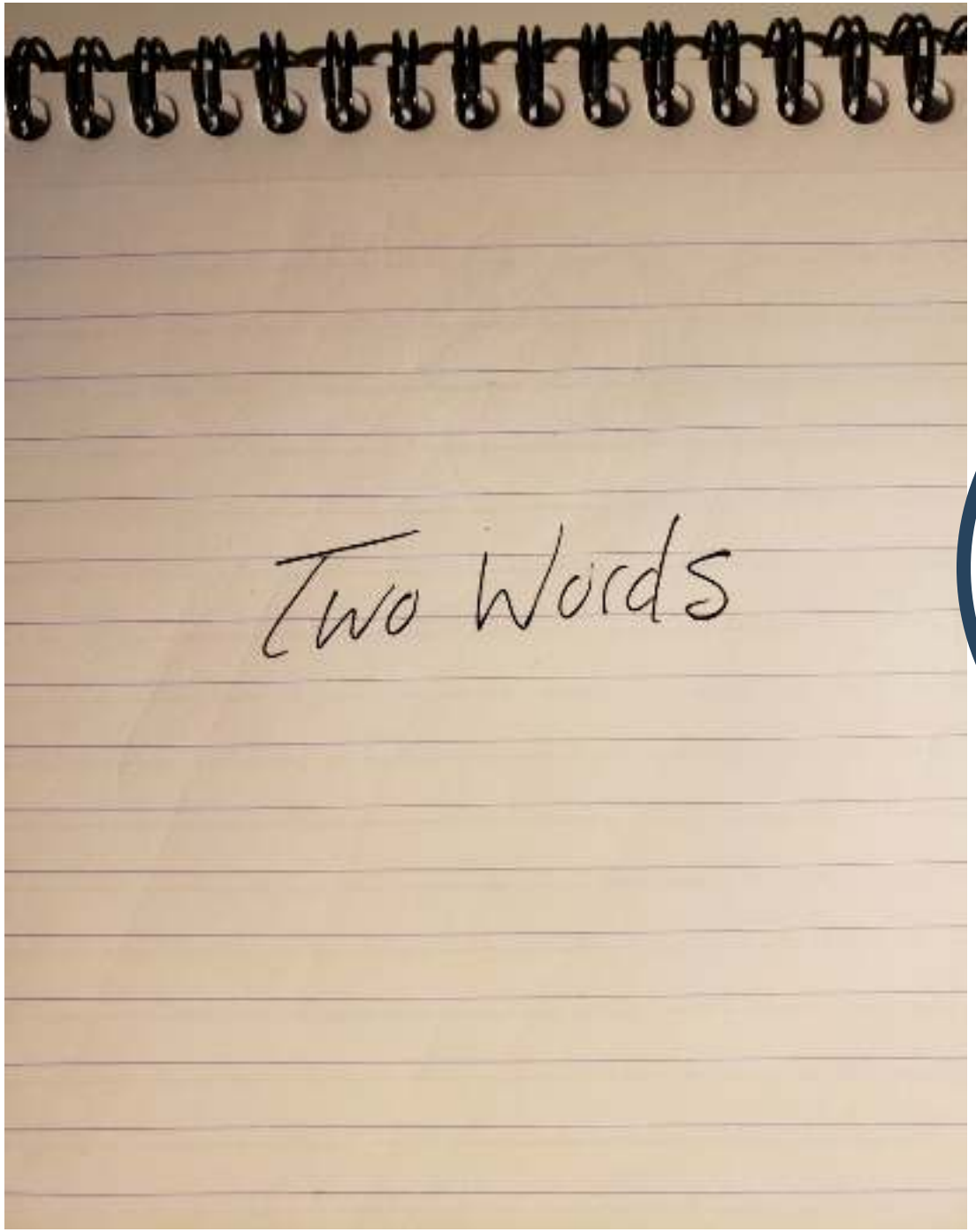


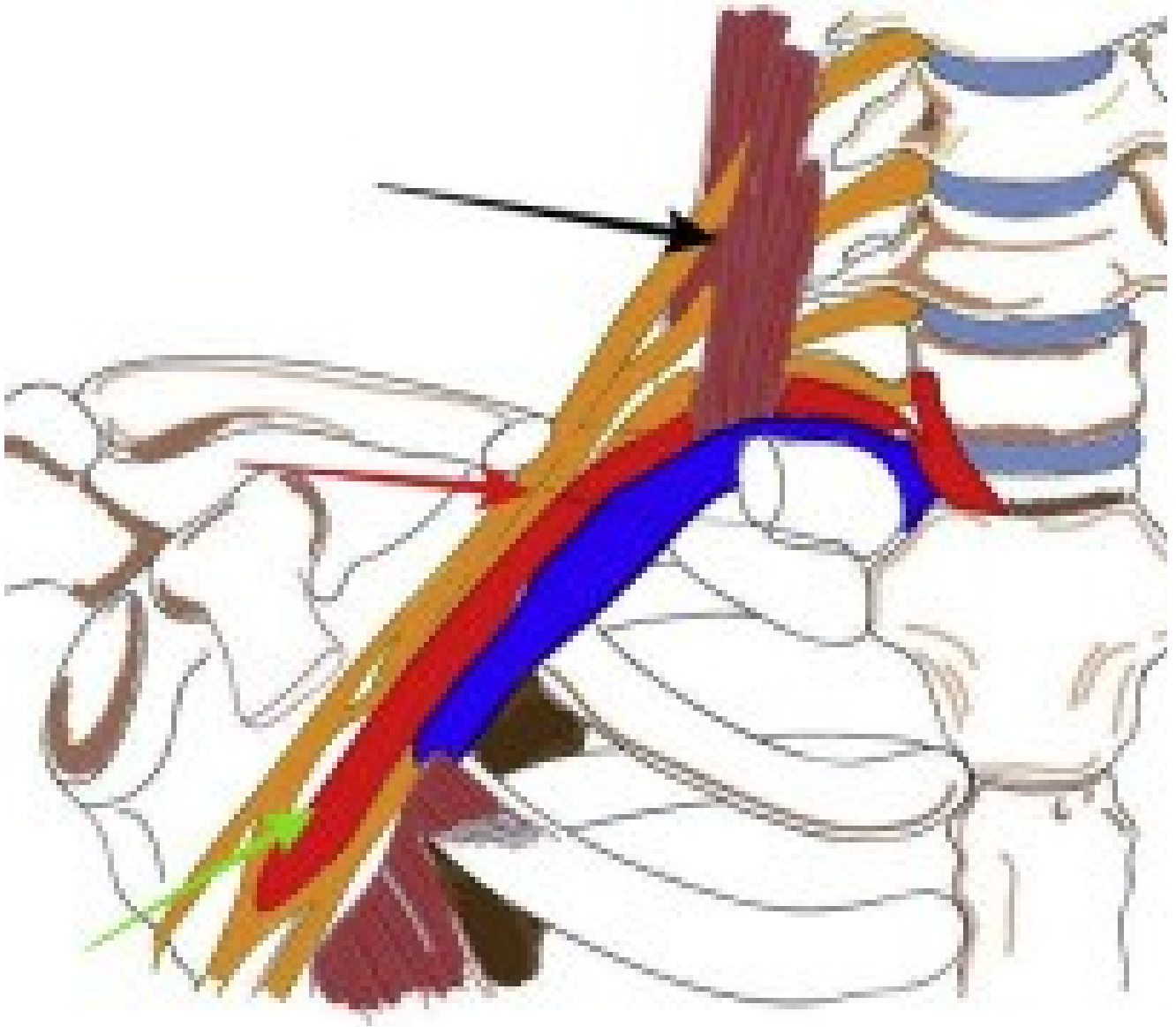
Entrapment

Compression


SYNONYMS

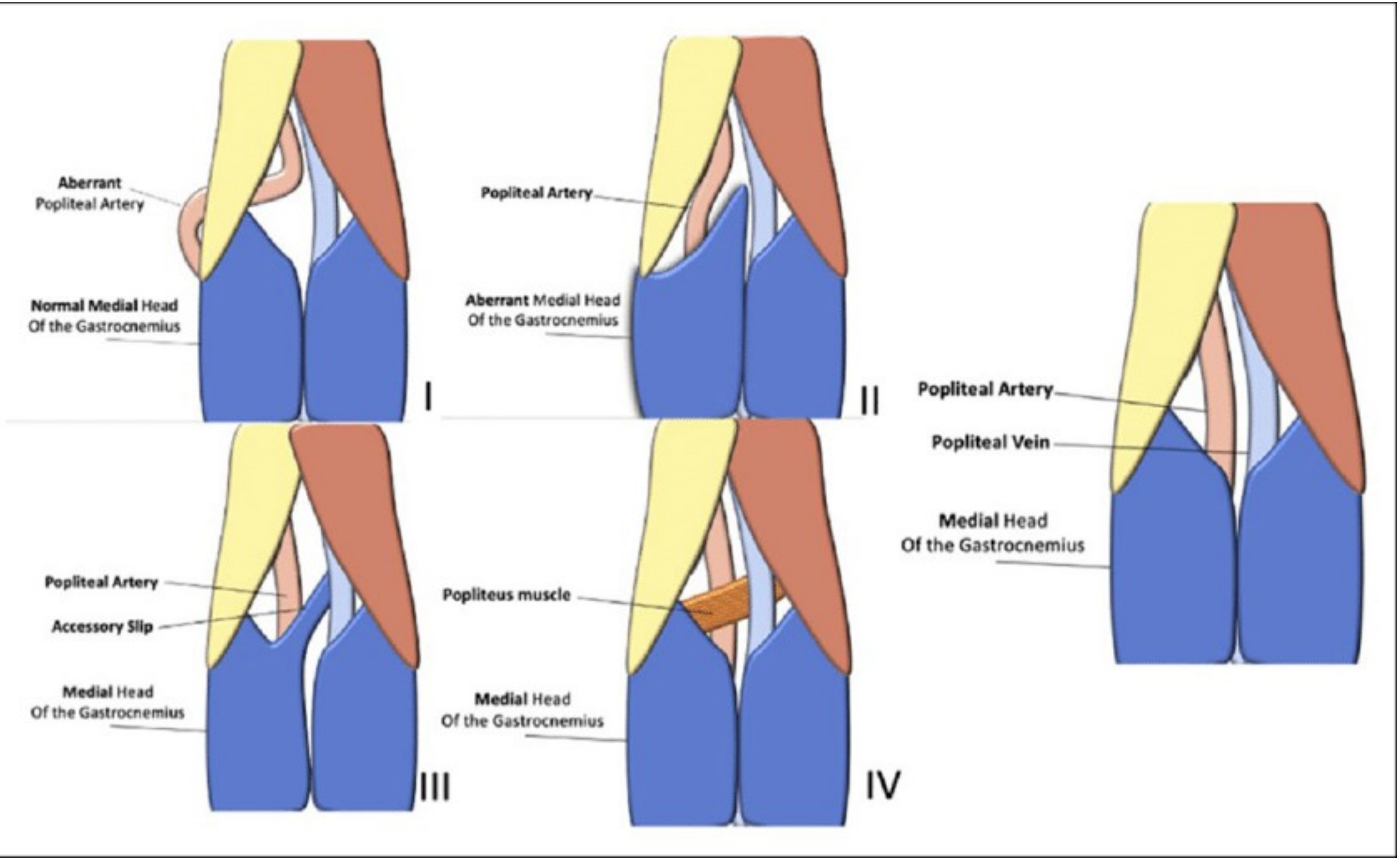
What is going to be compressed?

Neurovascular Bundle Compression Syndromes




CTS


Κερκίδα
Radius
Σωλήνας Guyon
Guyon Tunnel
Ωλένιο Νεύρο
Ulnar Nerve
Βραχιόνιο οστό
Humerus bone
Ωλένη
Ulna
Αύλακα Ωλενίου
νεύρου αγκώνος
Cubital Tunnel
of Ulnar nerve
Ωλέκρανον
Olecranon


Aberrant
Popliteal Artery
Normal Medial Head
Of the Gastrocnemius
I
Popliteal Artery
Aberrant Medial Head
Of the Gastrocnemius
II
Popliteal Artery
Popliteal Vein
Medial Head
Of the Gastrocnemius
Popliteal Artery
Accessory Slip
Medial Head
Of the Gastrocnemius
III
Popliteus muscle
Medial Head
Of the Gastrocnemius
IV

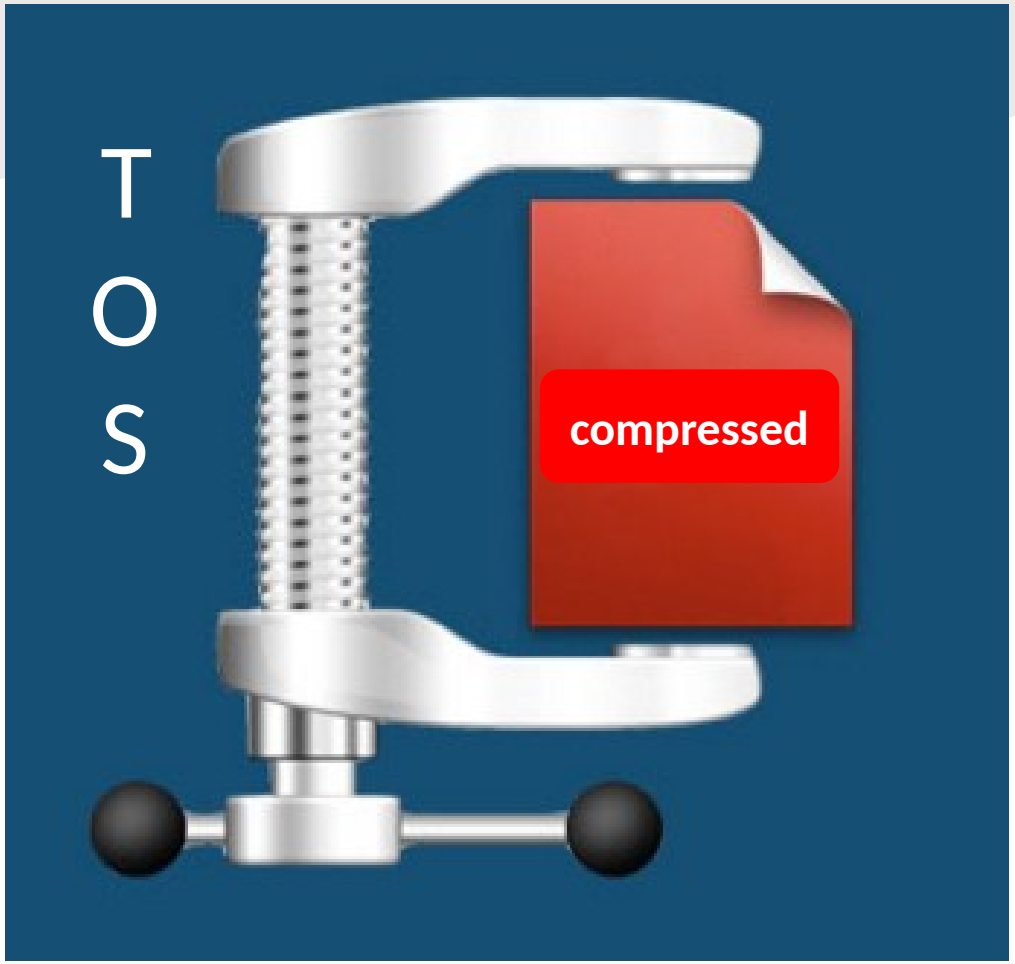
Vascular Entrapment / Compression Syndromes

- Group of symptoms and signs that are caused by……
- the entrapment /compression of vessels between rigid or semirigid surfaces……..
- in a confined anatomic space.

