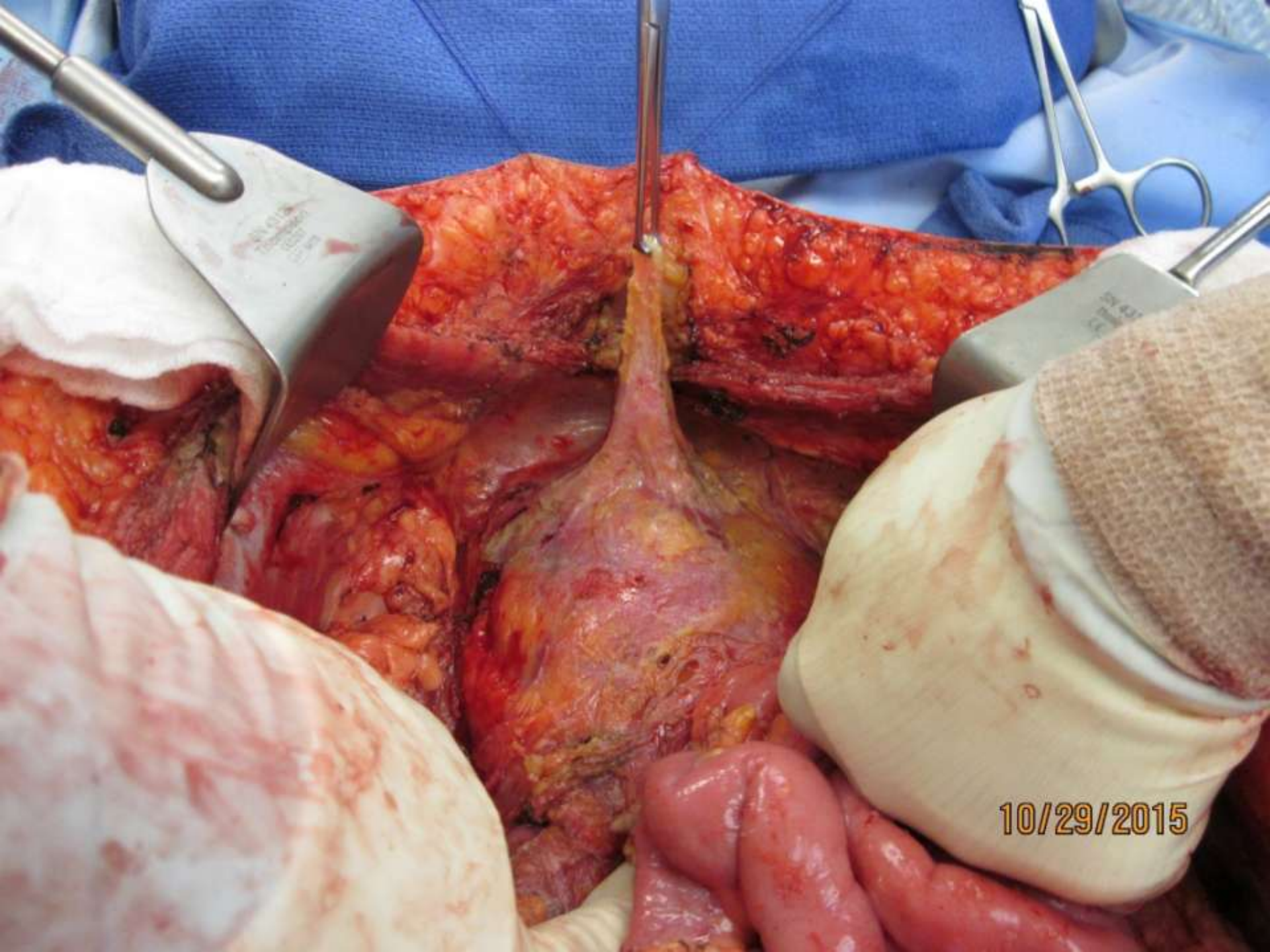
Ureter localization

Locate and widely explore the ureter within the abdomen before dissecting for it in the pelvis.


Anterior view
Renal vessels
Inferior vena cava
Abdominal aorta
Testicular vessels
Ureter
Inferior mesenteric artery
Common iliac vessels
Internal iliac vessels
External iliac vessels
Inferior vesical artery
Inferior epigastric vessels
Artery to ductus deferens
Cremasteric vessels
Testicular vessels in spermatic cord
Femoral vessels
Superficial external pudendal vessels (*cut*--pass superficial to spermatic cord)
Deep external pudendal vessels
Pampiniform venous plexus
Deep dorsal vein and dorsal arteries of penis under deep (Buck's) fascia of penis
F. Netter M.D.

Urachal traction

Place an Allis clamp on the urachus to elevate the bladder to initiate pelvic peritonectomy.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Cul-de-sacectomy

Place the posterior vagina on traction using an Allis clamp to facilitate peritonectomy of the anterior aspect of the rectum.

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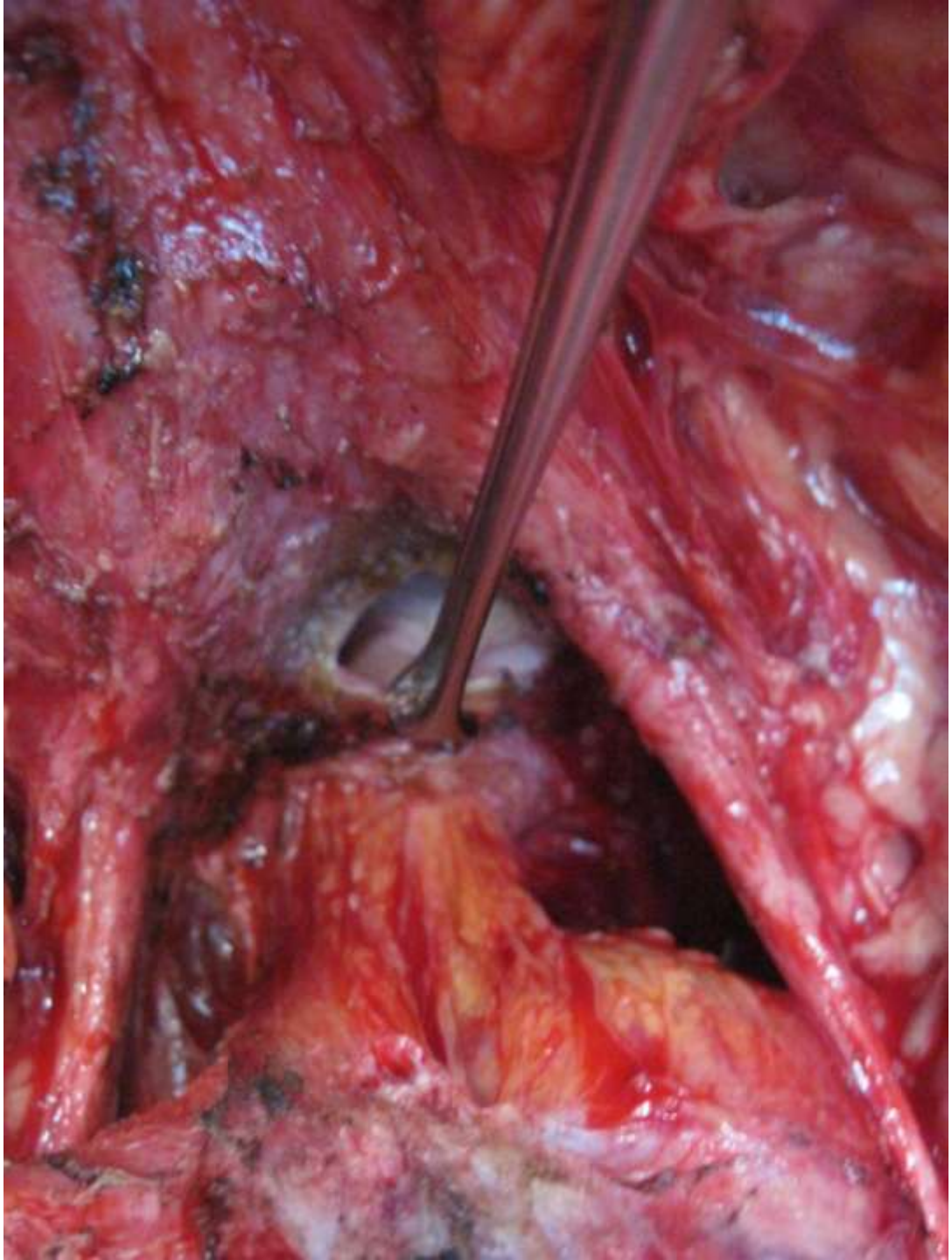

Use the subphrenic planes to bluntly strip the posterior ½ of the diaphragm from posterior to anterior.

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Blunt dissection of the right subphrenic plane medially

Locate the space between the anterolateral branch of the inferior subphrenic vessels and the right hepatic vein to bluntly open the aspect of the right subphrenic plane.