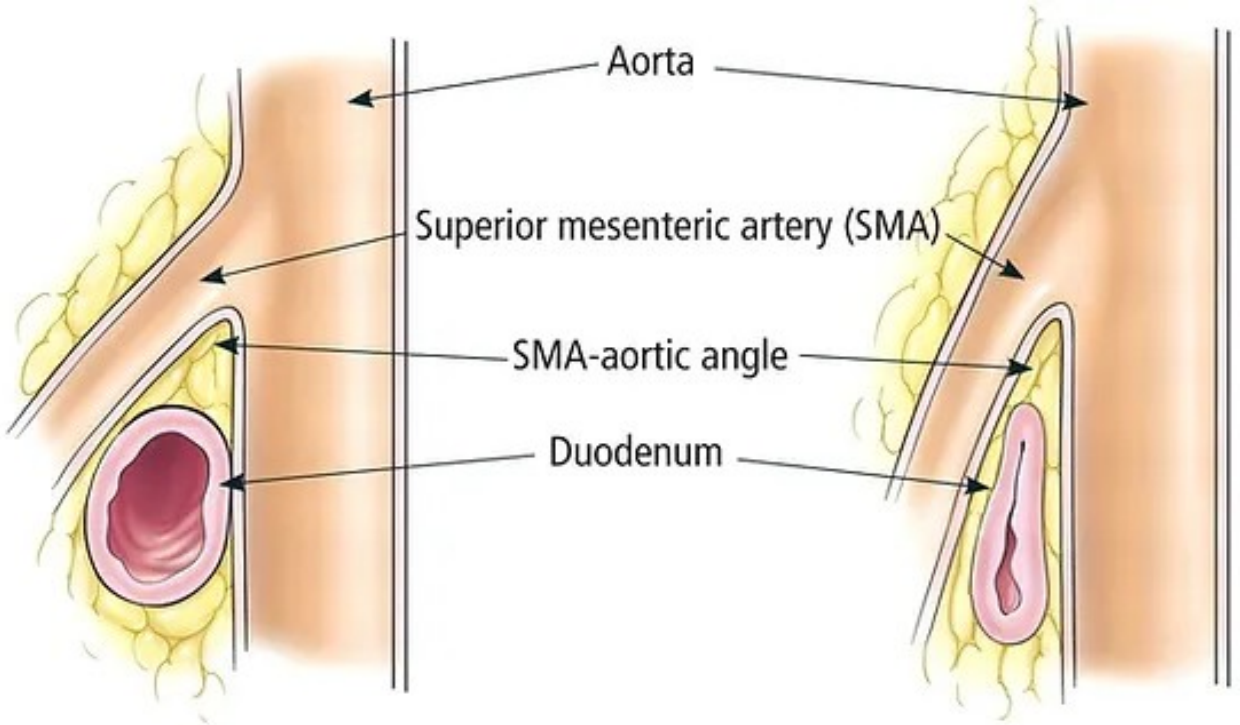
Compressed

Sometimes

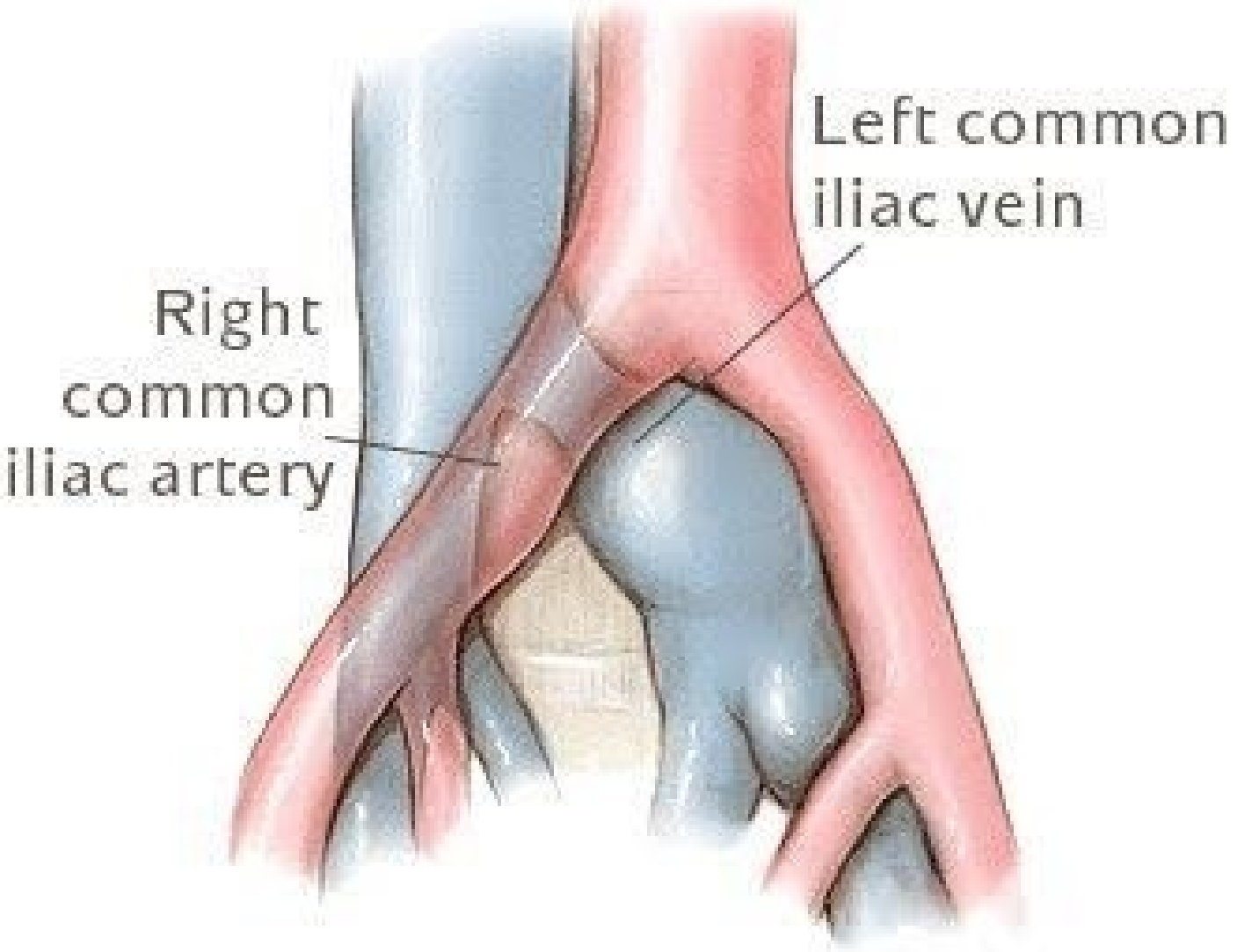
Compressing فاعل



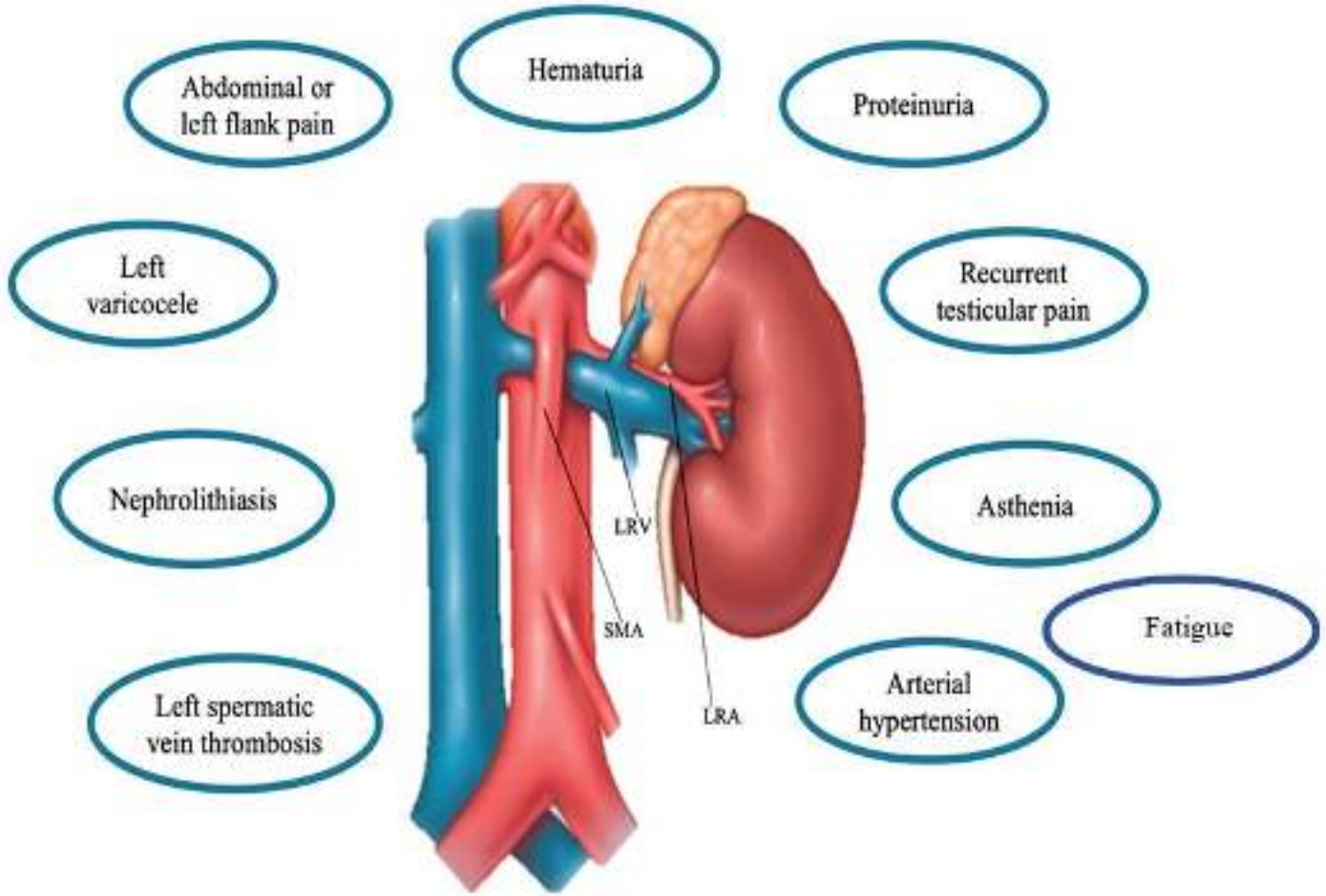
Compressing: (SMA syndrome)

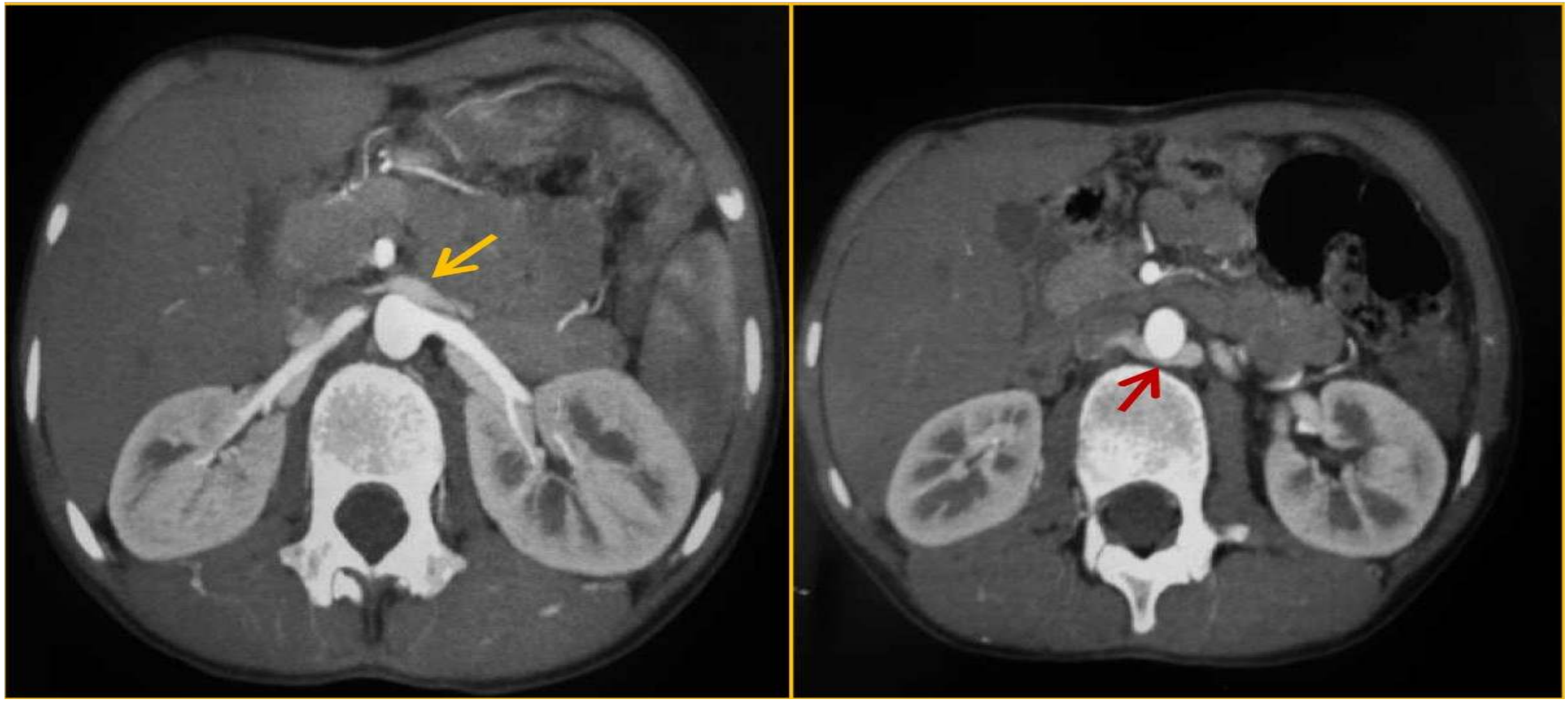


COMPRESSED/ COMPRESSING



COMPRESSED/ COMPRESSING





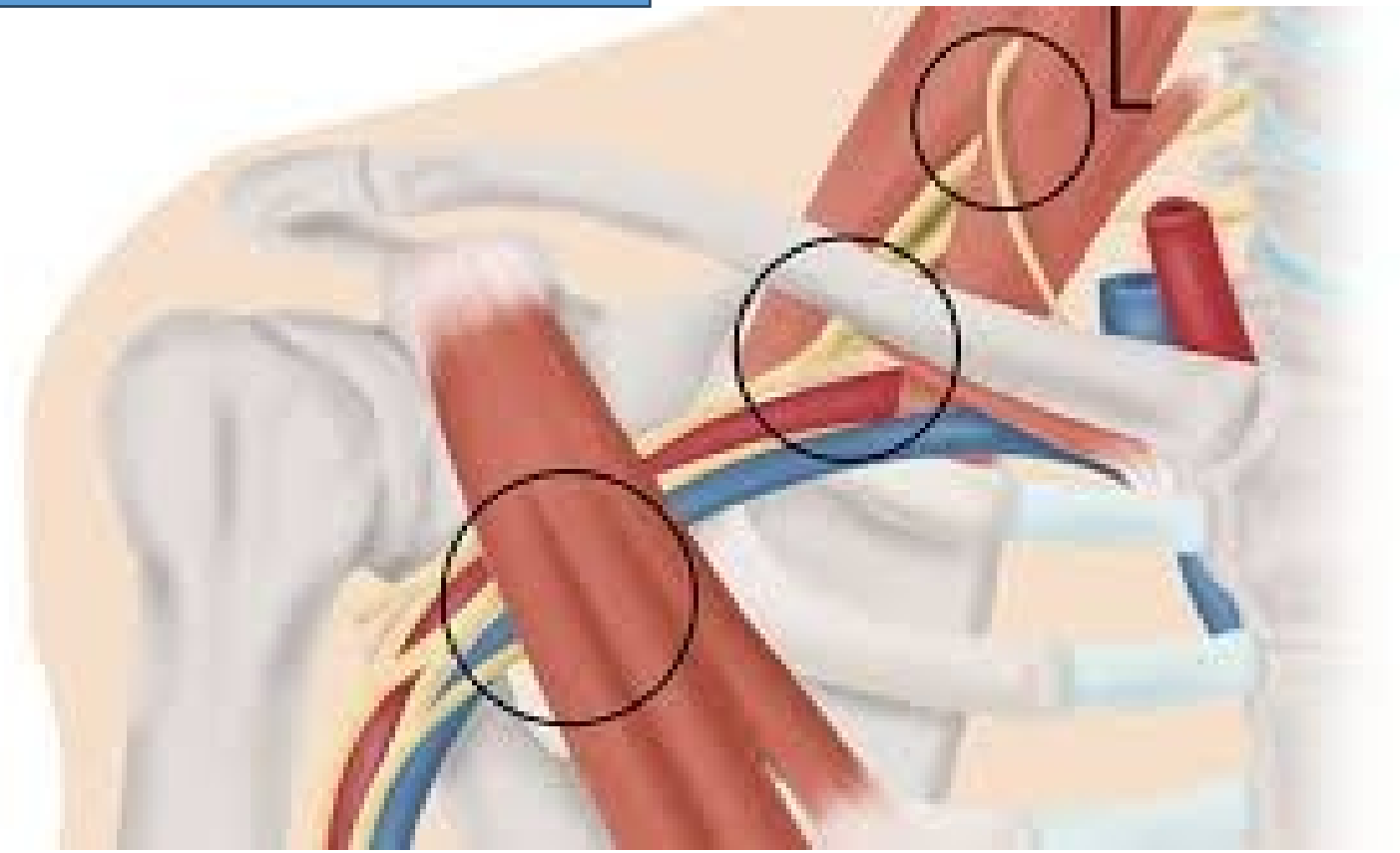

FOCUS

Vessels that are compressed

- Eagle syndrome,
- Thoracic outlet syndrome,
- Dunbar syndrome
- Nutcracker syndrome,
- May-Thurner syndrome, and
- Popliteal artery entrapment syndrome

EAGLE Syndrome

Thoracic Outlet Syndrome

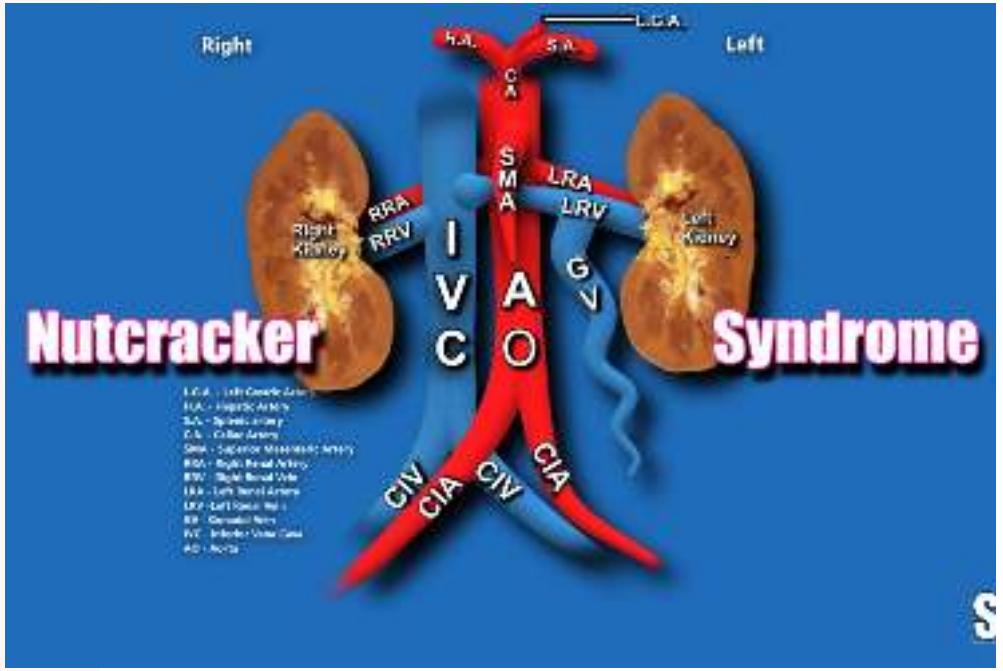



MEDIAN ARCUATE LIGAMENT SYNDROME (MALS)
Ligament
Plexus
Celiac Axis
Breathing Out
Breathing In

SYMPTOMS

- flank pain
- hematuria (blood in urine)
- orthostatic intolerance
- abdominal pain
- orthostatic proteinuria
- varicocele
- tachycardia

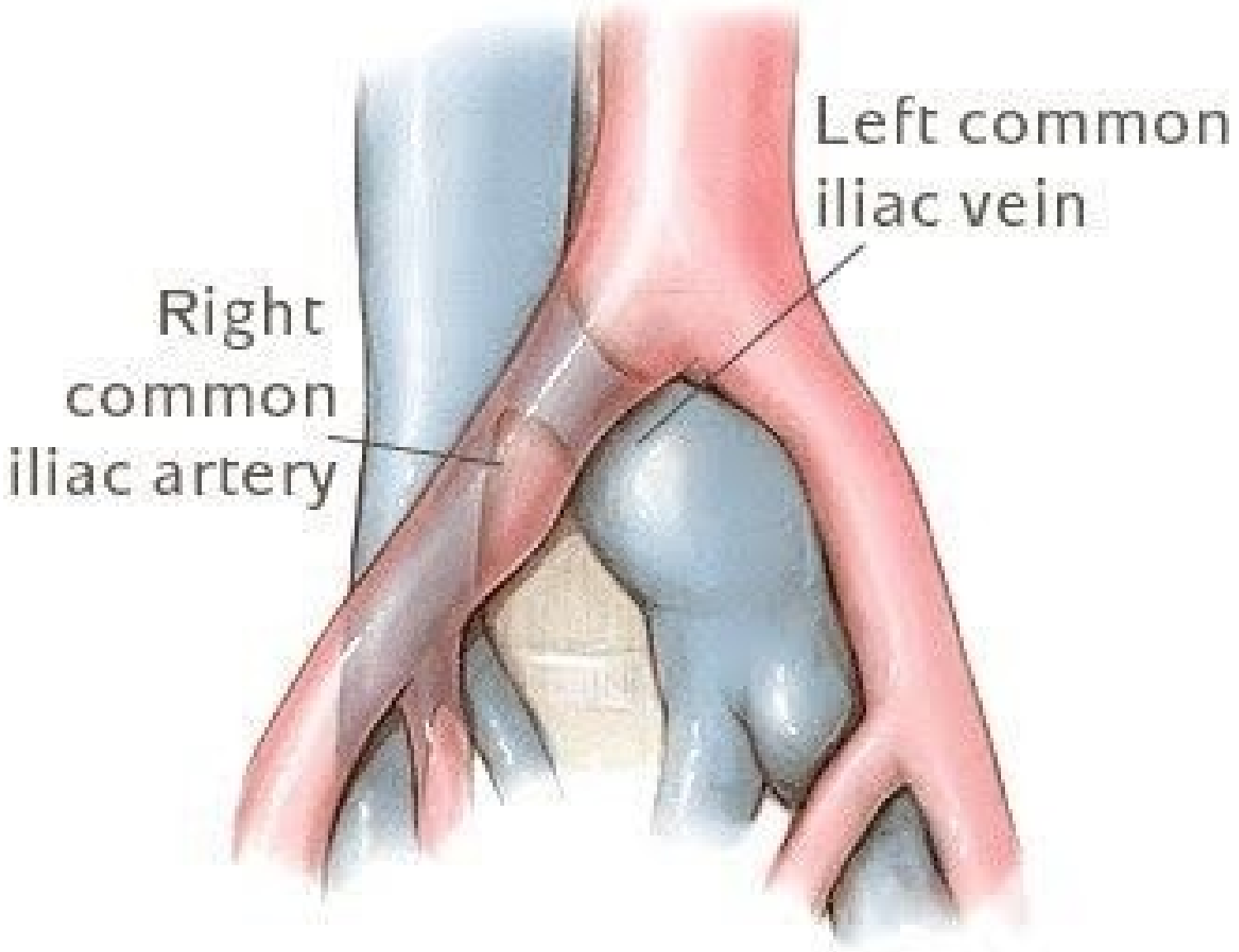
Note: symptoms may vary with position



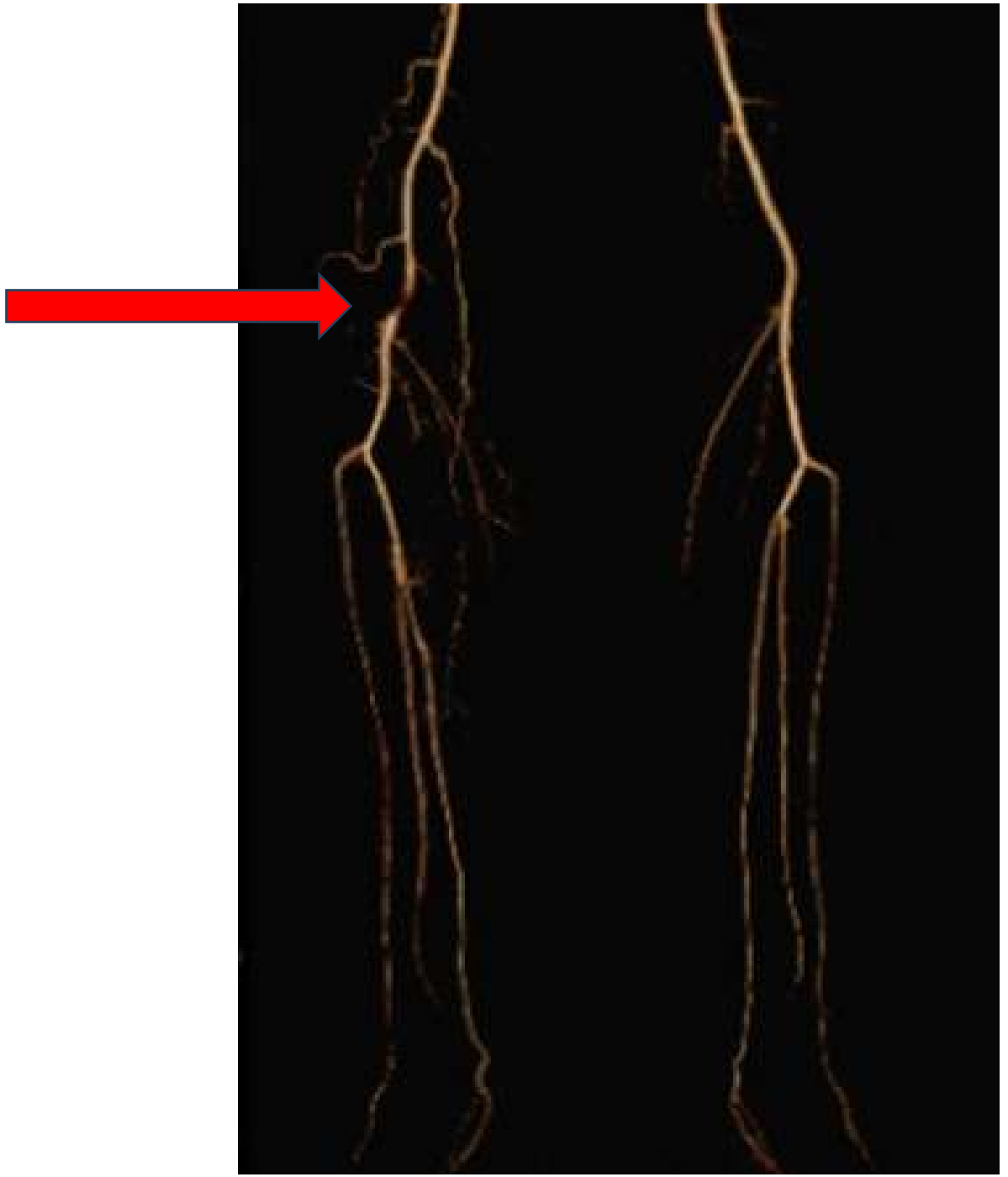
ANTERIOR VS POSTERIOR

compression of left renal vein between abdominal aorta and superior mesenteric artery

compression of left renal vein between abdominal aorta and vertebral column


Left common iliac vein
Right common iliac artery

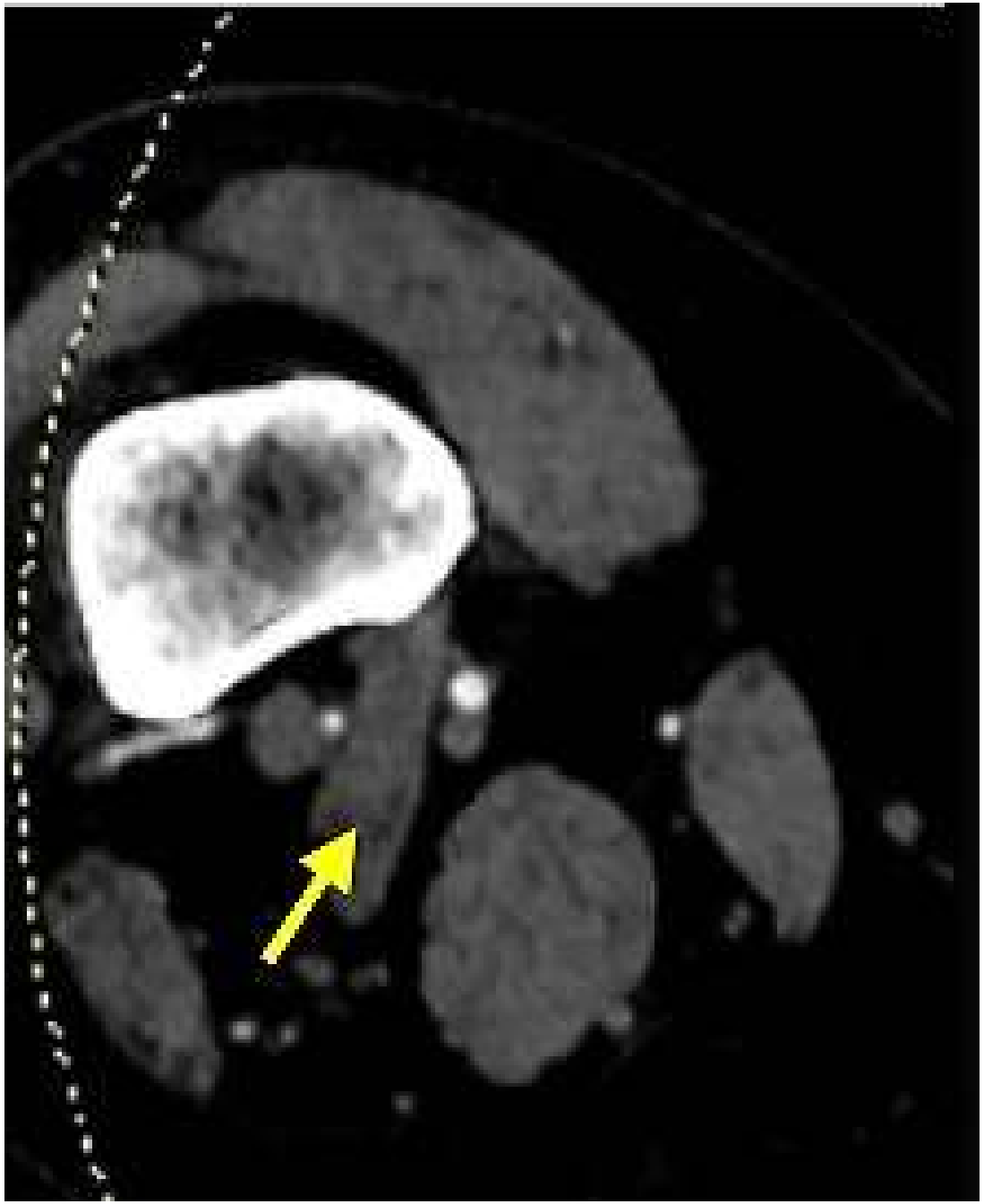
Popliteal Artery Entrapment Syndrome (PAES)