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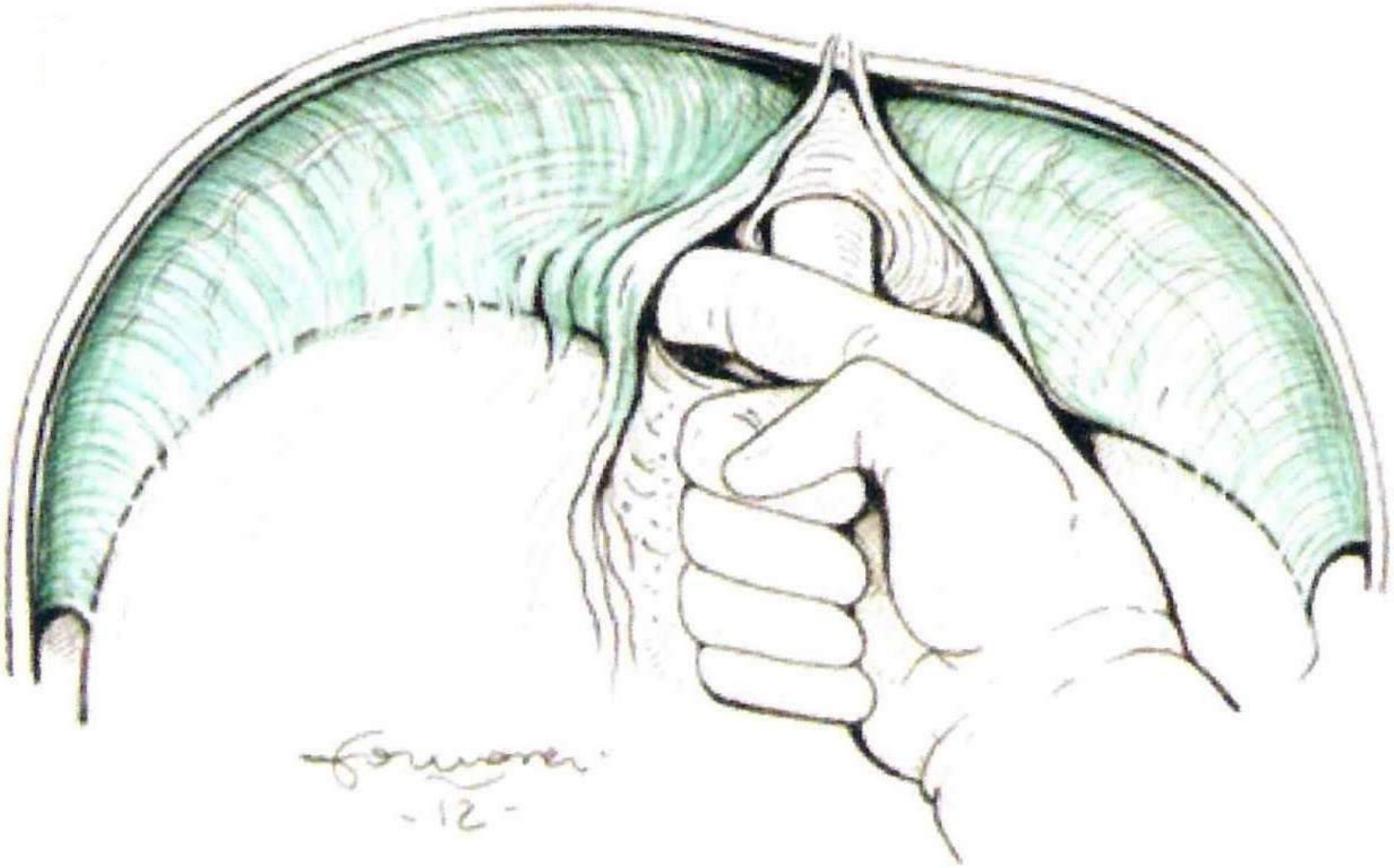

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Blunt dissection of the right subphrenic plane laterally

Remove the retroperitoneal fat to locate the 12th rib and the lateral arcuate ligament. Develop the lateral aspect of the right subphrenic plane and bluntly dissect posterior to anterior.

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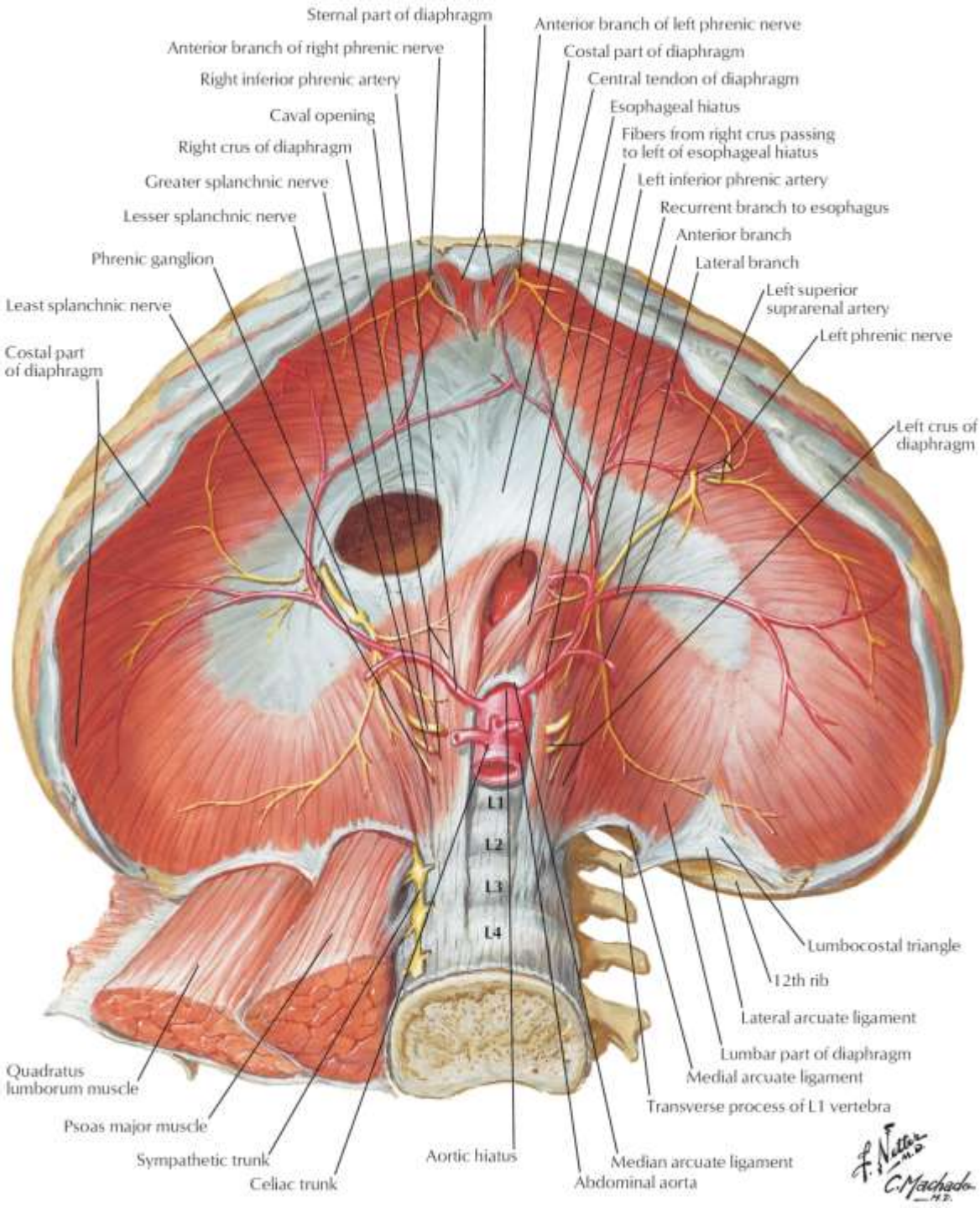
Sternal part of diaphragm
Anterior branch of right phrenic nerve
Right inferior phrenic artery
Caval opening
Right crus of diaphragm
Greater splanchnic nerve
Lesser splanchnic nerve
Phrenic ganglion
Least splanchnic nerve
Costal part of diaphragm
Anterior branch of left phrenic nerve
Costal part of diaphragm
Central tendon of diaphragm
Esophageal hiatus
Fibers from right crus passing to left of esophageal hiatus
Left inferior phrenic artery
Recurrent branch to esophagus
Anterior branch
Lateral branch
Left superior suprarenal artery
Left phrenic nerve
Left crus of diaphragm
L1
L2
L3
L4
Lumbocostal triangle
12th rib
Lateral arcuate ligament
Lumbar part of diaphragm
Medial arcuate ligament
Transverse process of L1 vertebra
Quadratus lumborum muscle
Psoas major muscle
Sympathetic trunk
Celiac trunk
Aortic hiatus
Median arcuate ligament
Abdominal aorta
F. Netter M.D.
C. Machado M.D.

On the left, the medial aspect of the left subphrenic plane does not develop well. By dividing the perirenal fascia, the lateral aspect of the left subphrenic plane can be used effectively.

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Division of the hepatic bridge

The peritoneal tunnel around the hepatic round ligament must be divided to clear peritoneal metastases from beneath the pont hepatique (hepatic bridge).

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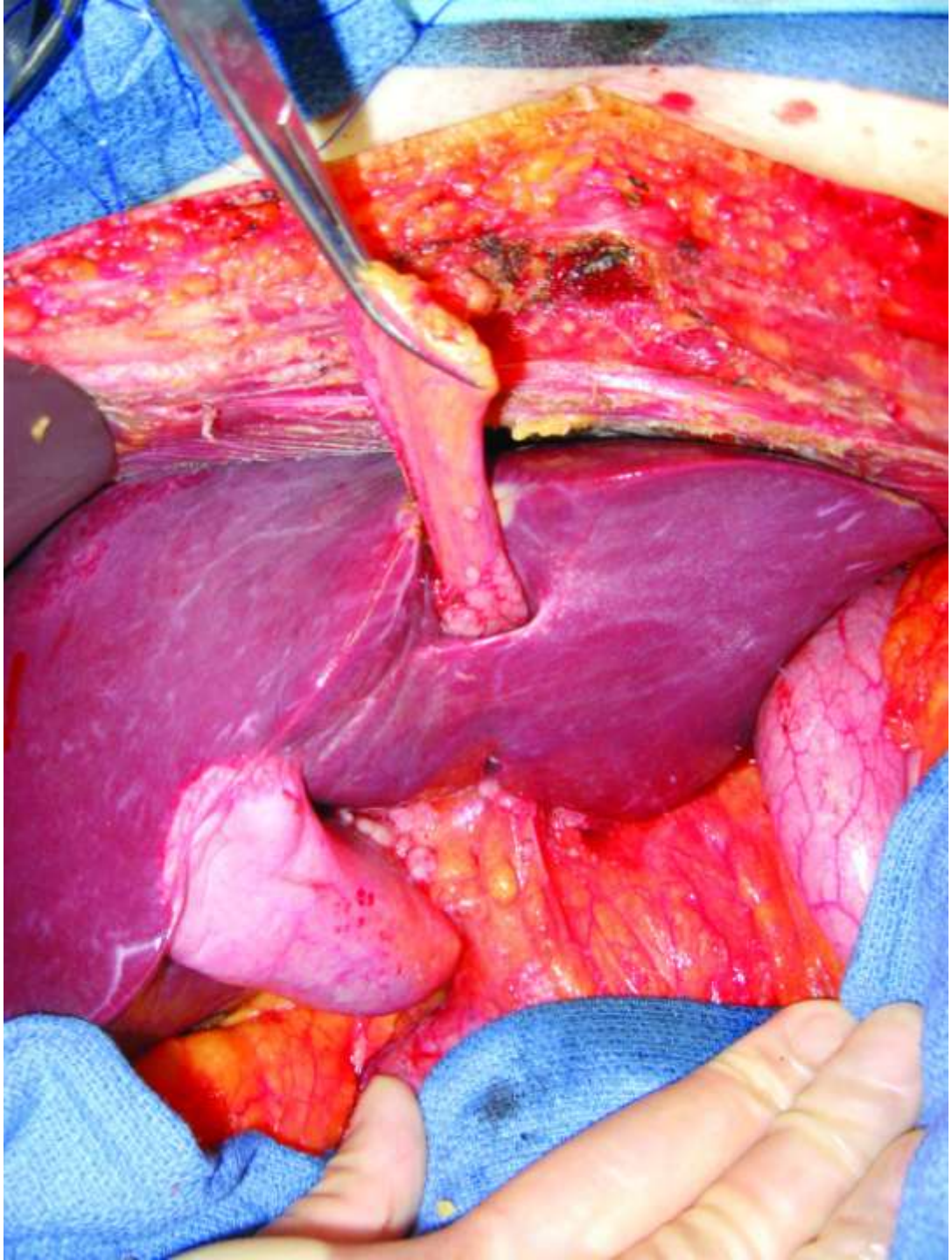