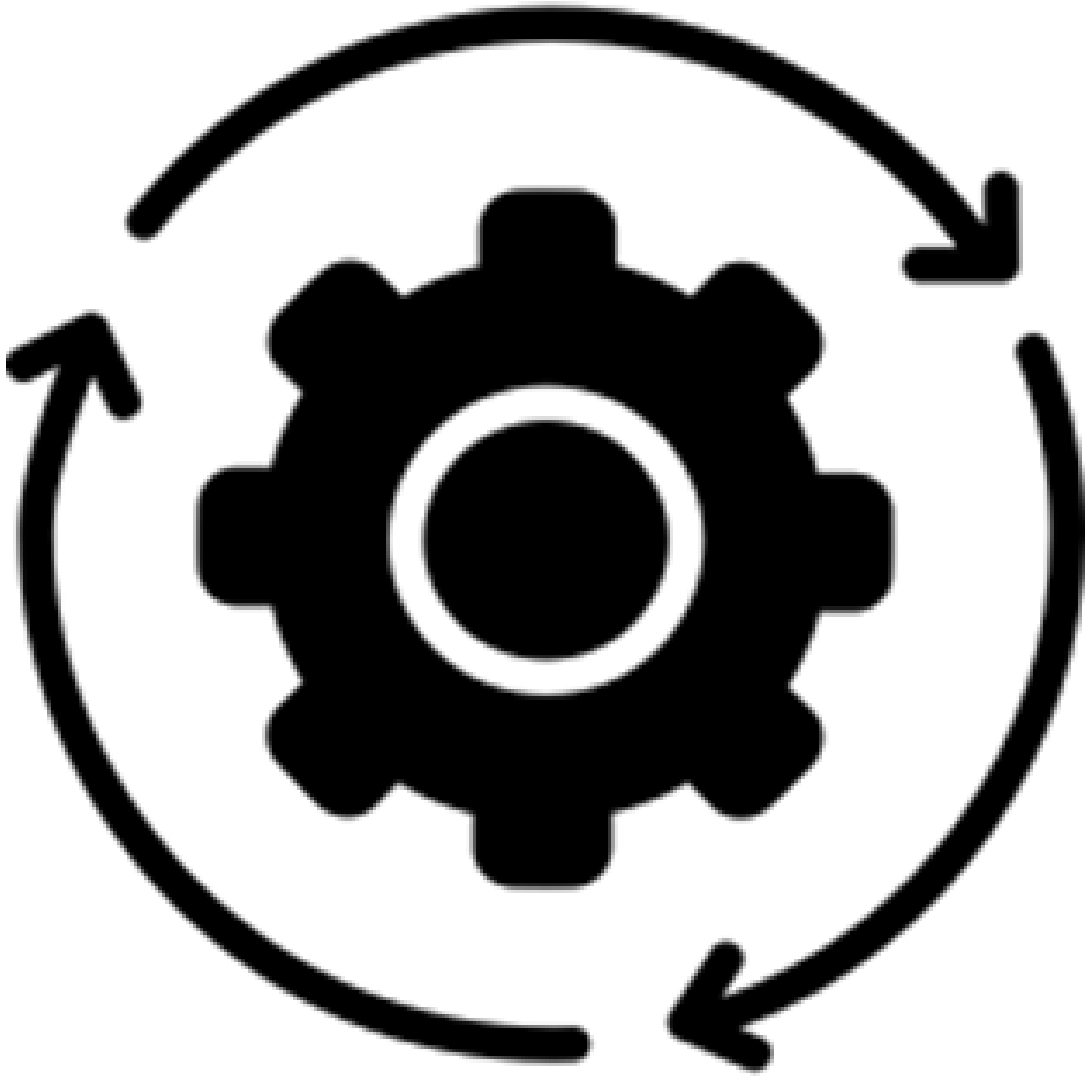


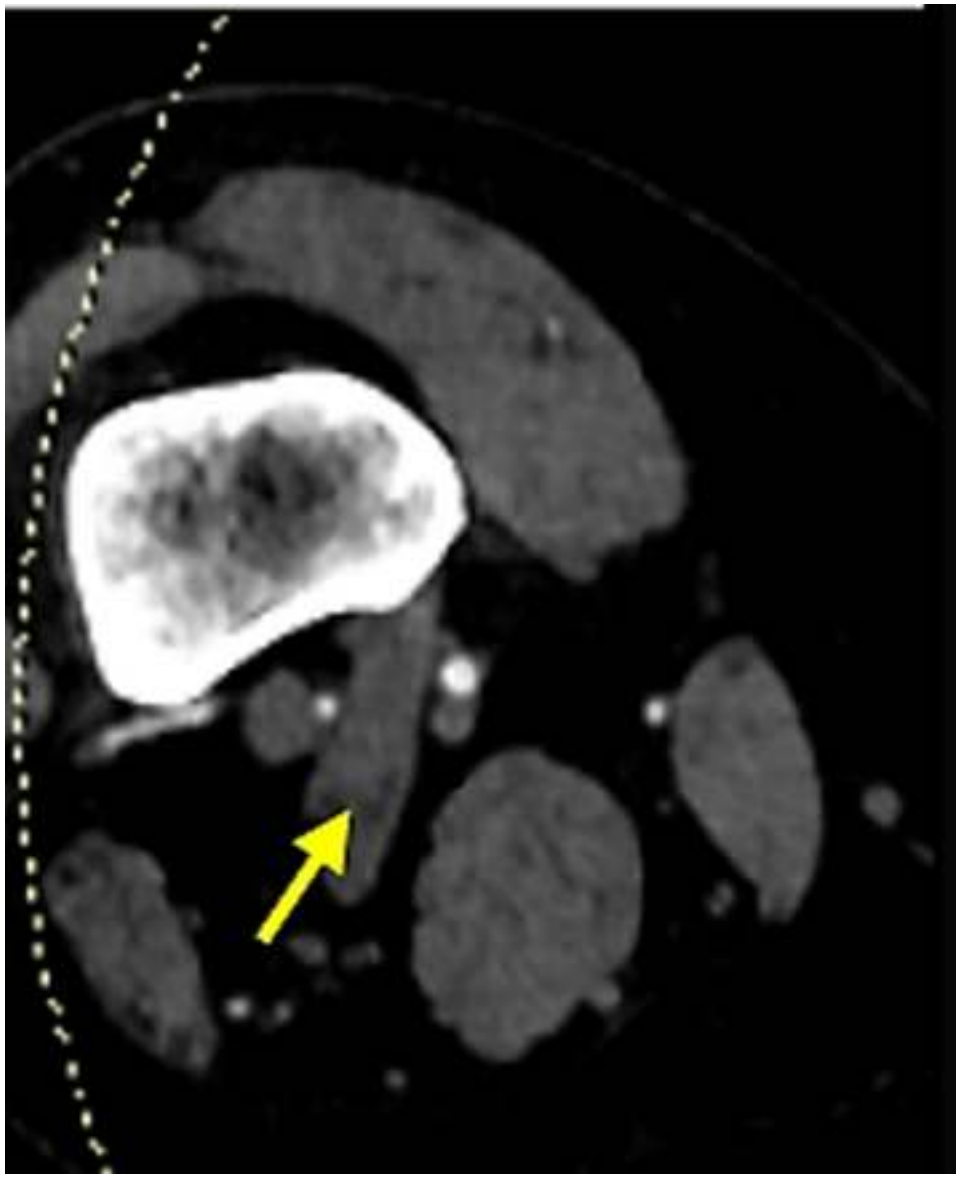
Slip

Slinging

Separating








who?
What?


AND FOOT


STOP

(CECS) CHRONIC EXERTIONAL COMPARTMENT SYNDROME


confirm
substantiate
prove
verify
attest
justify
clarify
check
inspect
document
authen cate

Do all PAES need surgery?

If surgery is planned is it enough to cut the compering muscle fibers?

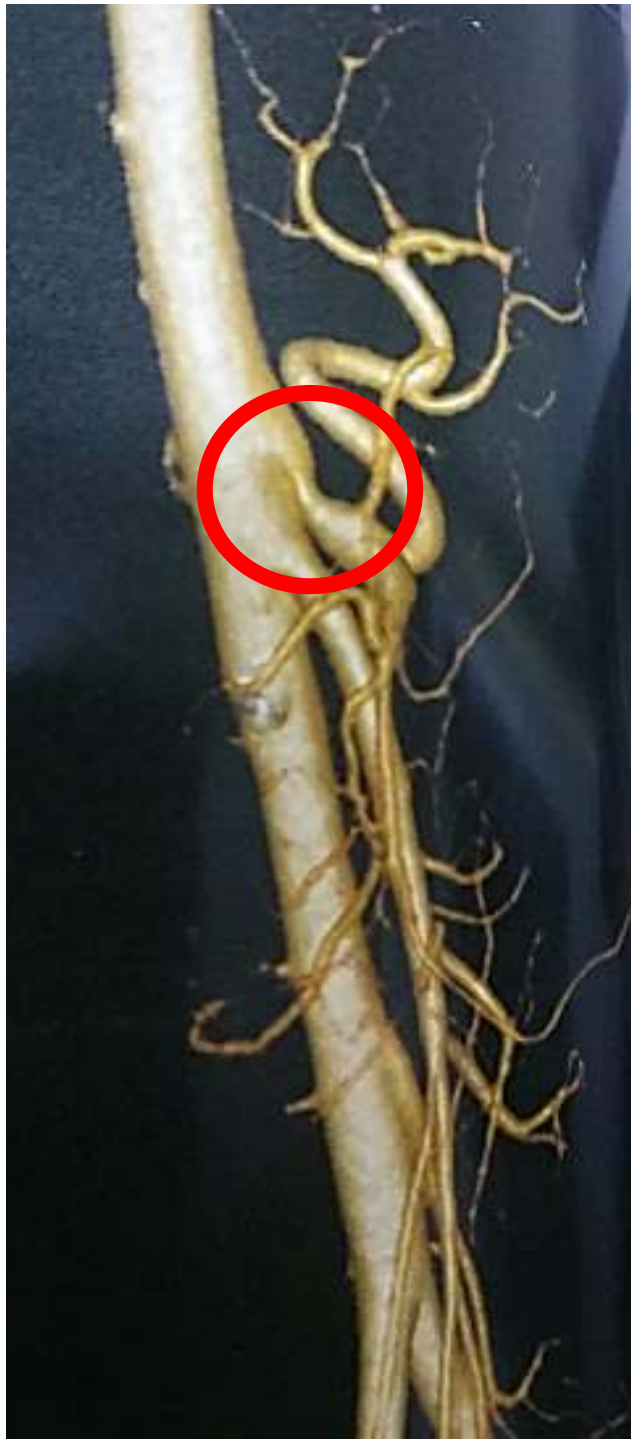
Verify	Verify your diagnosis 1st .
Try	Try conservative measures 1st.
Justify	Justify your management plan and not be just concerned by the 1ry pathology and miss the 2ry one.

M

A

Li

Syndrome



C

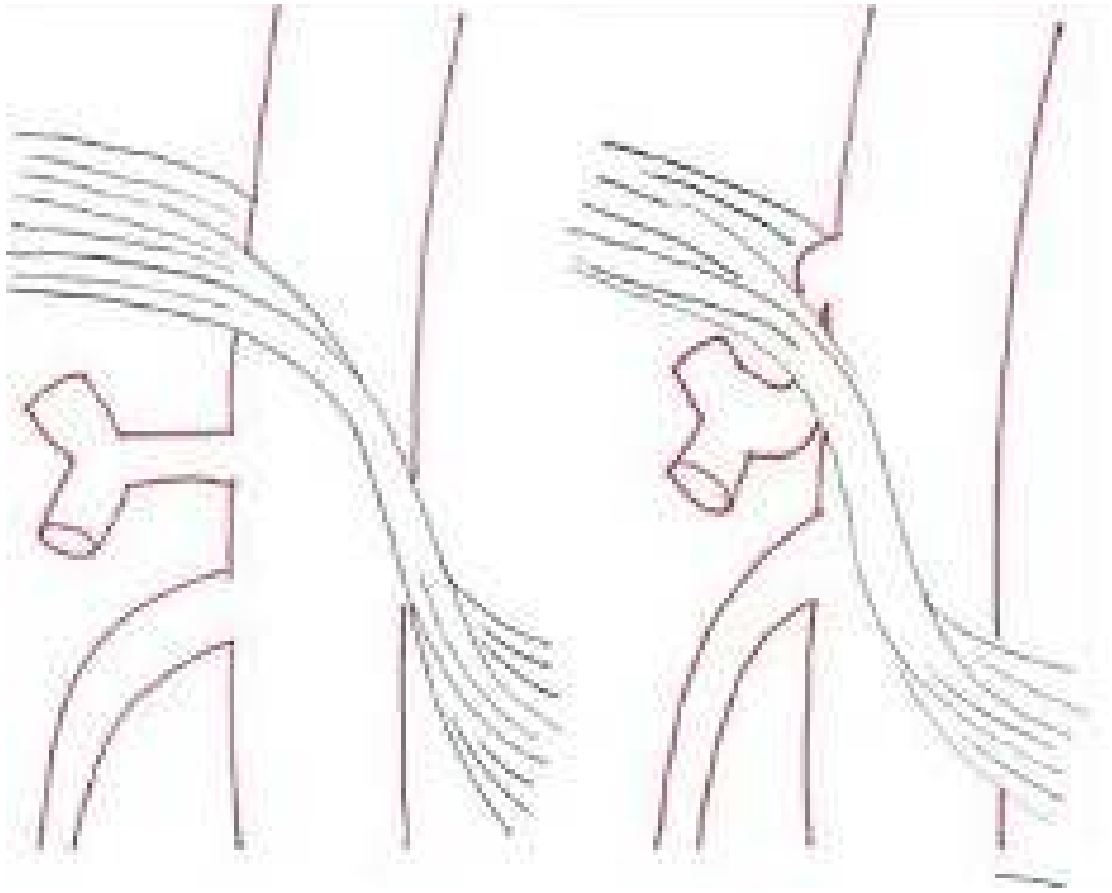
A

C

Syndrome

Dunbar Syndrome

Harjola-Marable syndrome



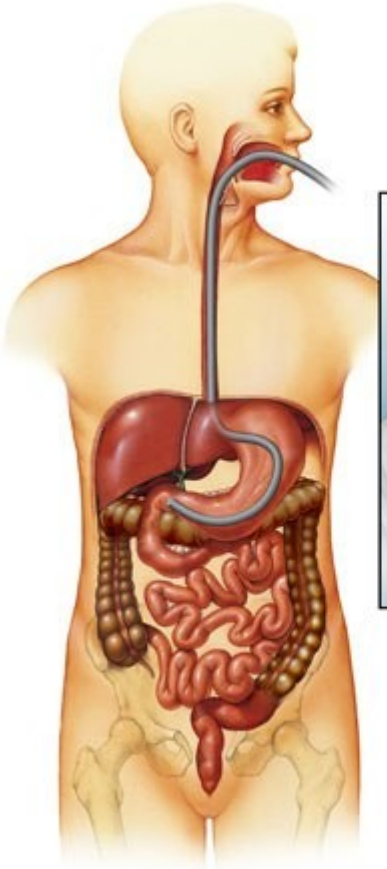
One of Two Things

- Compression of the **celiac trunk** **OR** the **sympathetic ganglia**.
- Due to high origin of the **celiac artery** **OR** **low set MAL**.
- It occurs **only during expiration** **OR** **all through .**

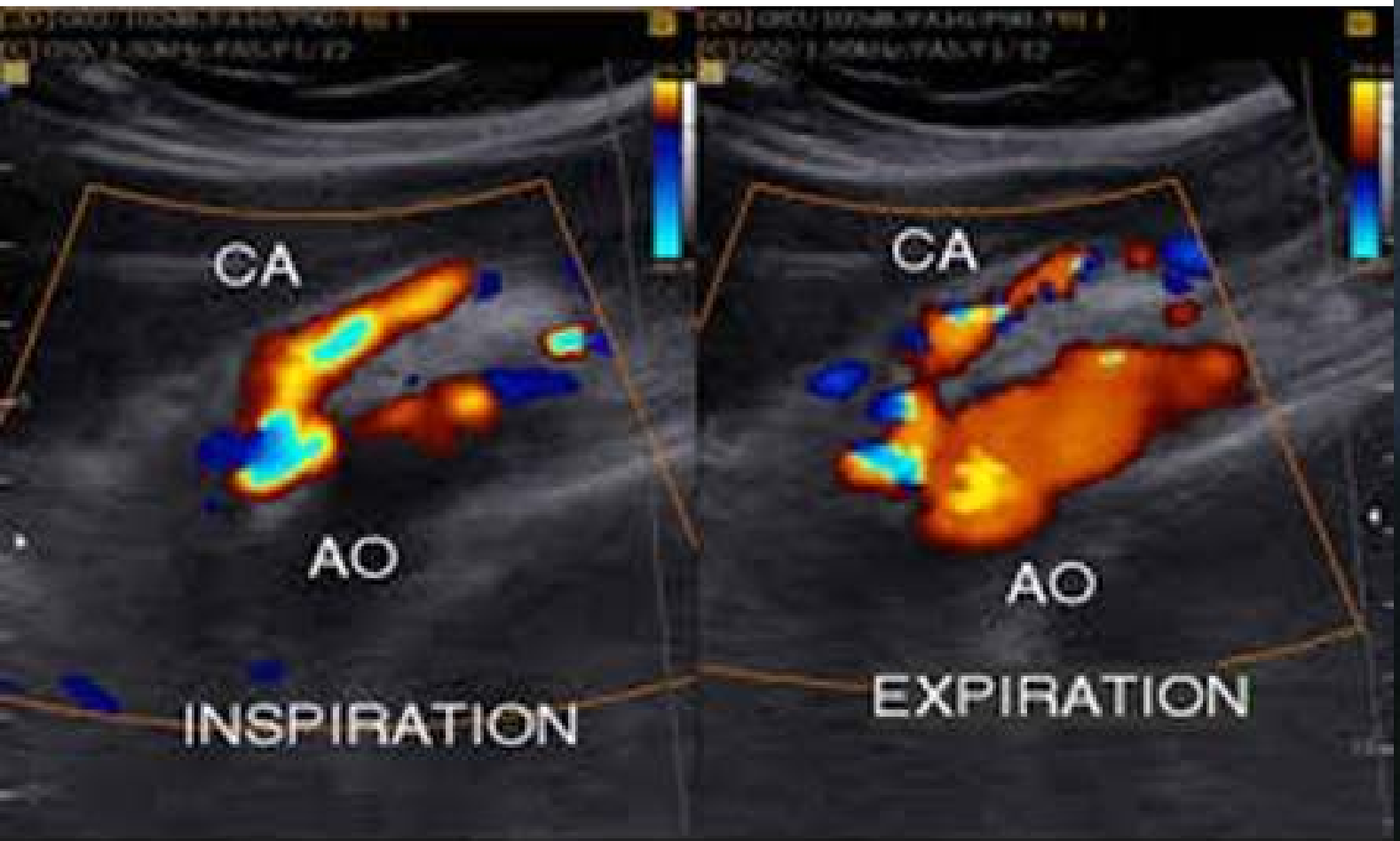
Post prandial pain

Vomiting

Weight loss

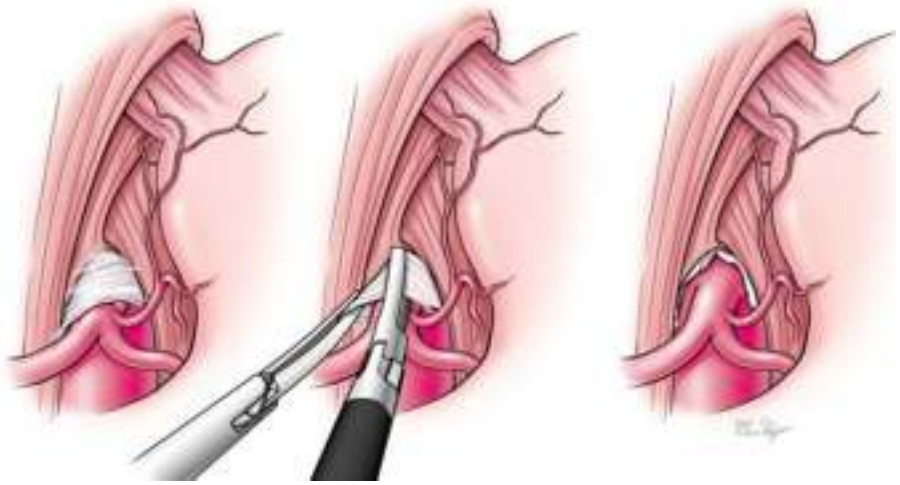


1.**Proximal stenosis** of CA with post **stenotic dilatation**.
2.**Indentation** on superior aspect of celiac artery
3.**Hook** shaped contour of celiac artery.



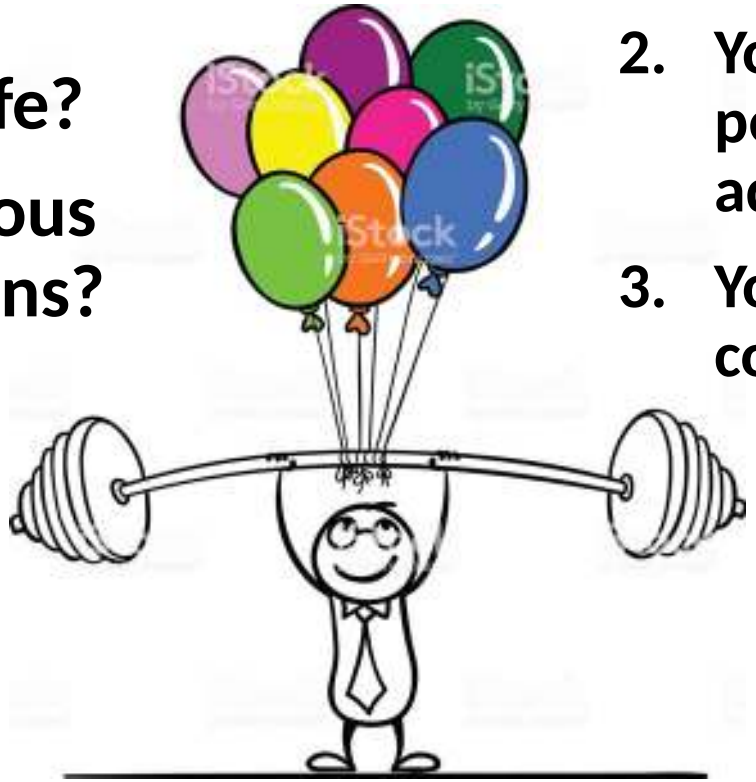
Treatment modalities for MAL syndrome

- Conservative ttt.
- Open surgical release.
- Laparoscopic release.
- Robotic assisted laparoscopic release.
- PTA and stenting.
- Rarely bypass is indicated.



“Laparoscopic release of MAL”
Is it an easy task?

1. You did it before?
2. You saw it before life?
3. You know how serious are the complications?

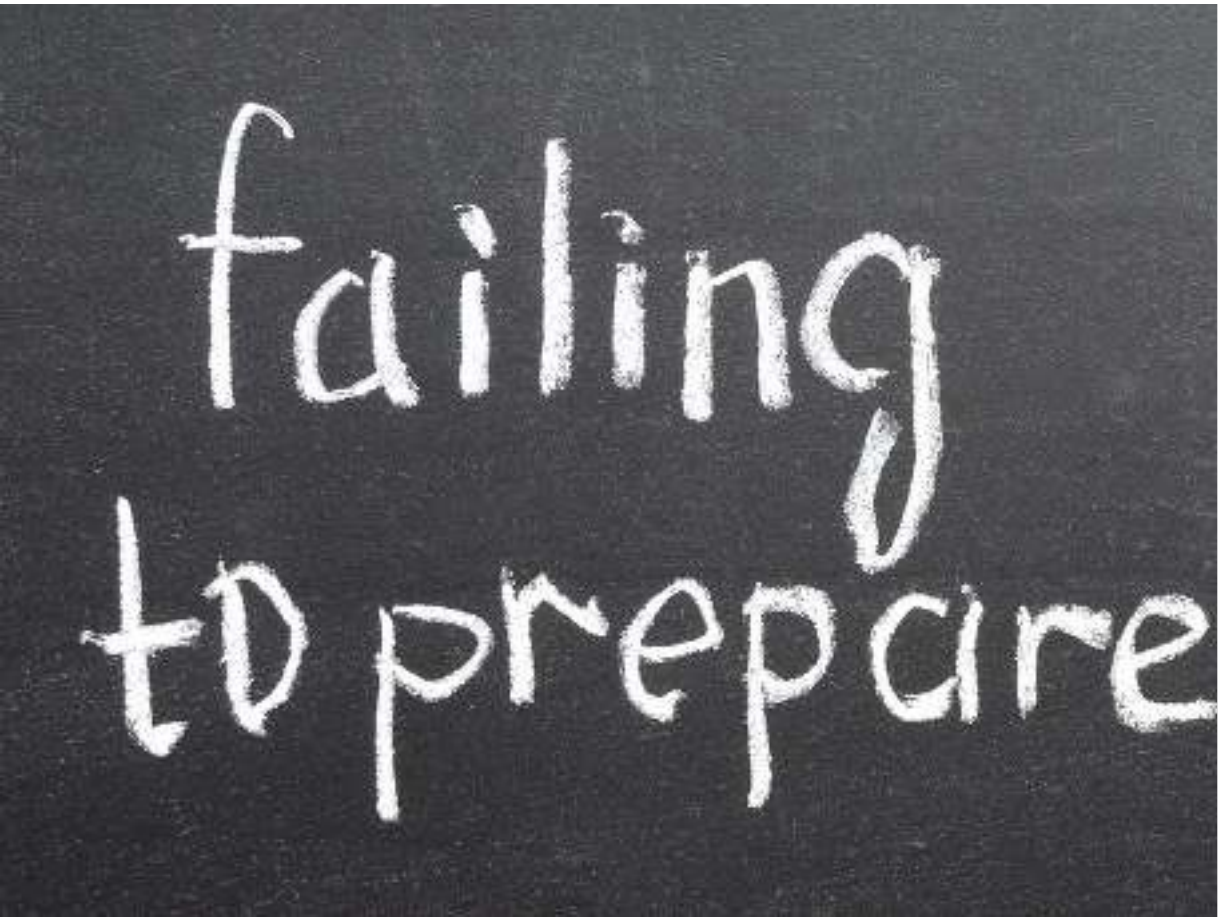


1. You know how to do it?
2. You will be able to do it perfect as you have advanced lap skills?
3. You are ready to manage if complications happened?


difficult
easy

7

1. Preparation
2. Access.
3. Approach.
4. Target area.
5. Leader to the celiac trunk.
6. Leader to the MAL
7. Safest way to dissect & release.

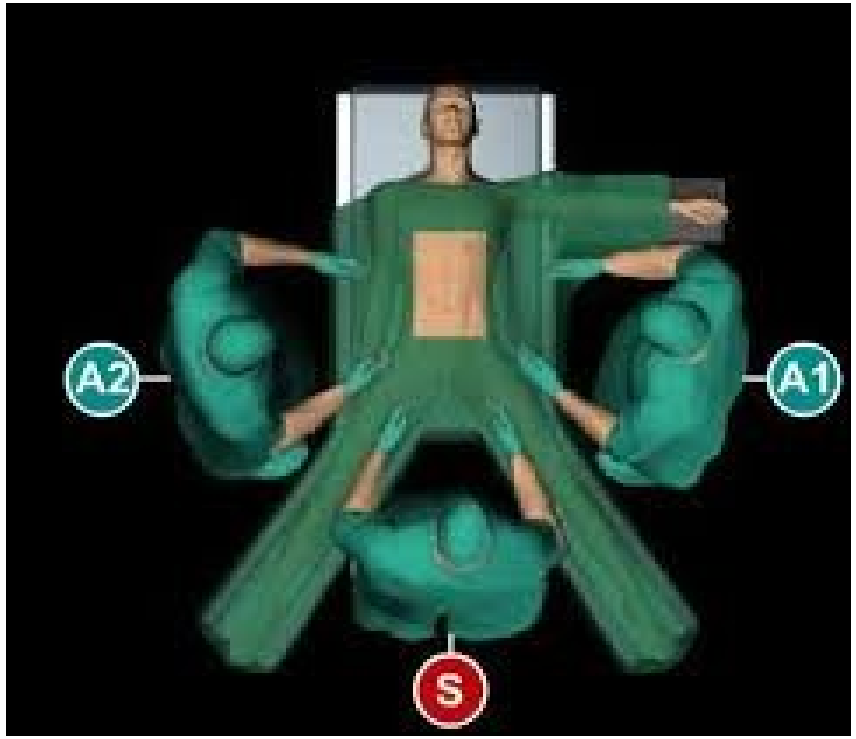

failing
to prepare

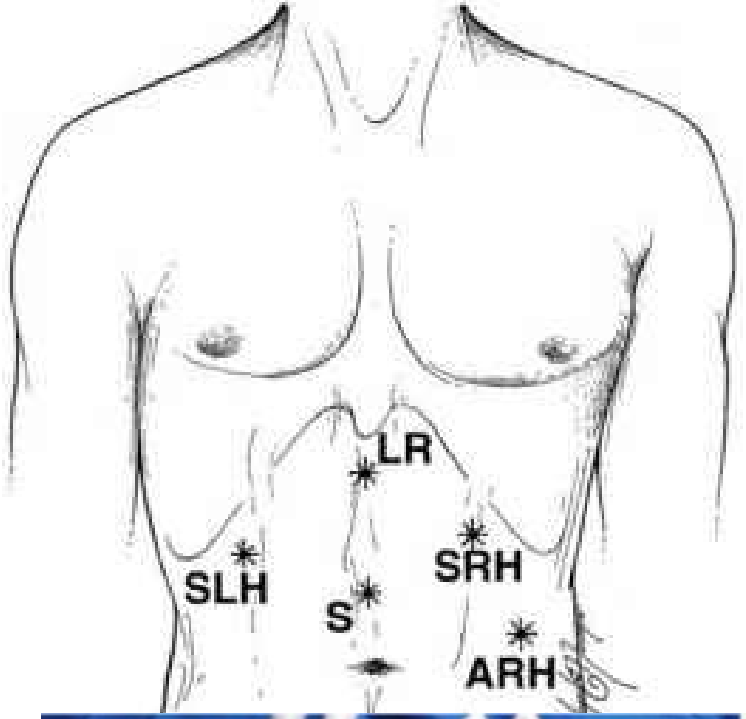

TEAM

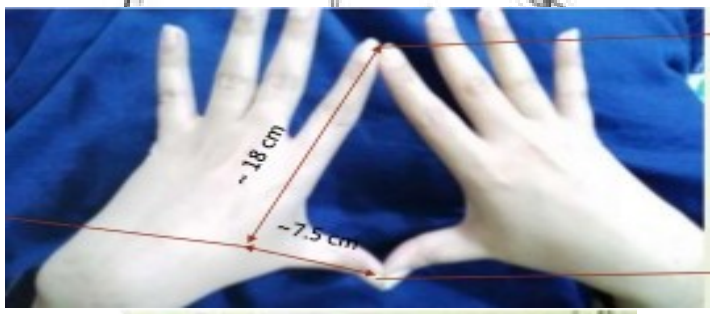

the world's no.1 e. learning minimally invasive surgery website
ircad
Presents
WEBSurg
online university of IRCAD

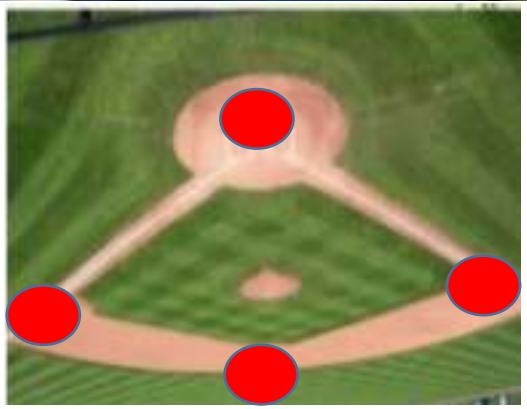

ADVANCED LAPAROSCOPIC

Access Management





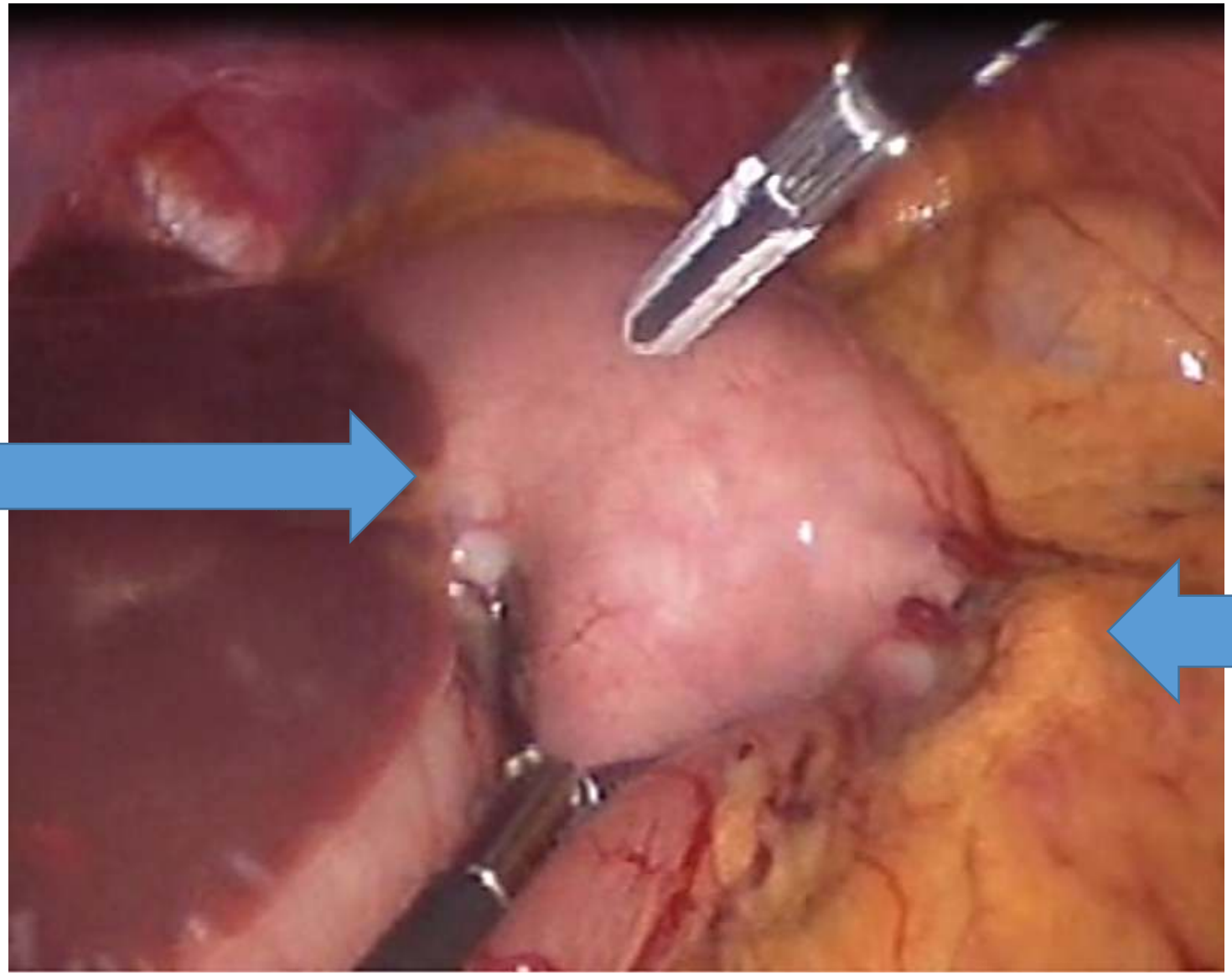




Before port insertion you have to know well…?????