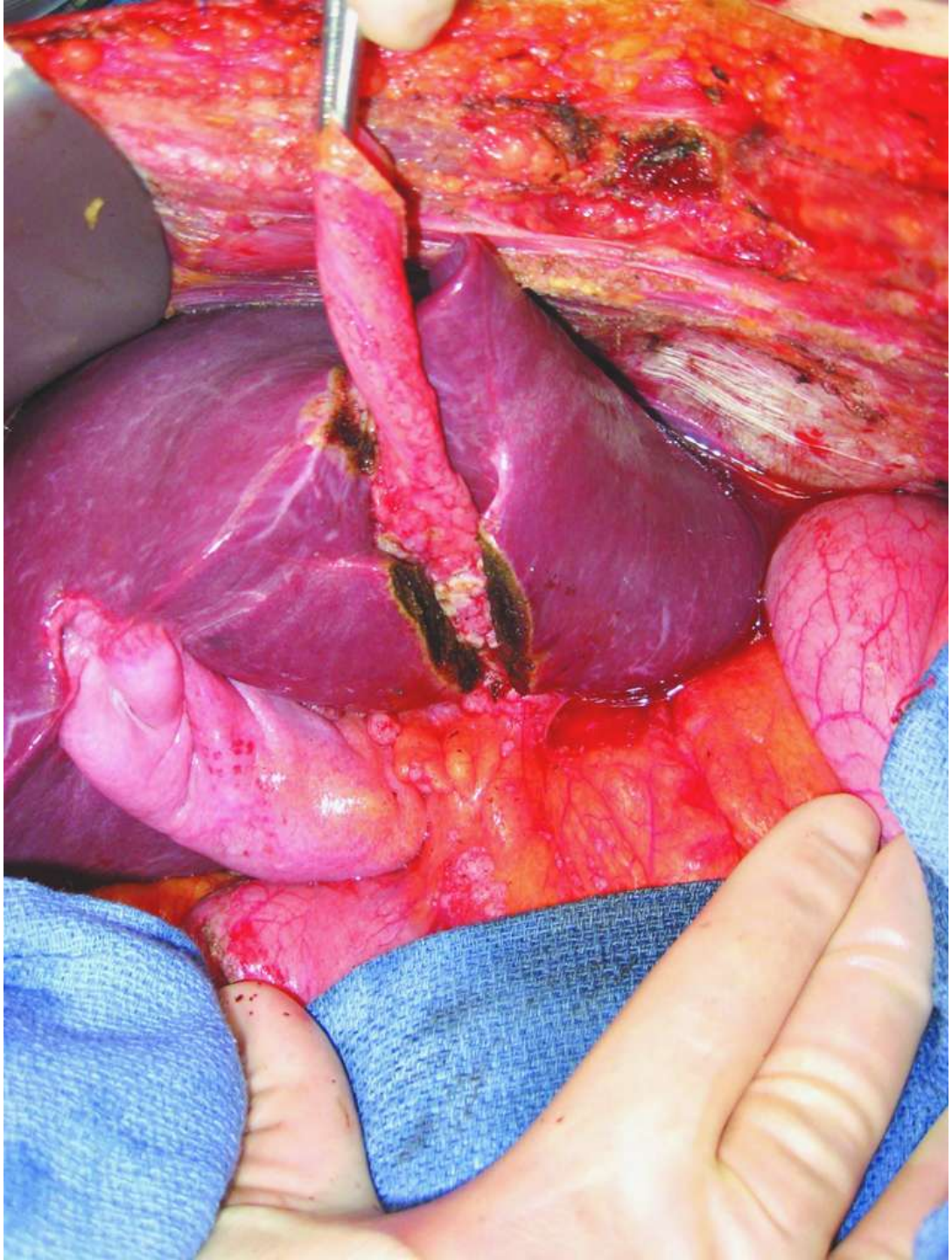

Exposure of the gastro-hepatic ligament

Completely divide the left triangular ligament and left coronary ligament to mobilize the left lateral segment of the liver. Elevate it to the right.

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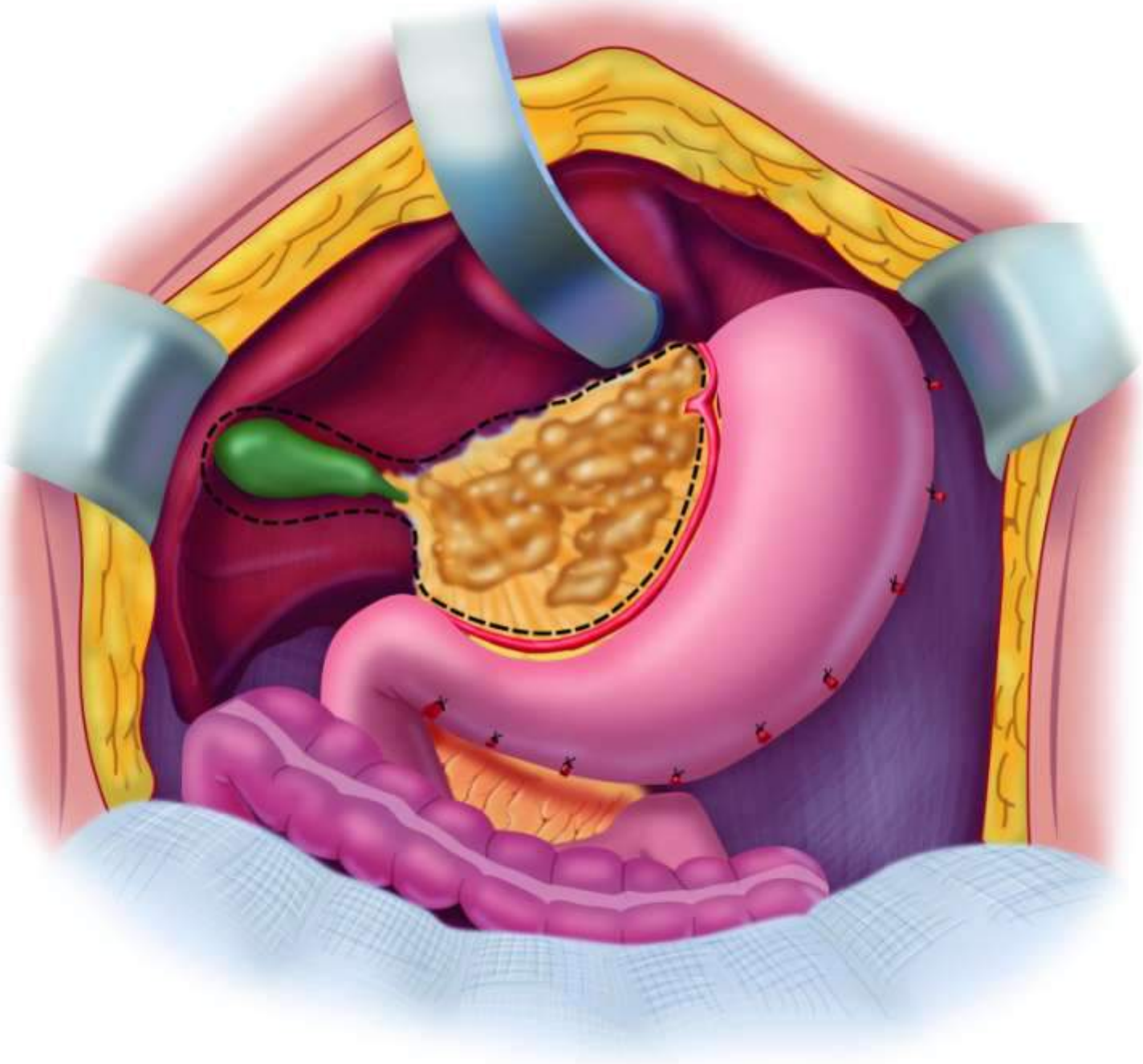

Lesser omentectomy

Use profound digital dissection to clear fat and tumor within the lesser omentum from the lesser omental vascular arcade. Preserve right and left gastric arteries.