Approach

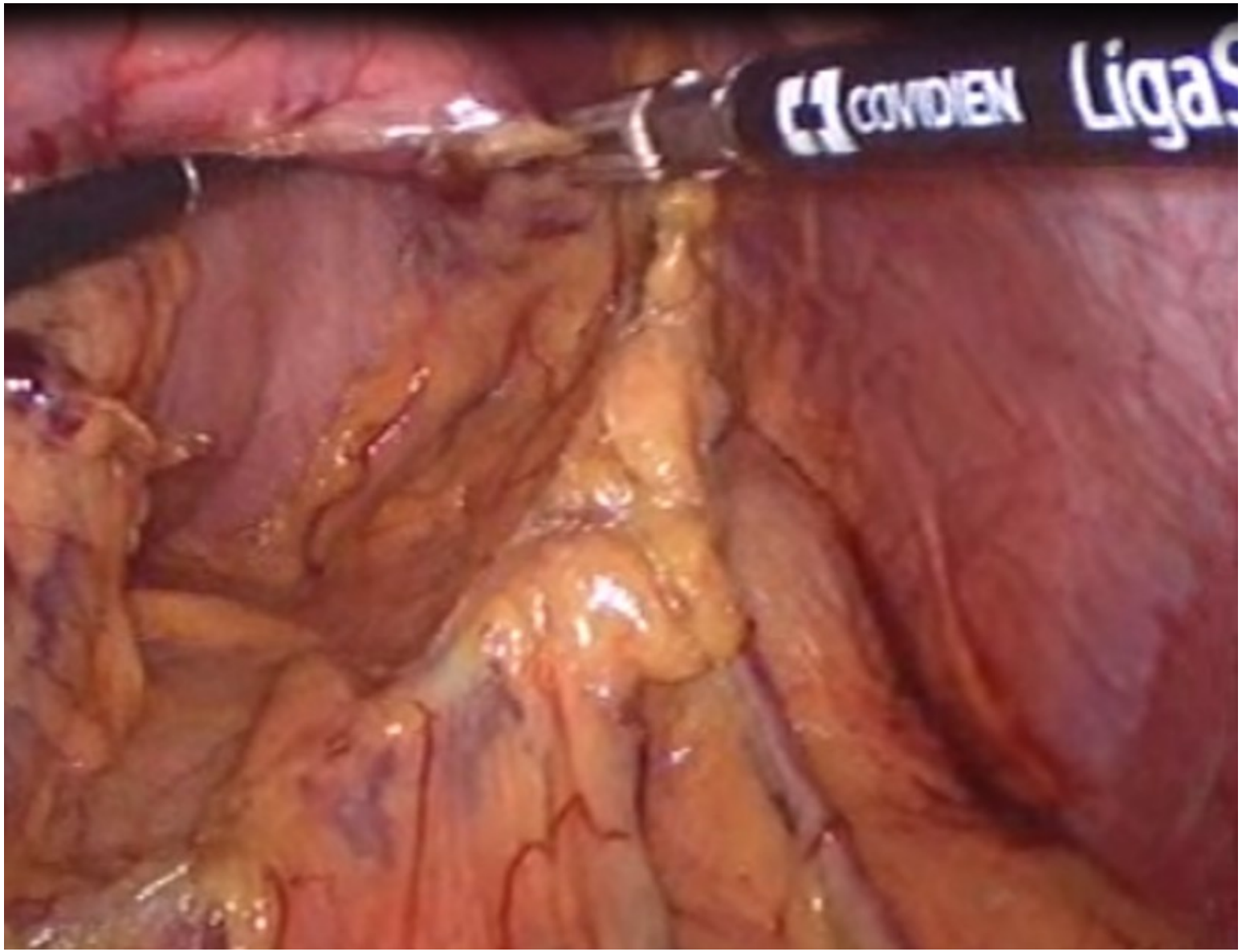
Your target is posterior to the lesser sac above the pancreas so we have two approaches



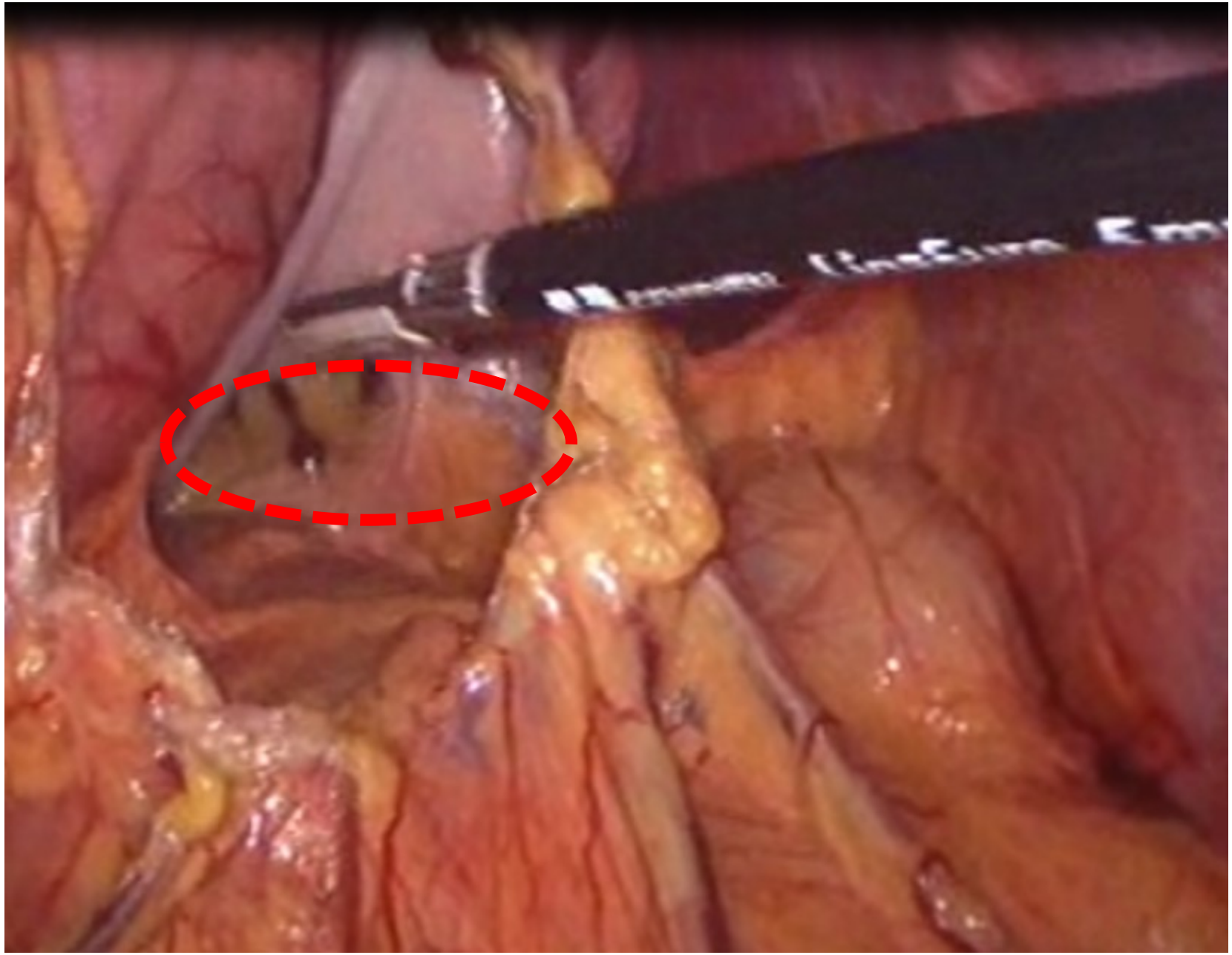
Pars flaccida

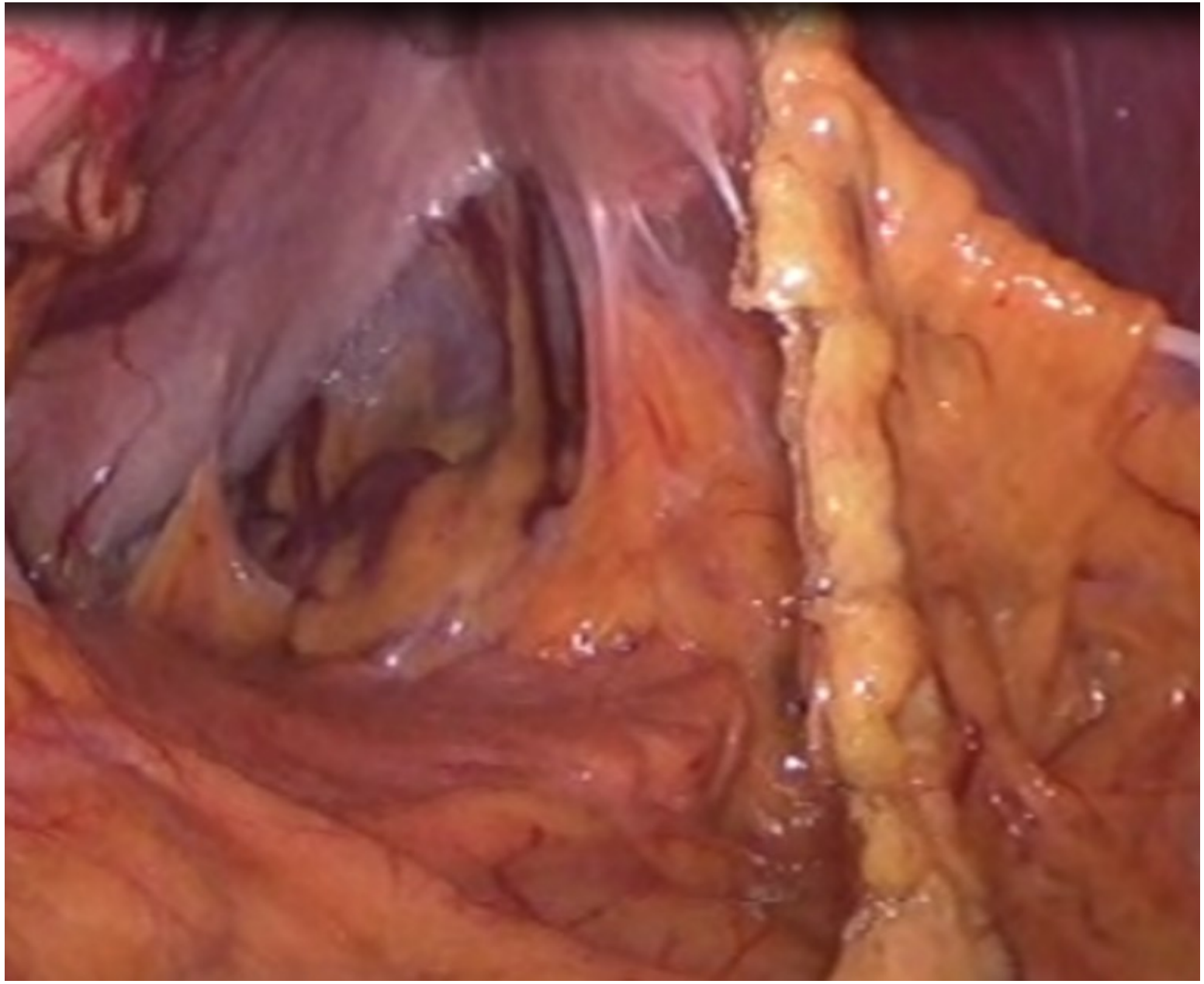
Gastro-colic ligament

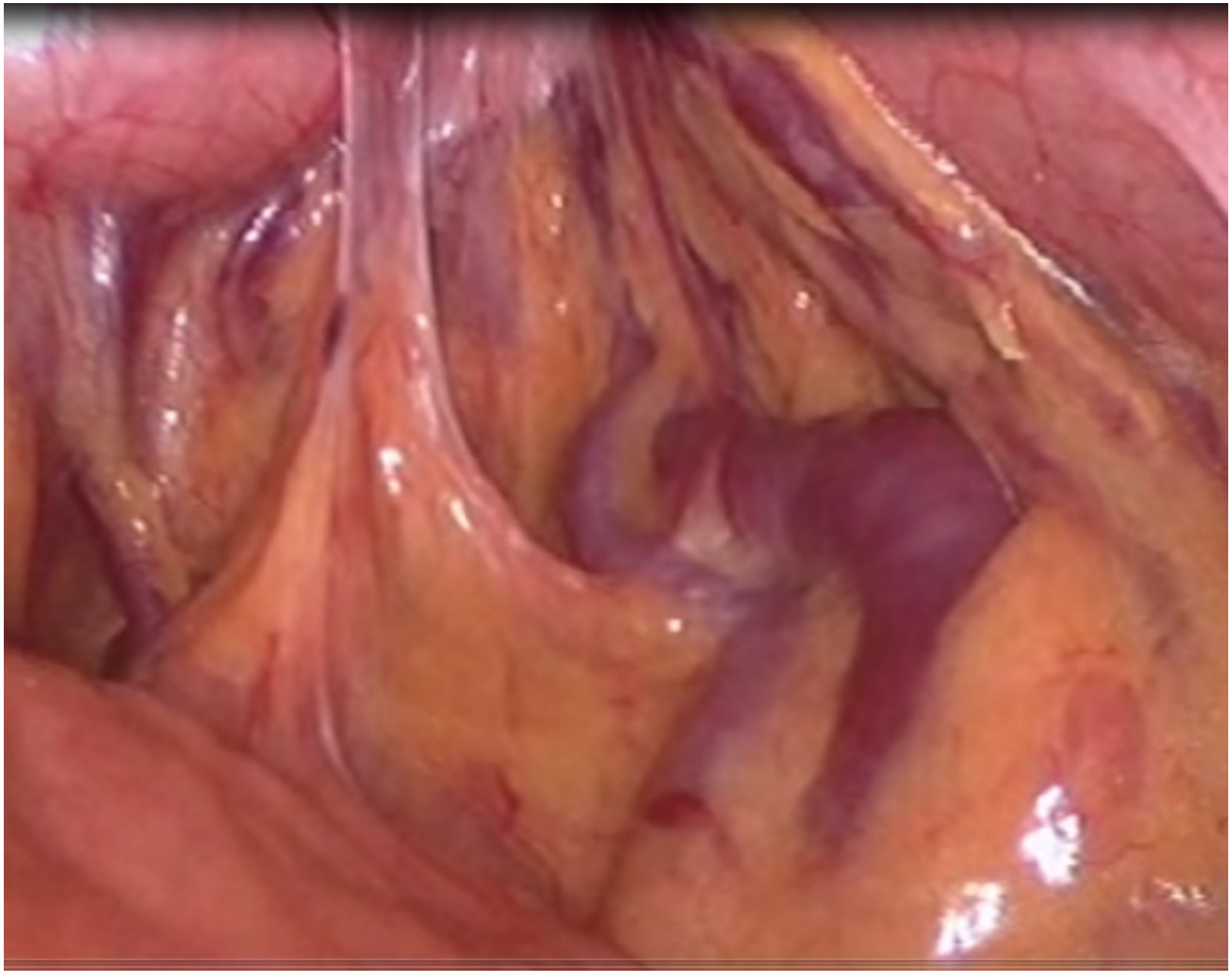
Going to the lesser sac through the gastro-colic ligament

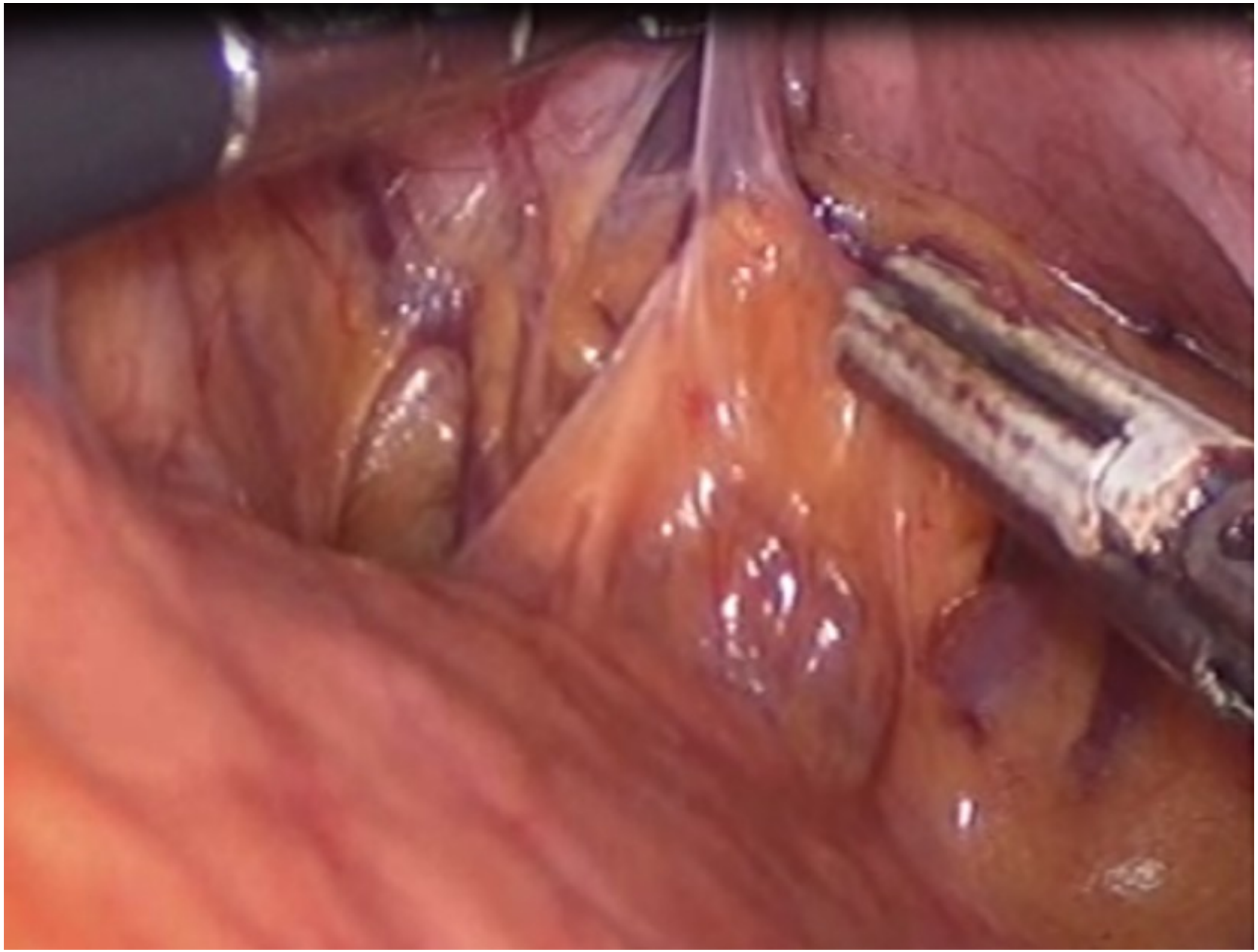


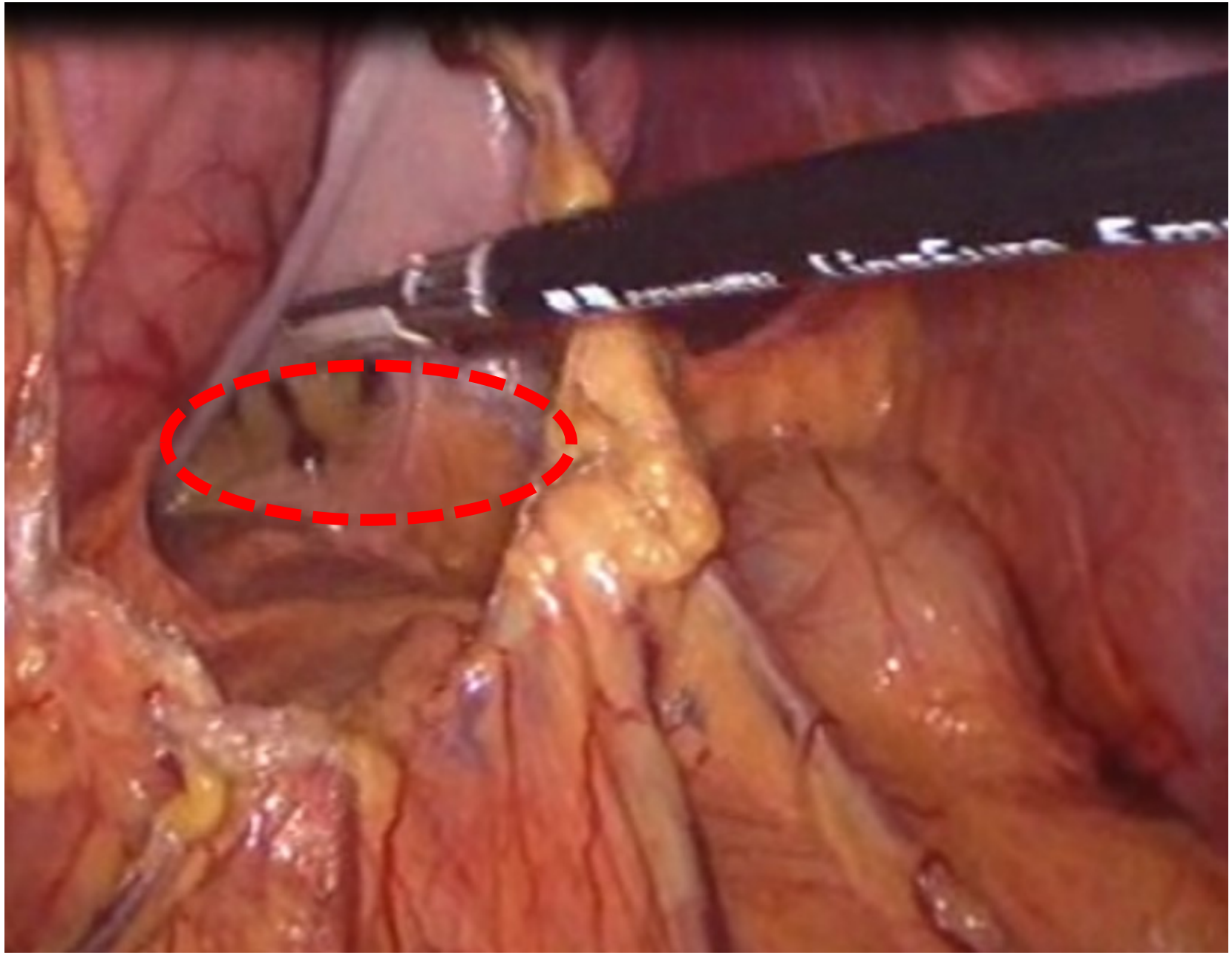
TARGET AREA

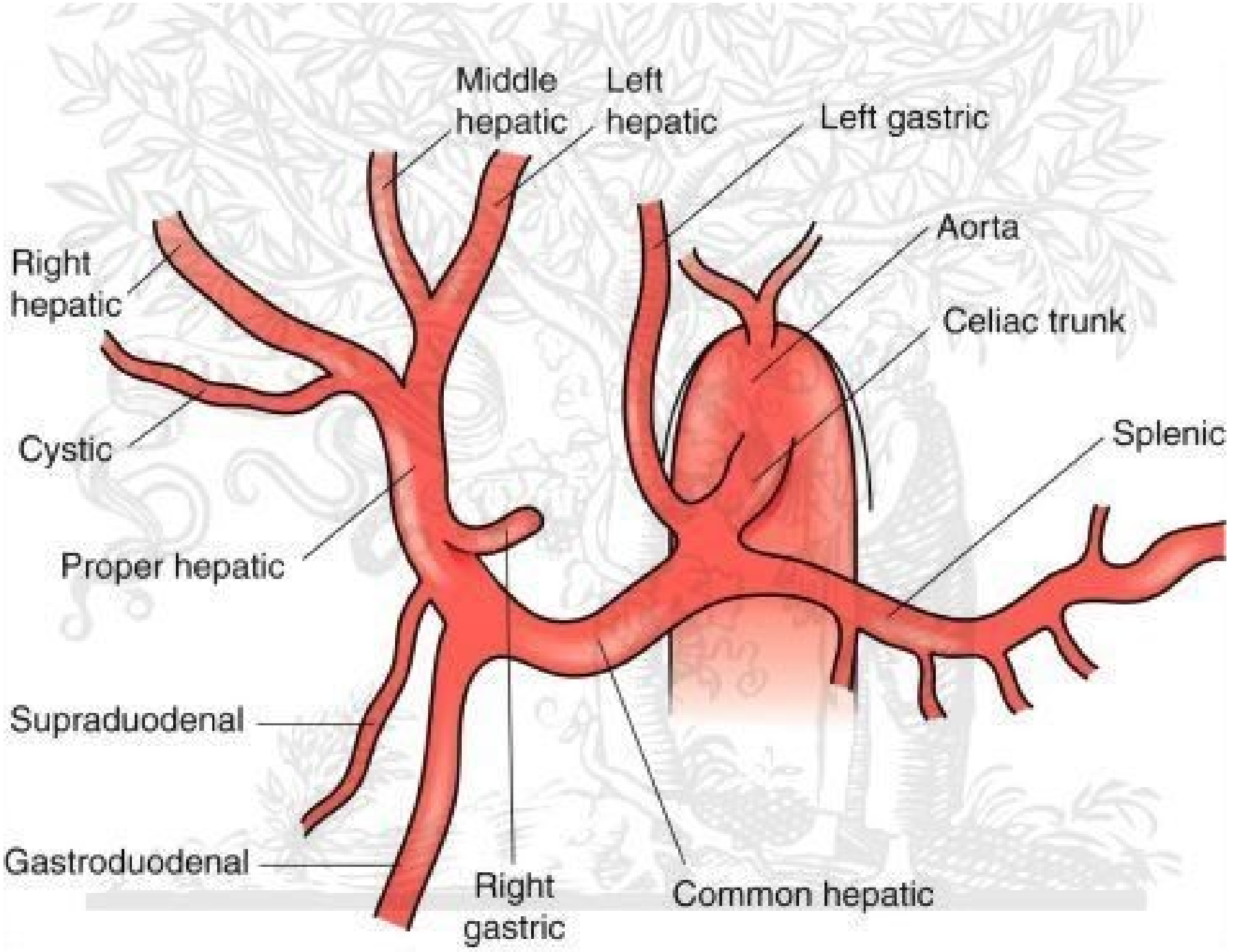


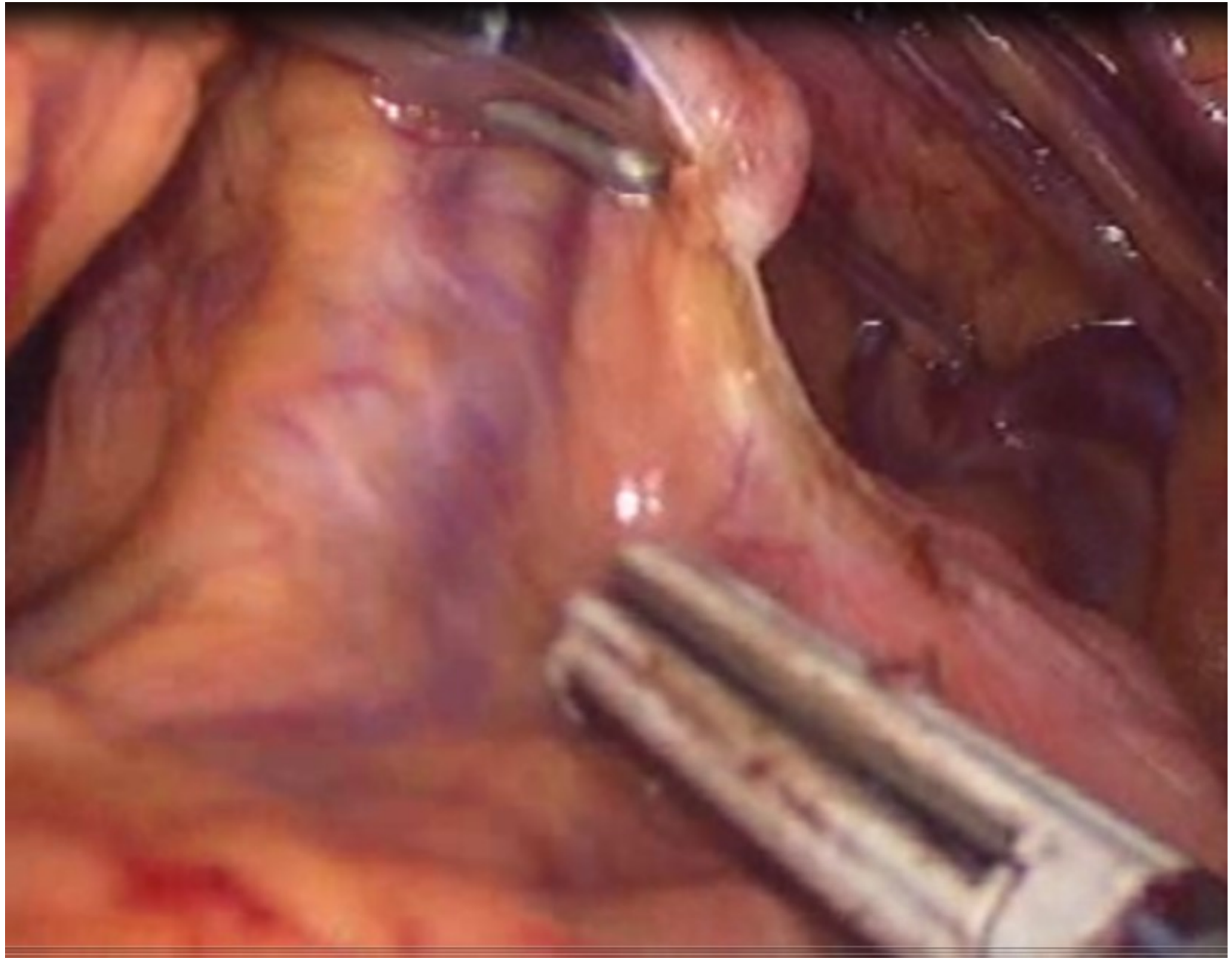


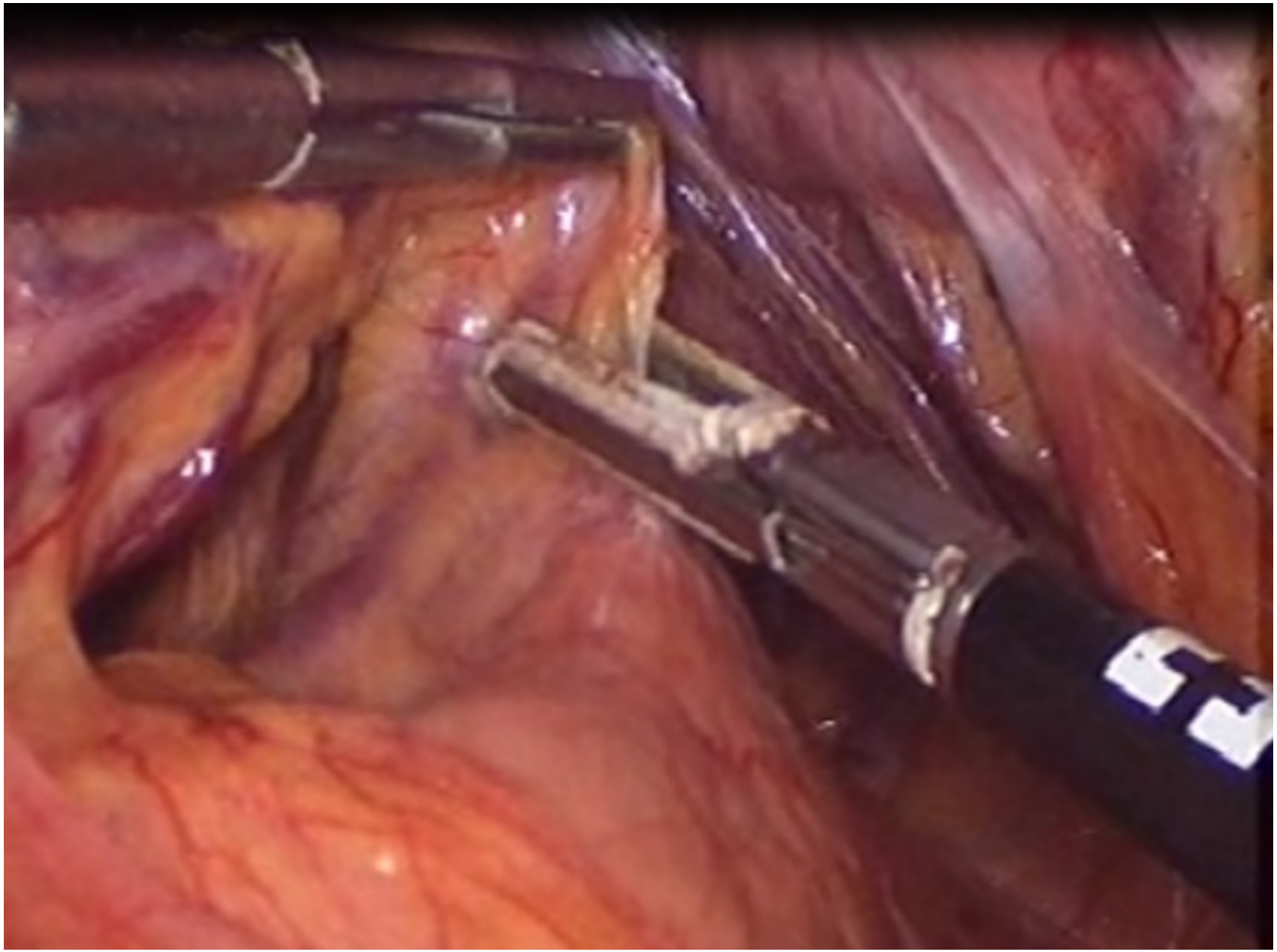


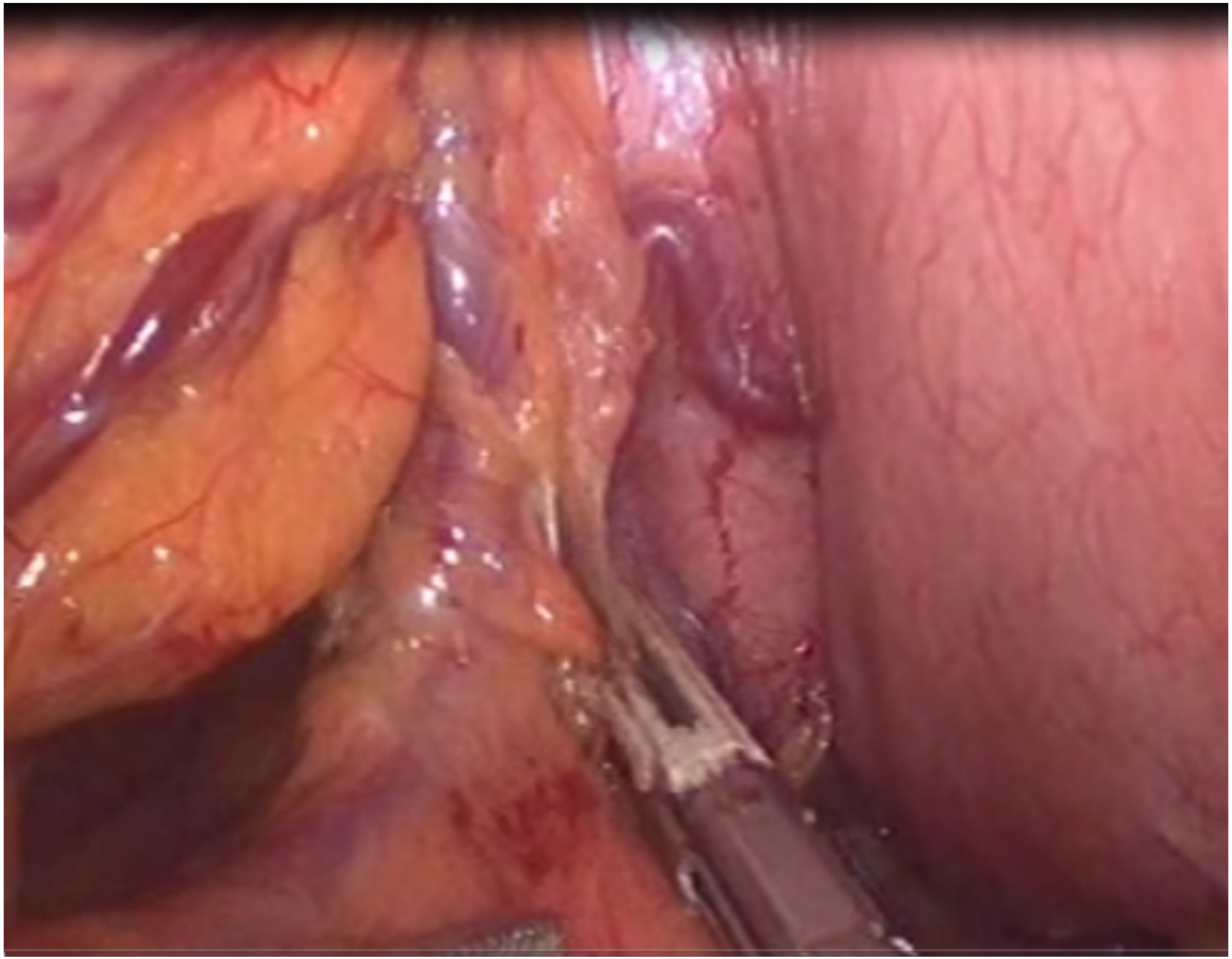


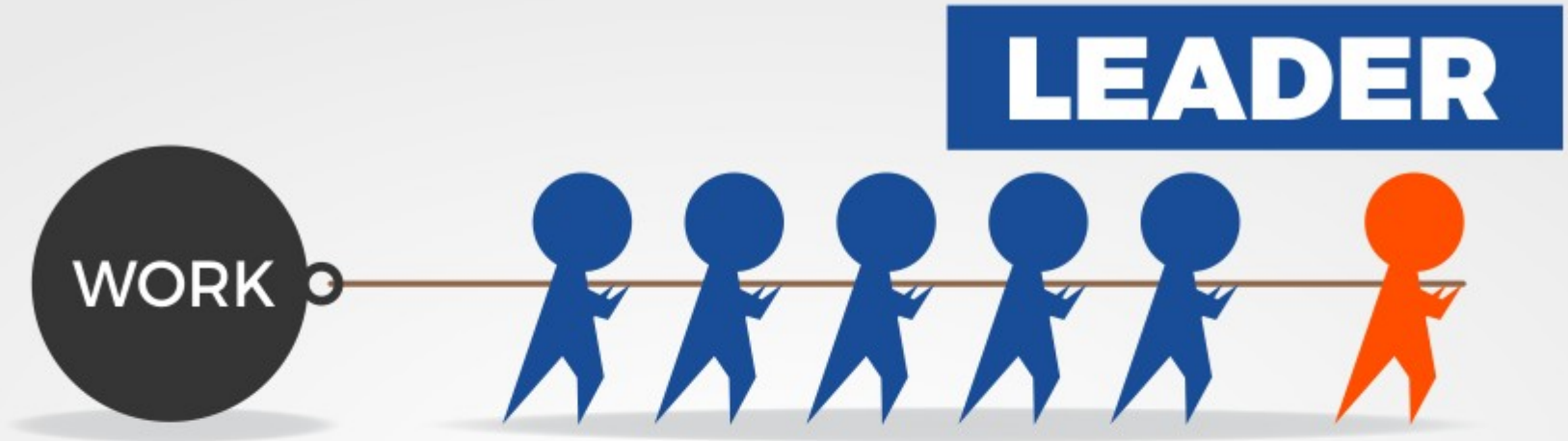