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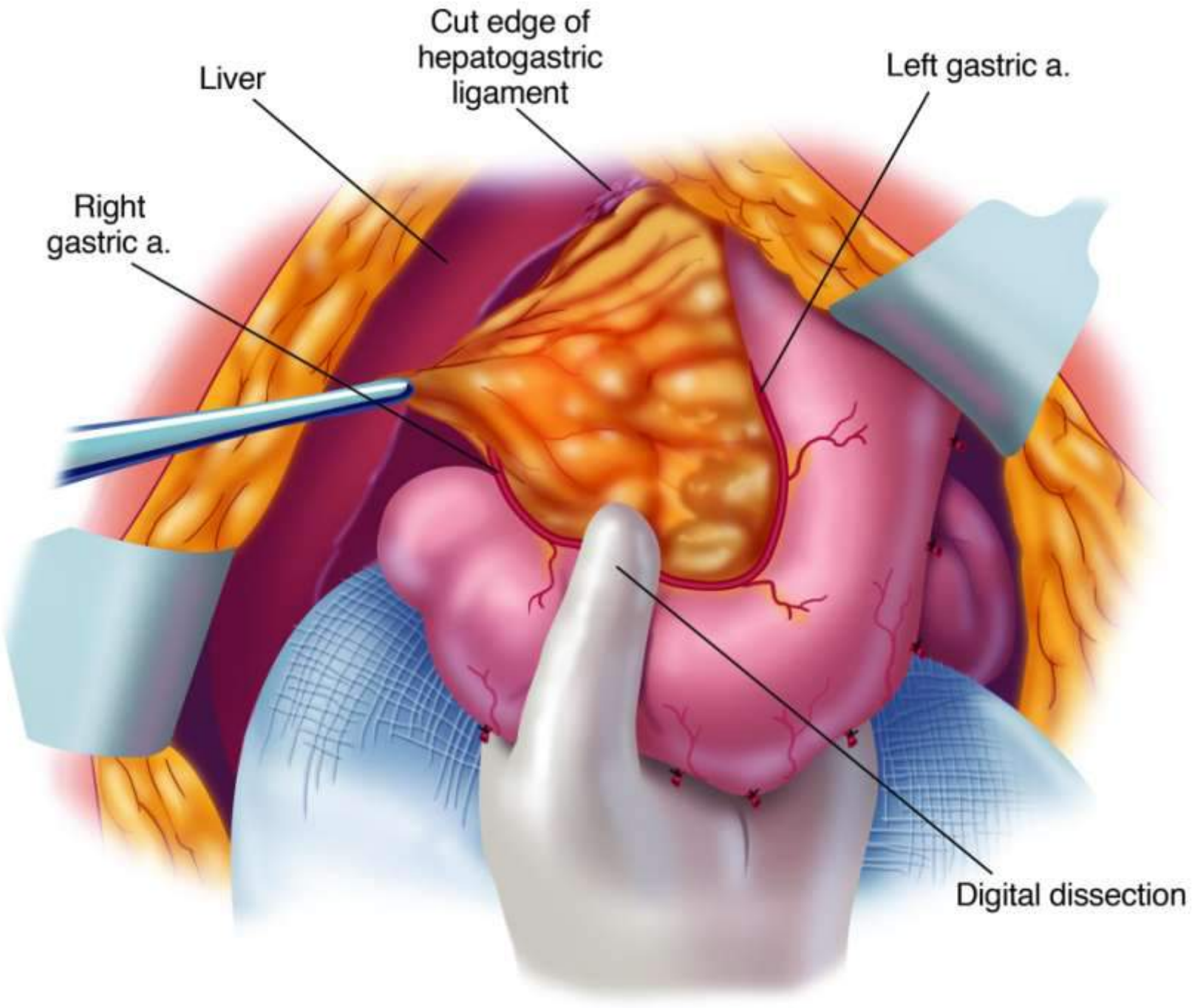
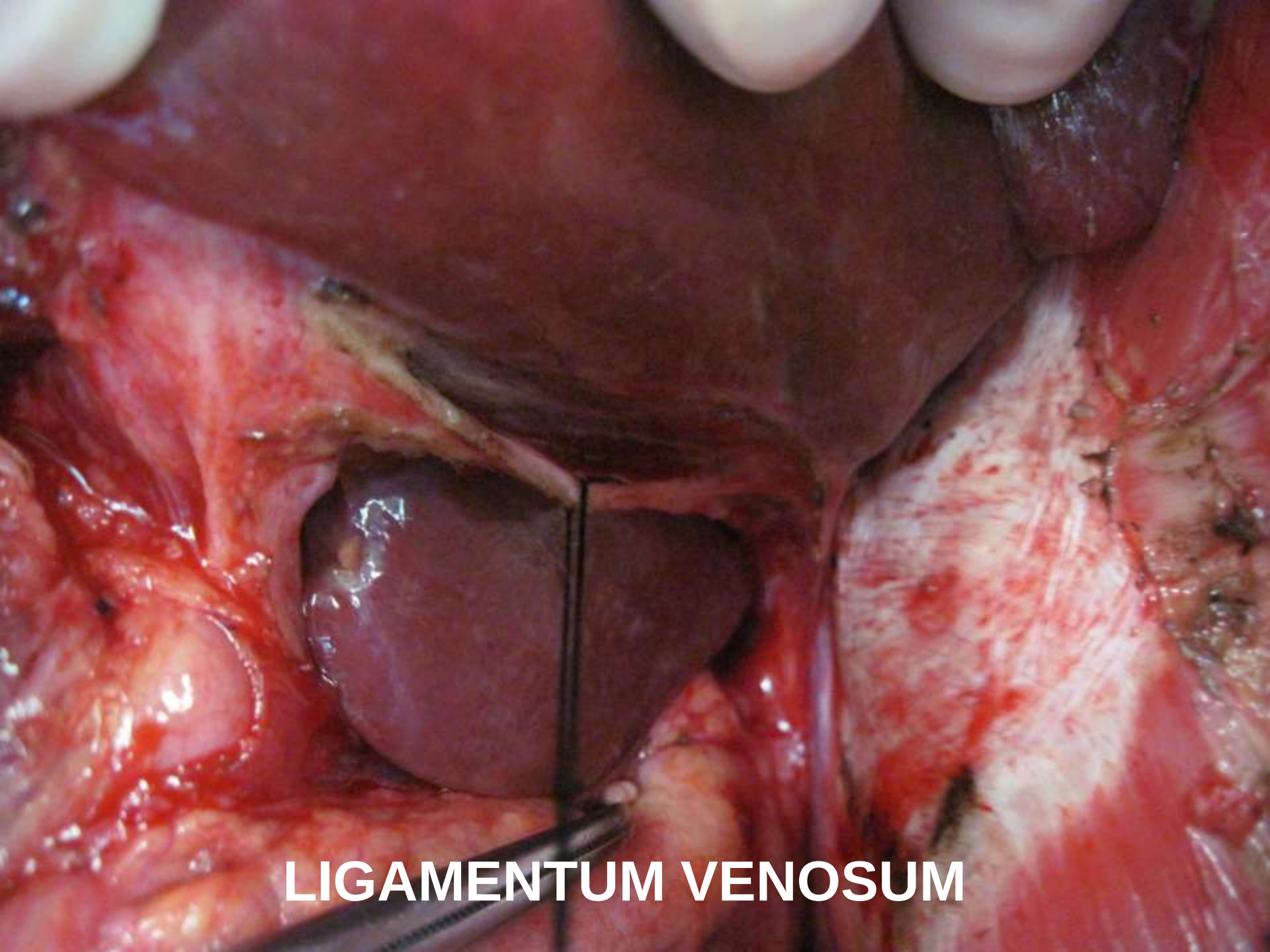
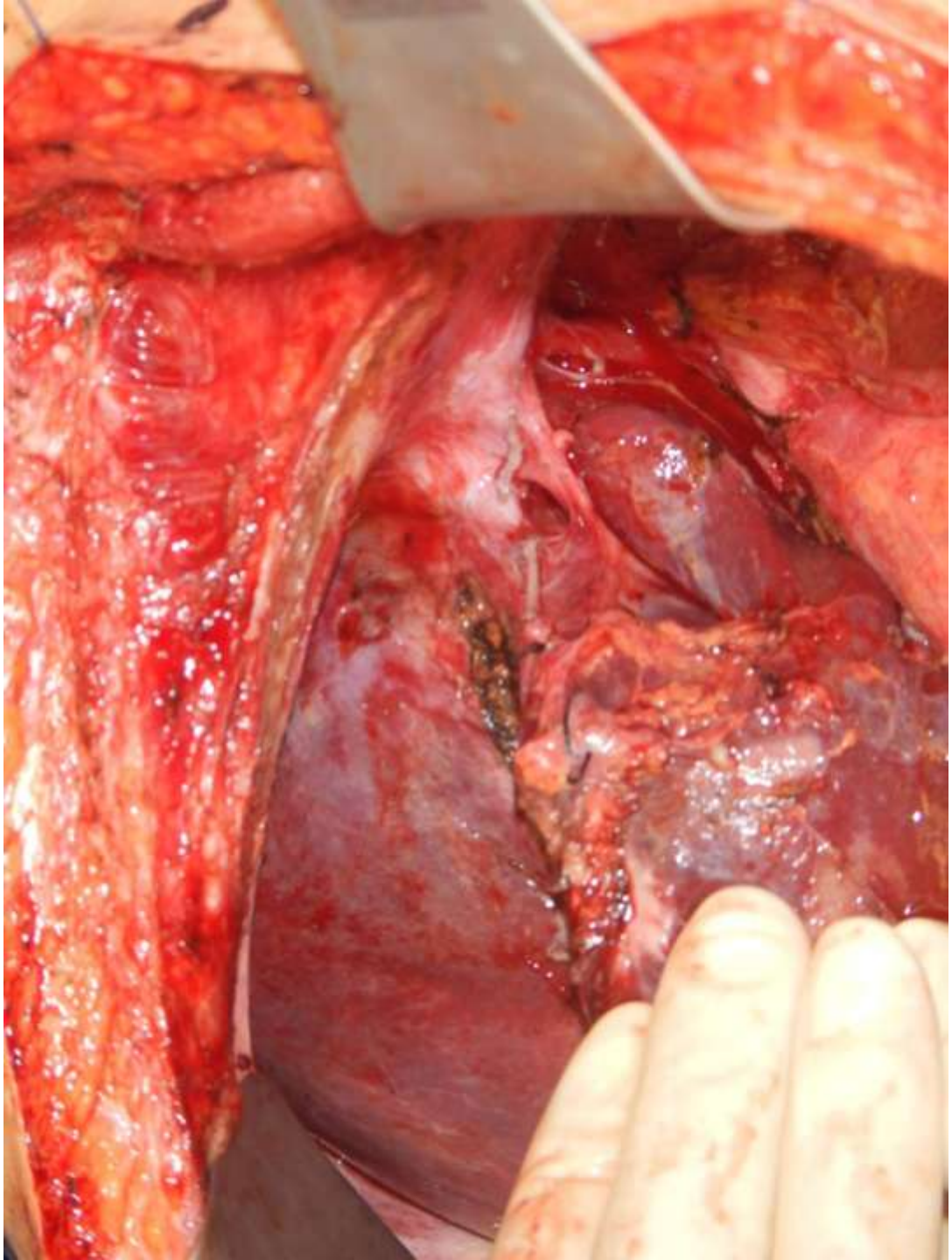
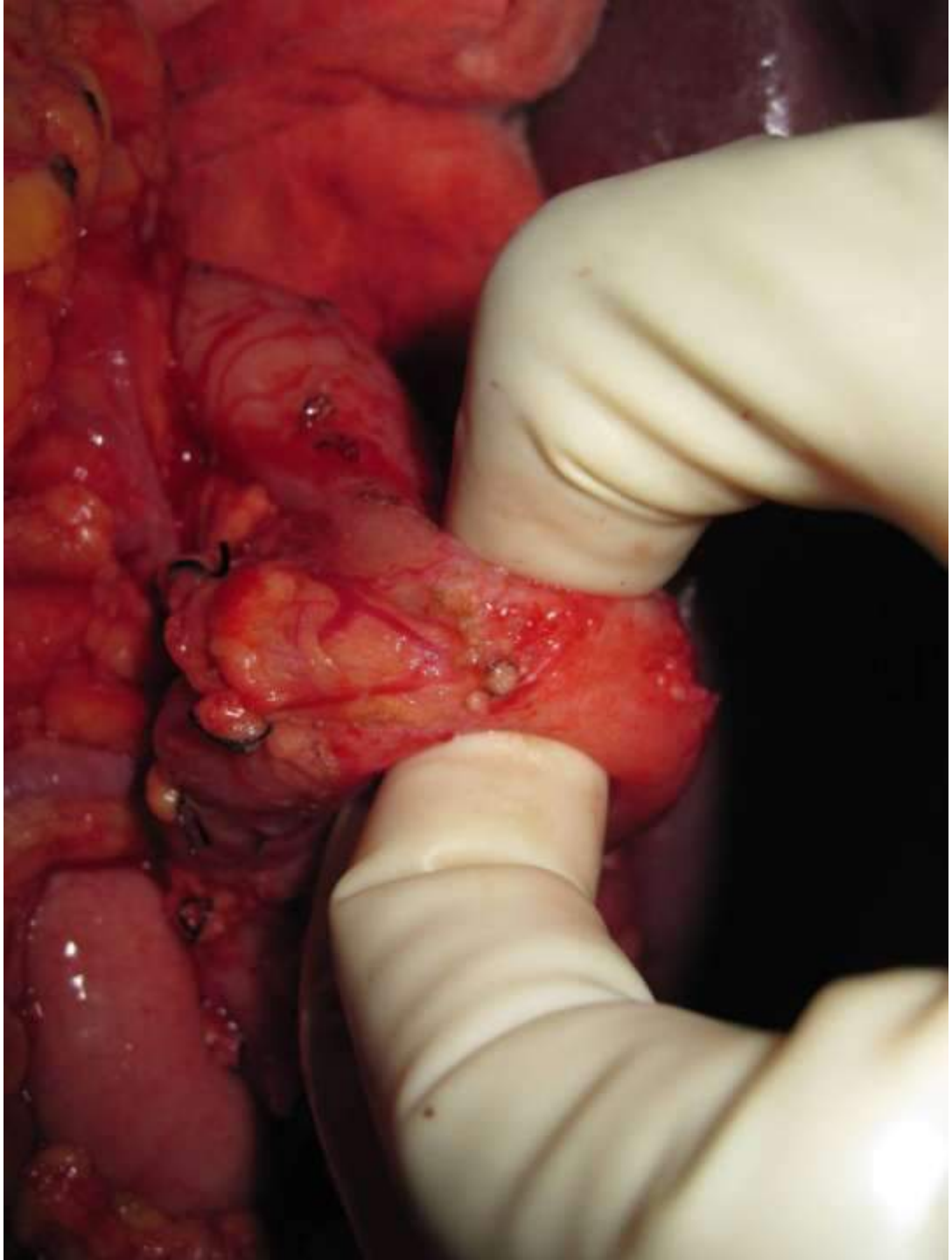

Liver
Cut edge of hepatogastric ligament
Left gastric a.
Right gastric a.
Digital dissection


LIGAMENTUM VENOSUM



Avoiding prolonged gastric stasis

After an extensive lesser omentectomy, test the pylorus for wide patency. If it is stenotic perform a pyloroplasty.



Avoiding ileostomy

Preserve a long rectal stump to place a second layer of sutures circumferentially around the circular stapled colorectal anastomosis.

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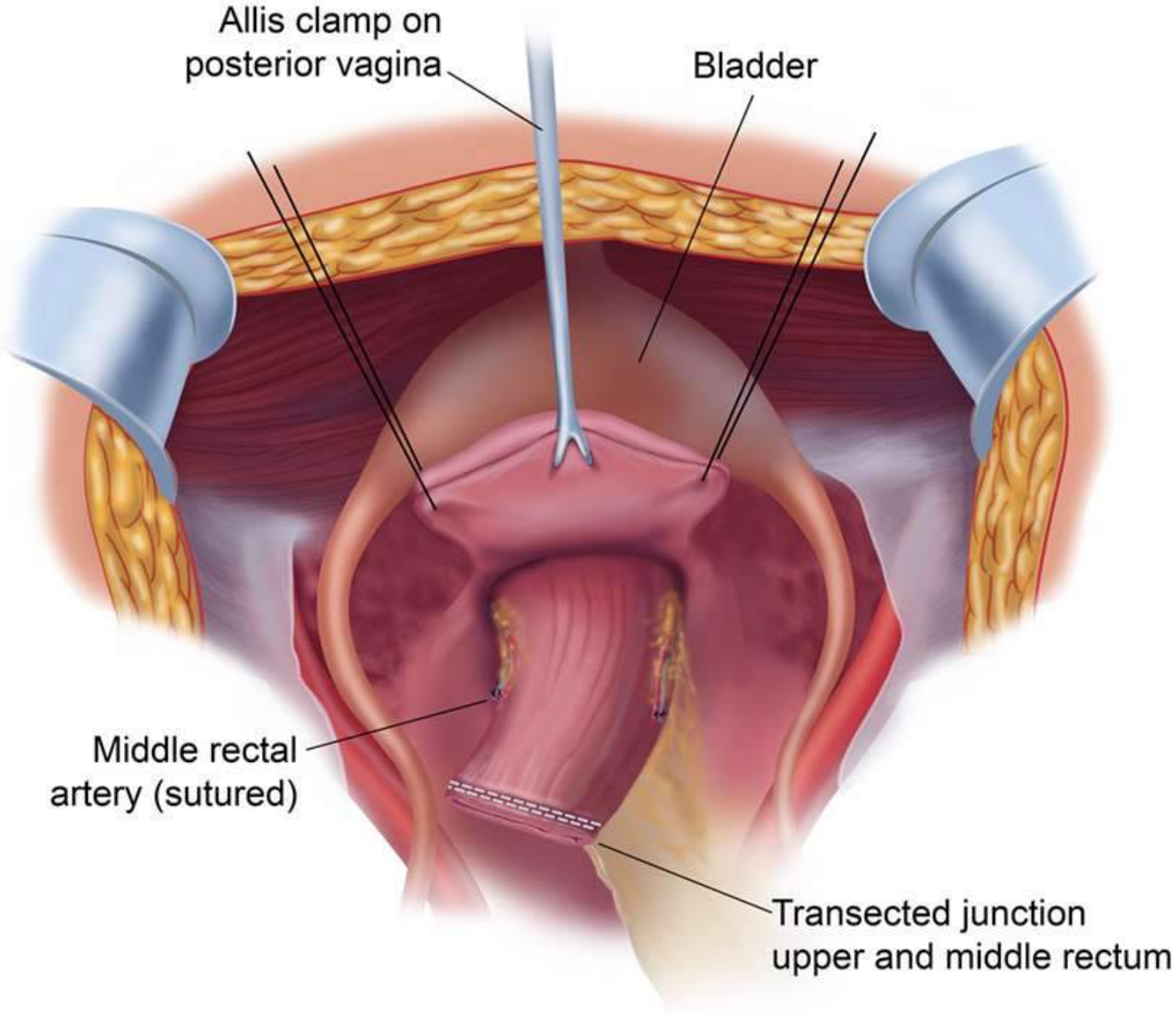
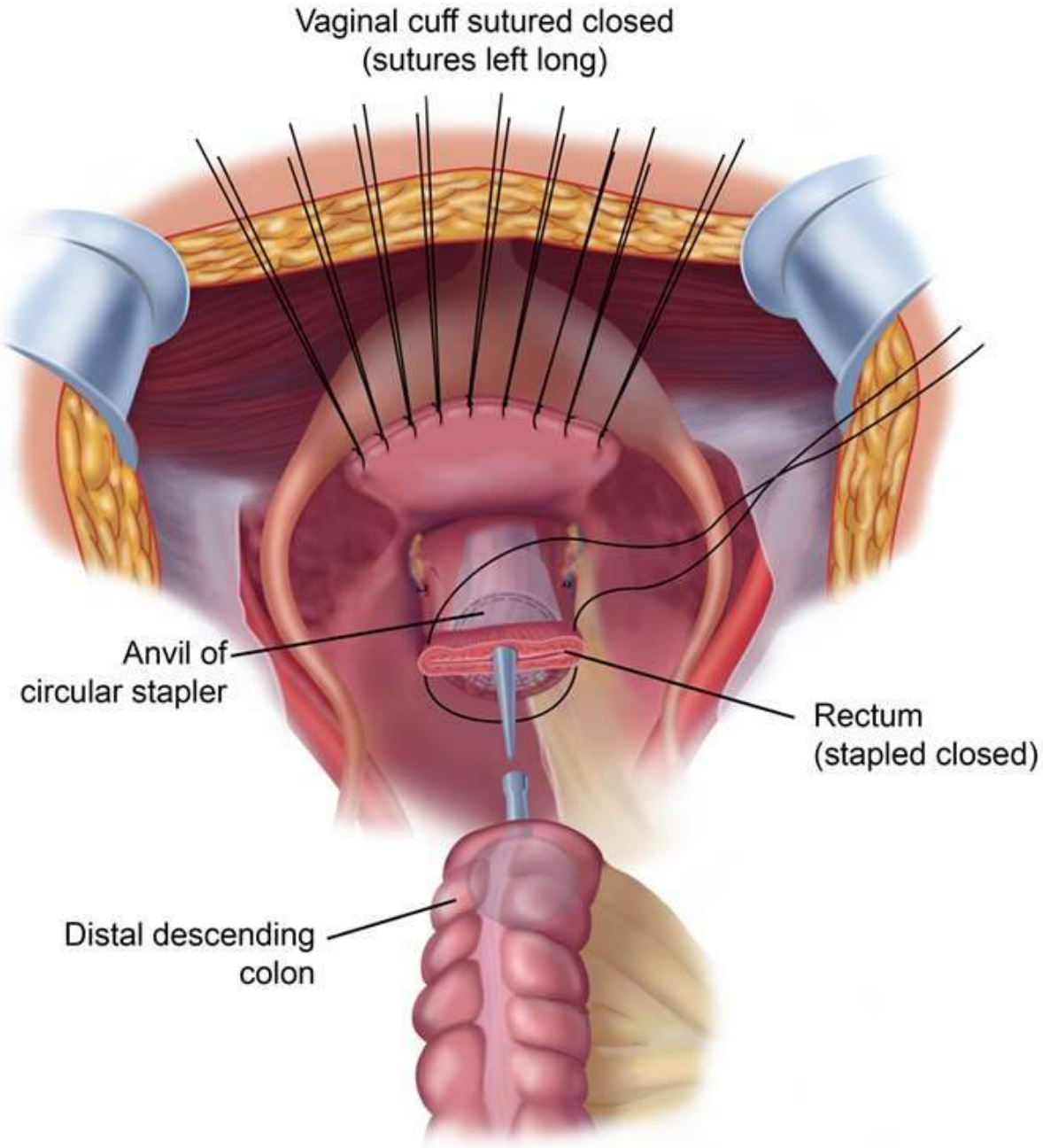
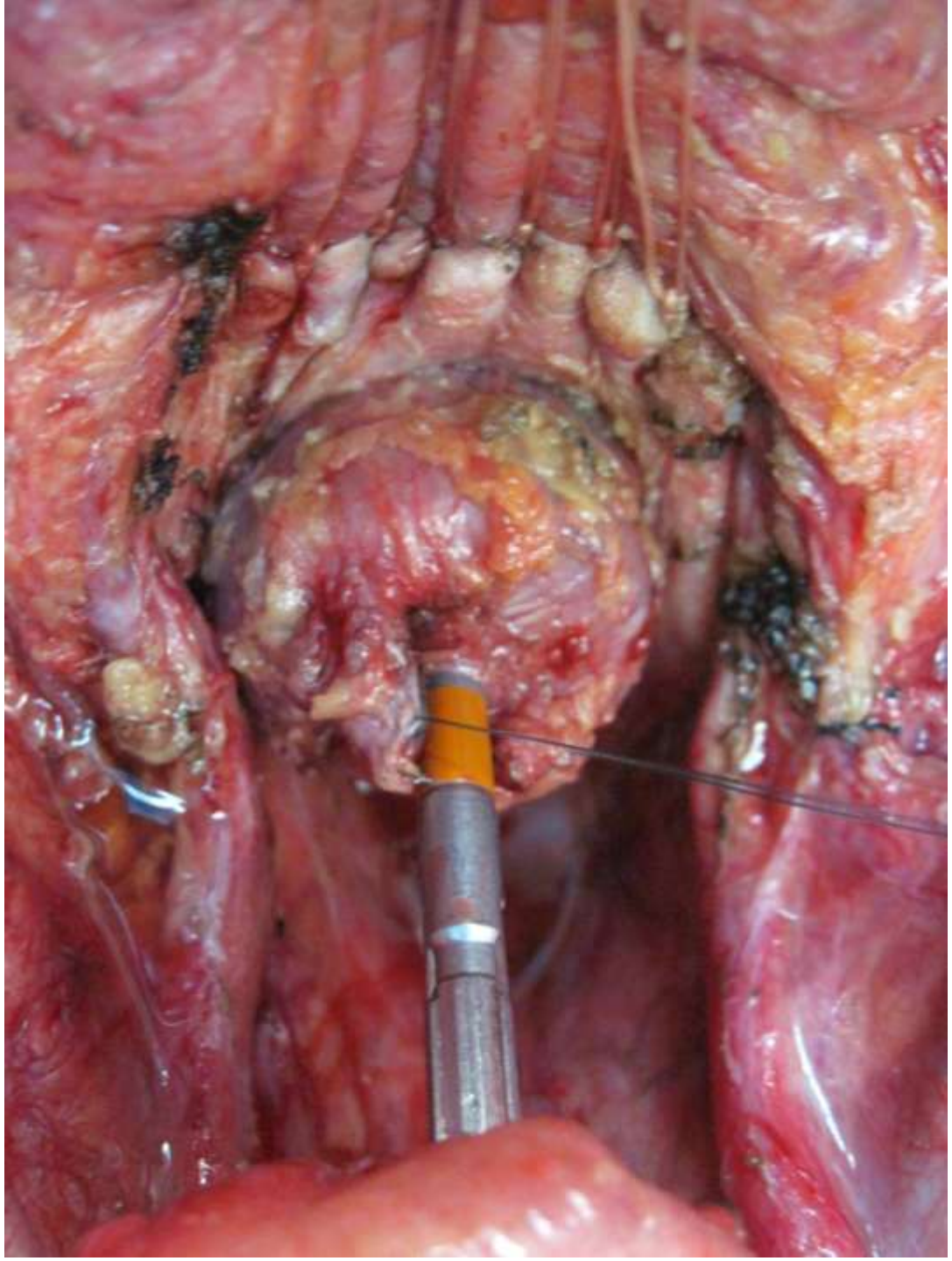
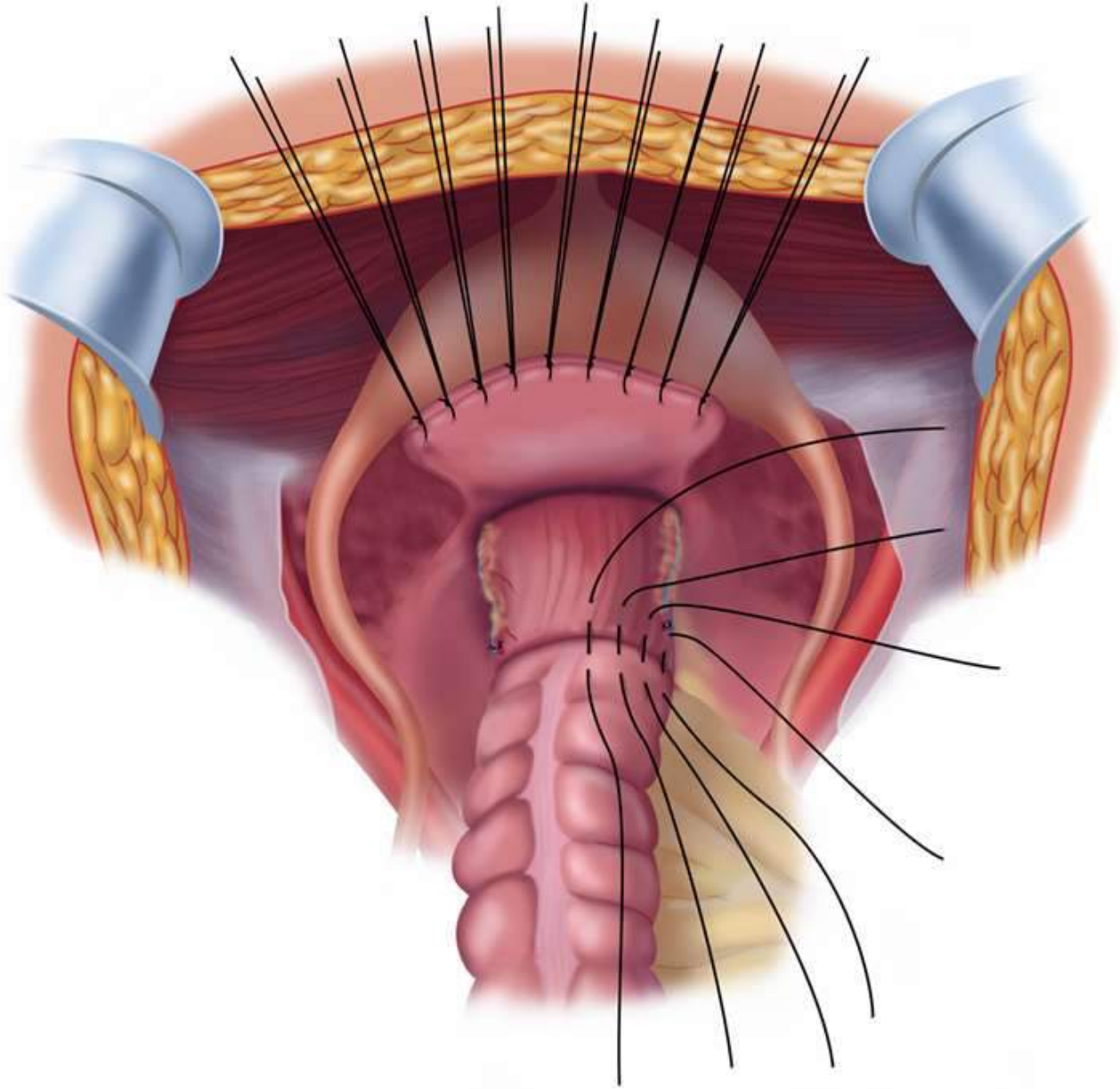
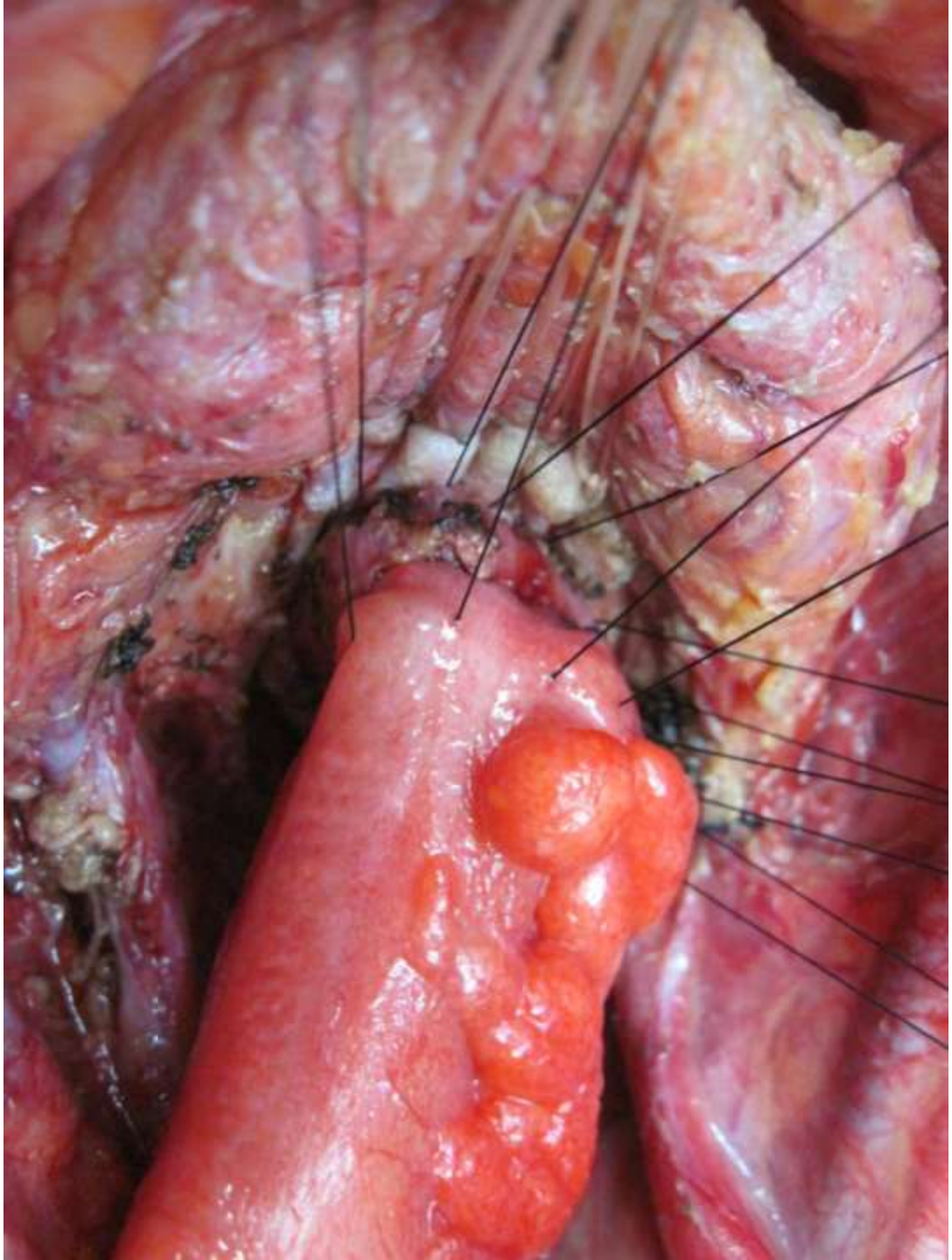

Allis clamp on
posterior vagina
Bladder
Middle rectal
artery (sutured)
Transected junction
upper and middle rectum

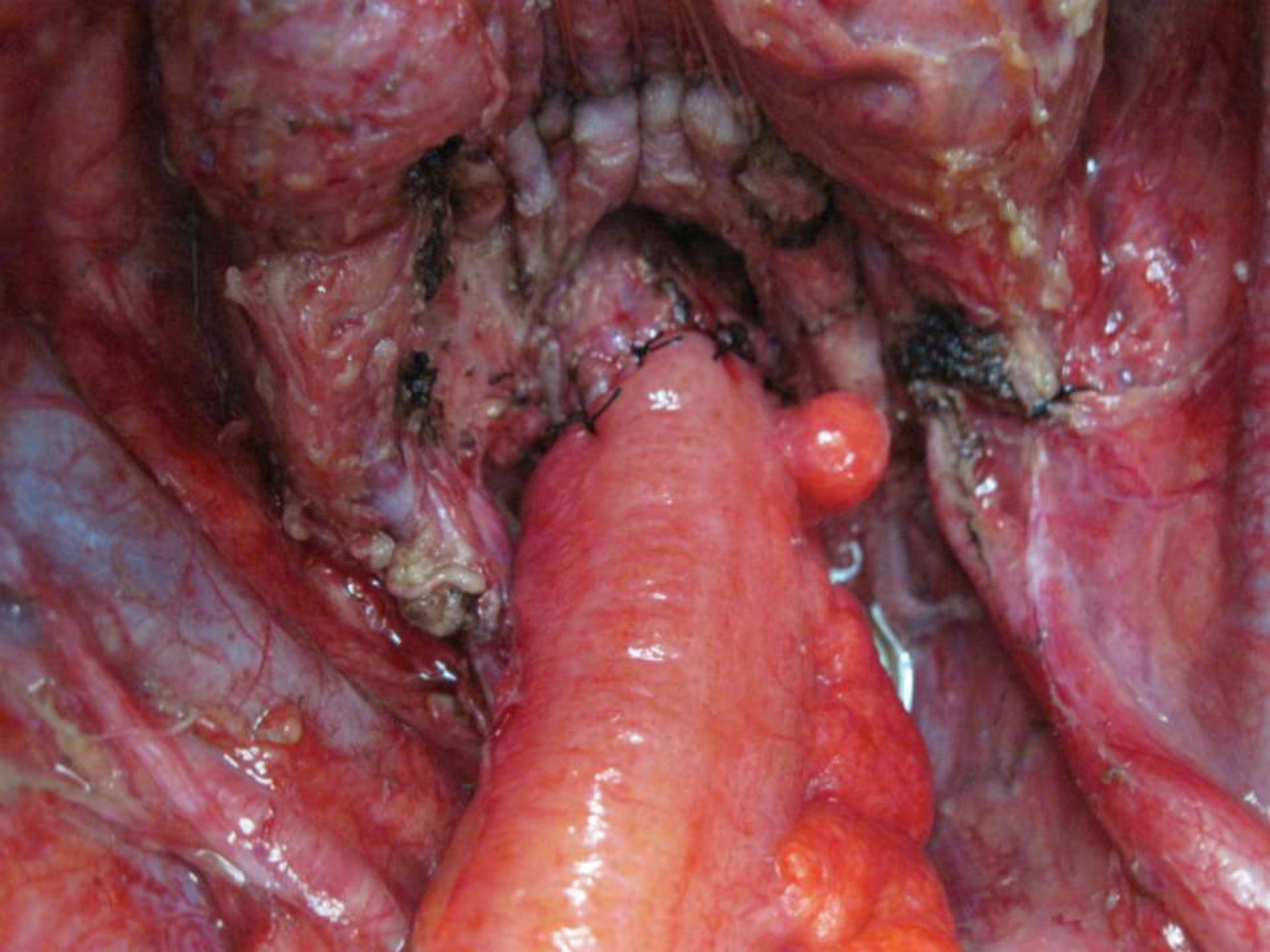

Vaginal cuff sutured closed
(sutures left long)
Anvil of
circular stapler
Rectum
(stapled closed)
Distal descending
colon



Vaginal cuff sutured closed
(sutures left long for traction)







Small bowel manicure

Use the curved Mayo scissor to clear the small bowel and its mesentery of minimally invasive tumor nodules.

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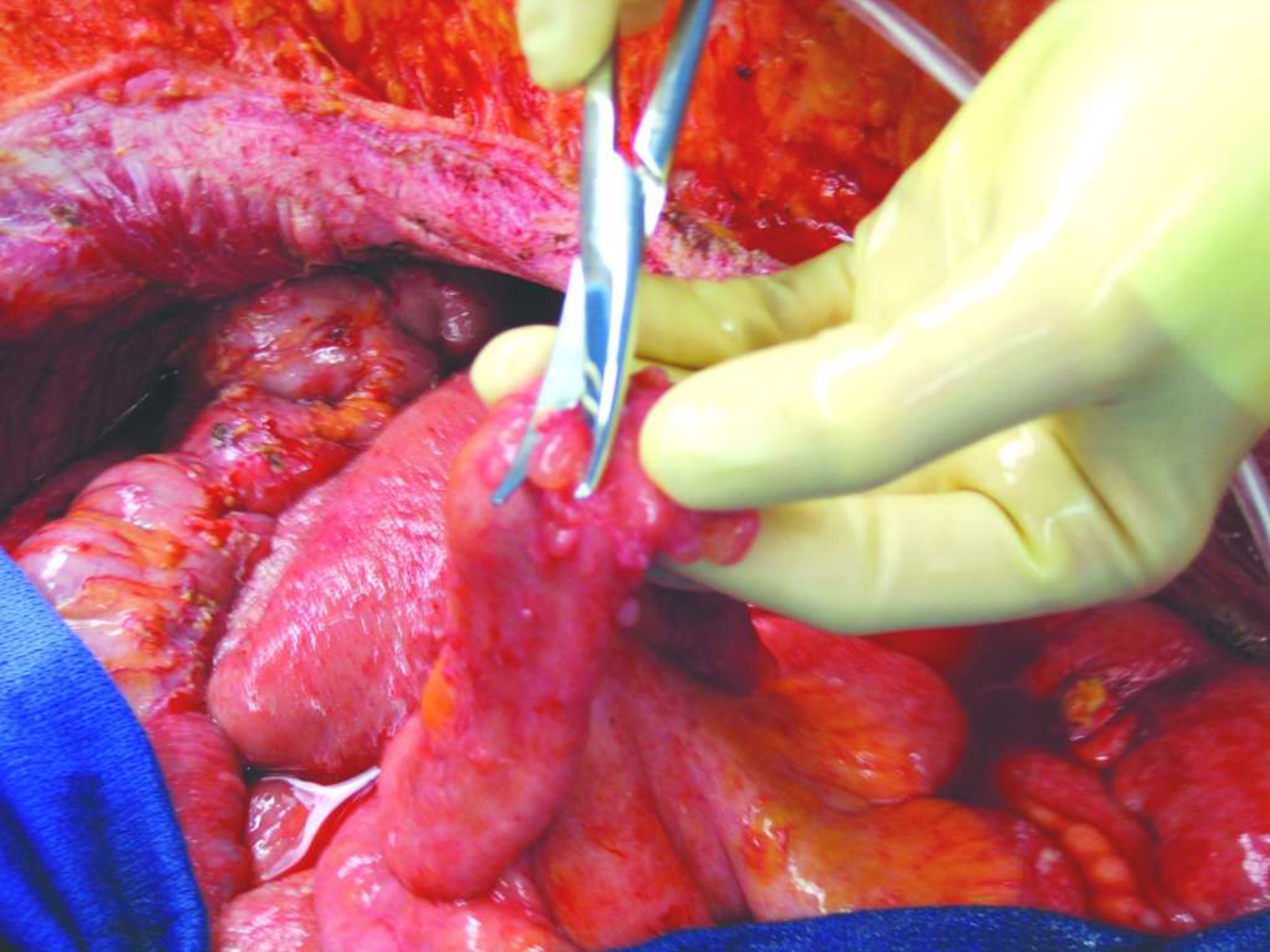

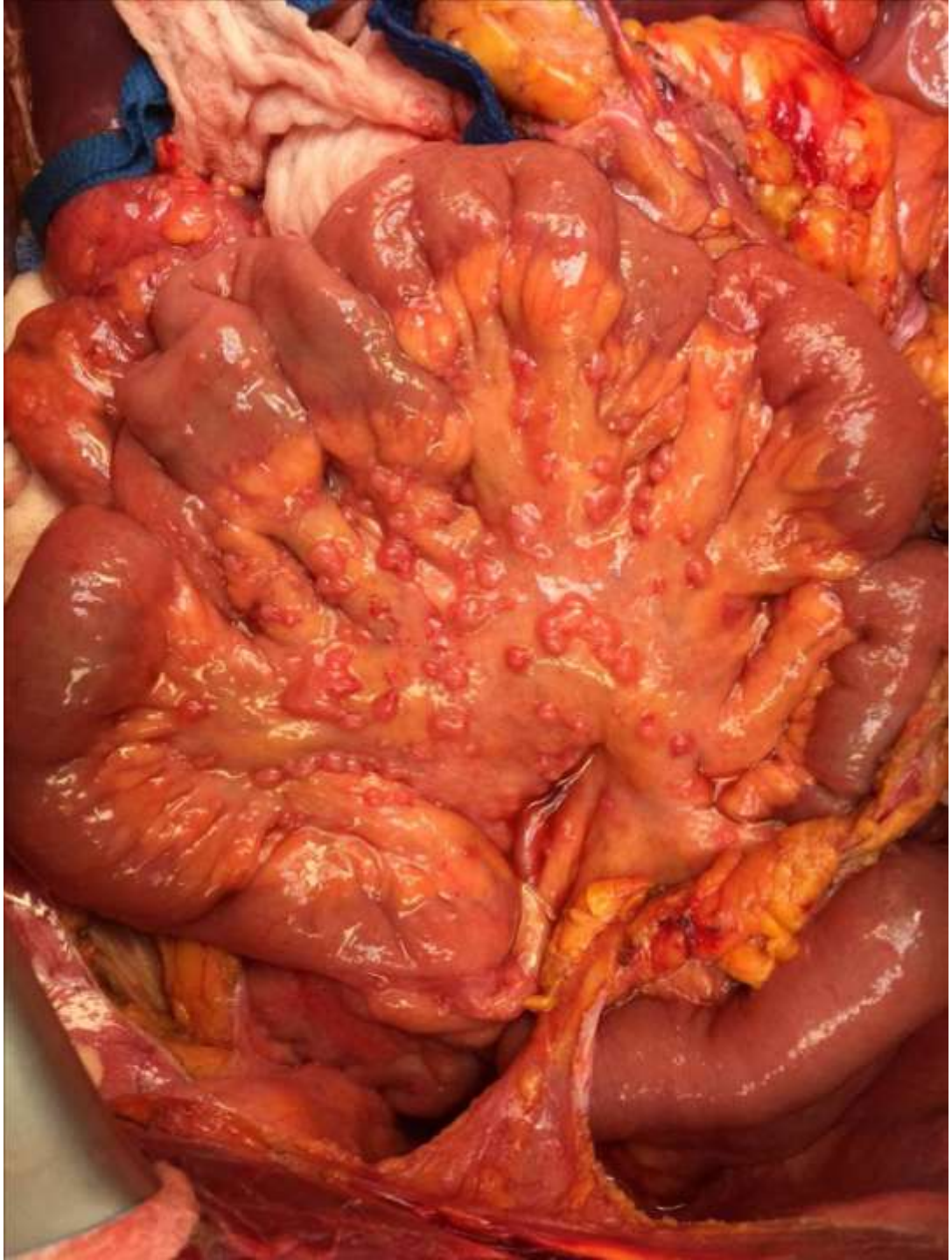

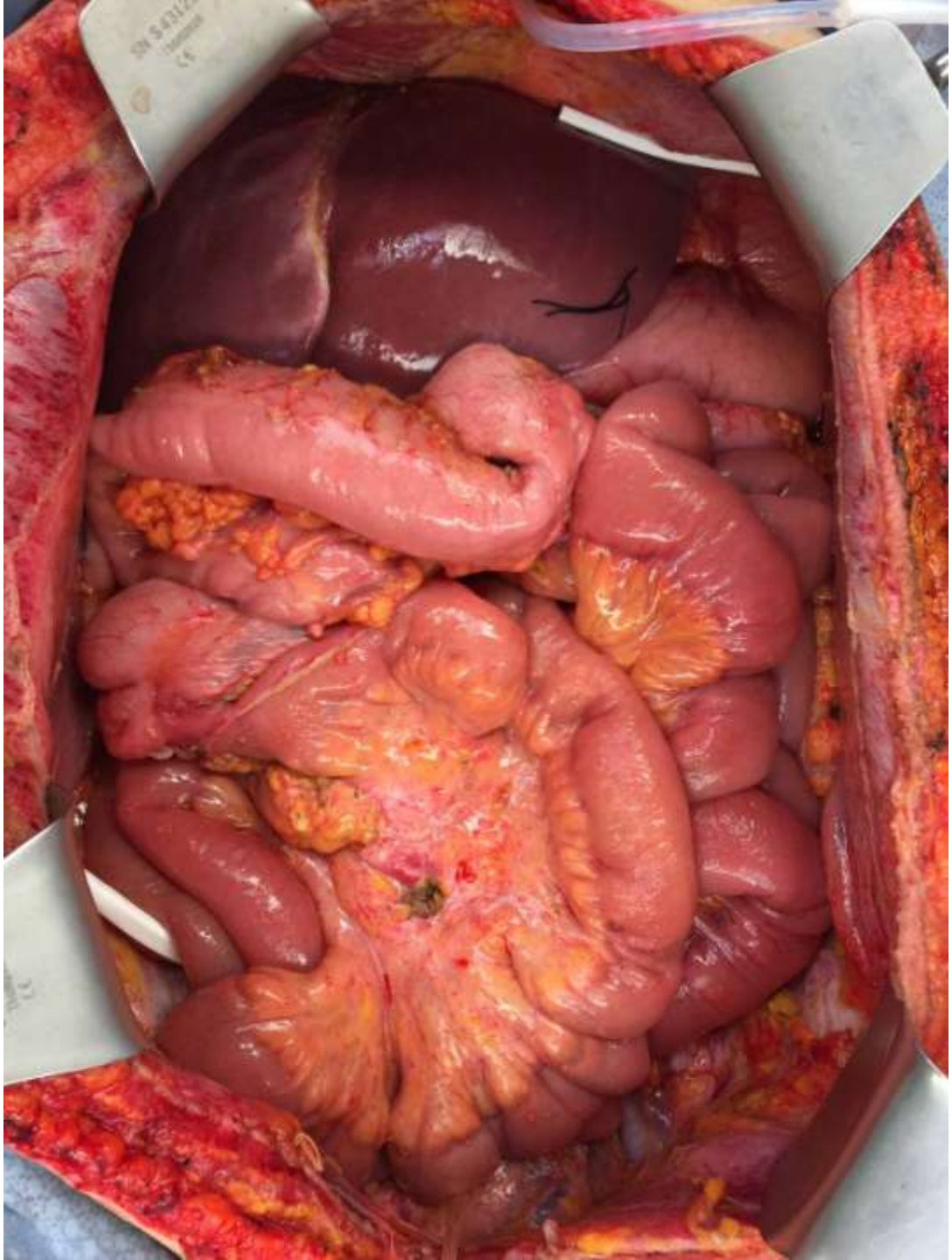

Extensive mechanical removal of cancer cells by irrigation:

- Frequent large volume irrigation is required to remove blood and tissue debris, clarify the anatomy and cool the high voltage electrosurgical dissection.
- Following the removal of each peritonectomy specimen the site is cleansed with 1 liter of warm saline and packed off by laparotomy pads or towels.
- Prior to HIPEC I irrigate with 3 liters of warm 0.25% H_2O_2 followed by 6 liters of warm saline. Three liters of warm distilled water or diluted Betadine has been recommended by others prior to final irrigation.

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LOCAL ORGANISING COMMITTEE

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HOPSCOTCH CONGRÈS

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