Middle hepatic
Left hepatic
Left gastric
Aorta
Celiac trunk
Splenic
Right hepatic
Cystic
Proper hepatic
Supraduodenal
Gastroduodenal
Right gastric
Common hepatic








LEADER
WORK

Diaphragm

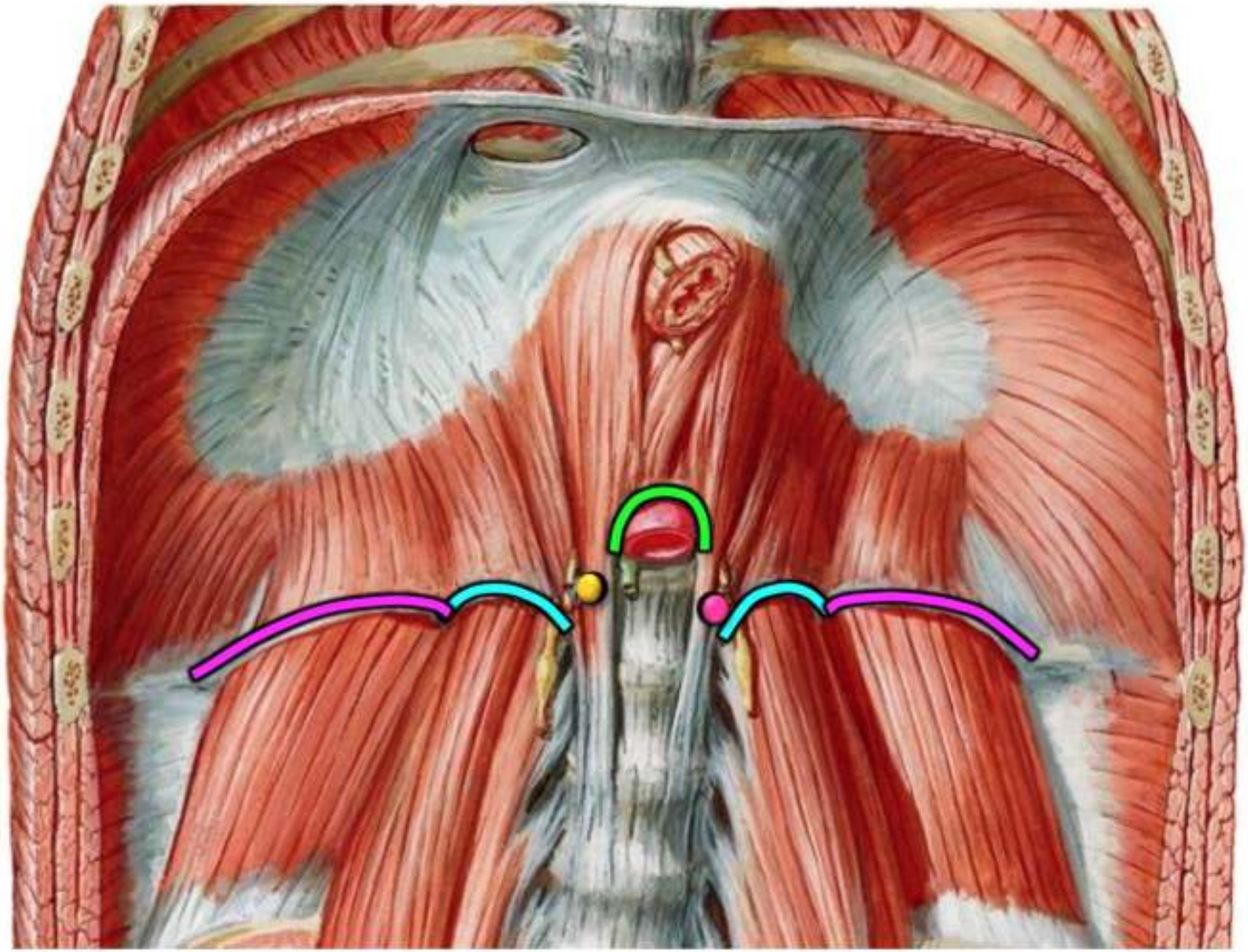
Right crus
-forms esophageal hiatus

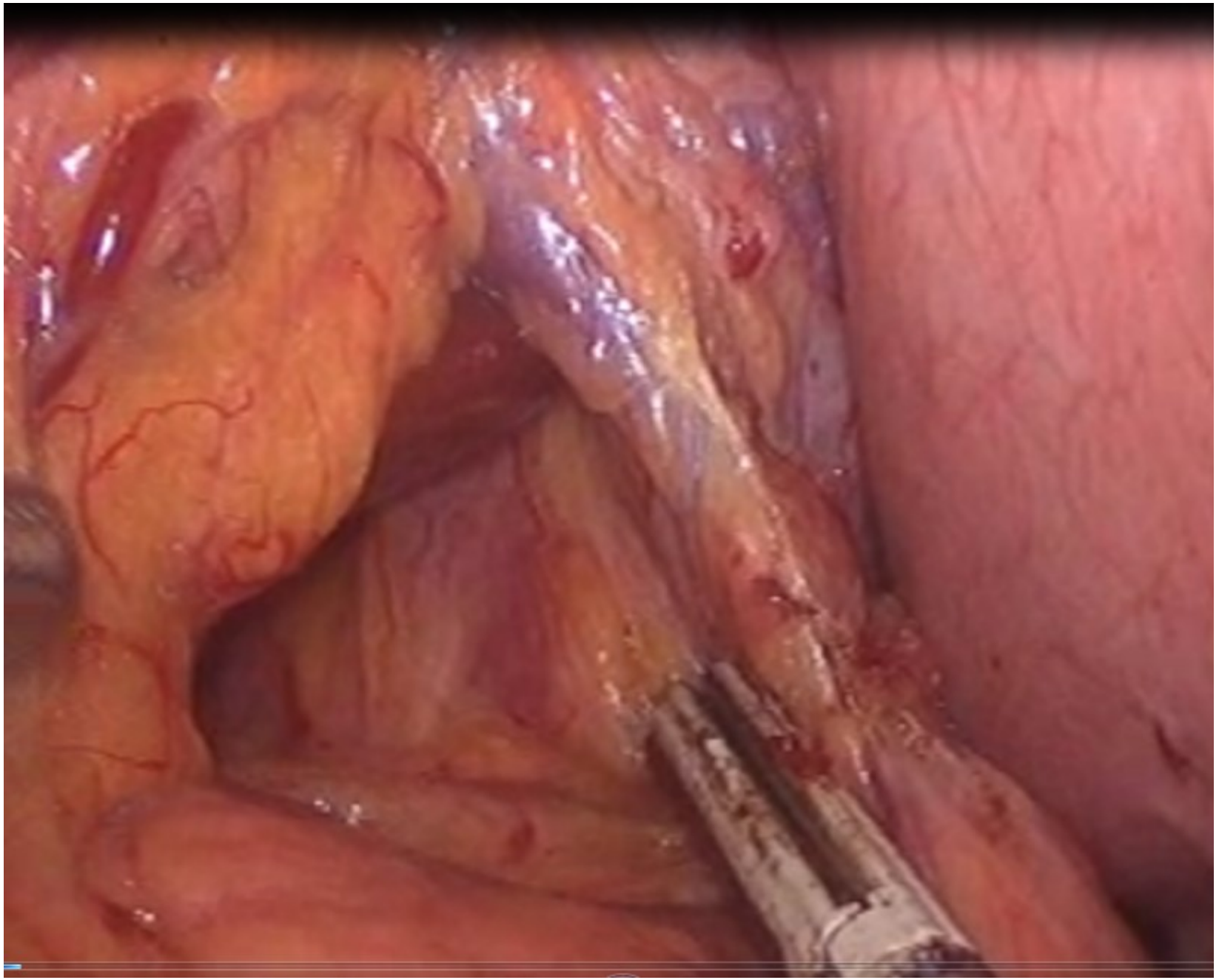
Left crus

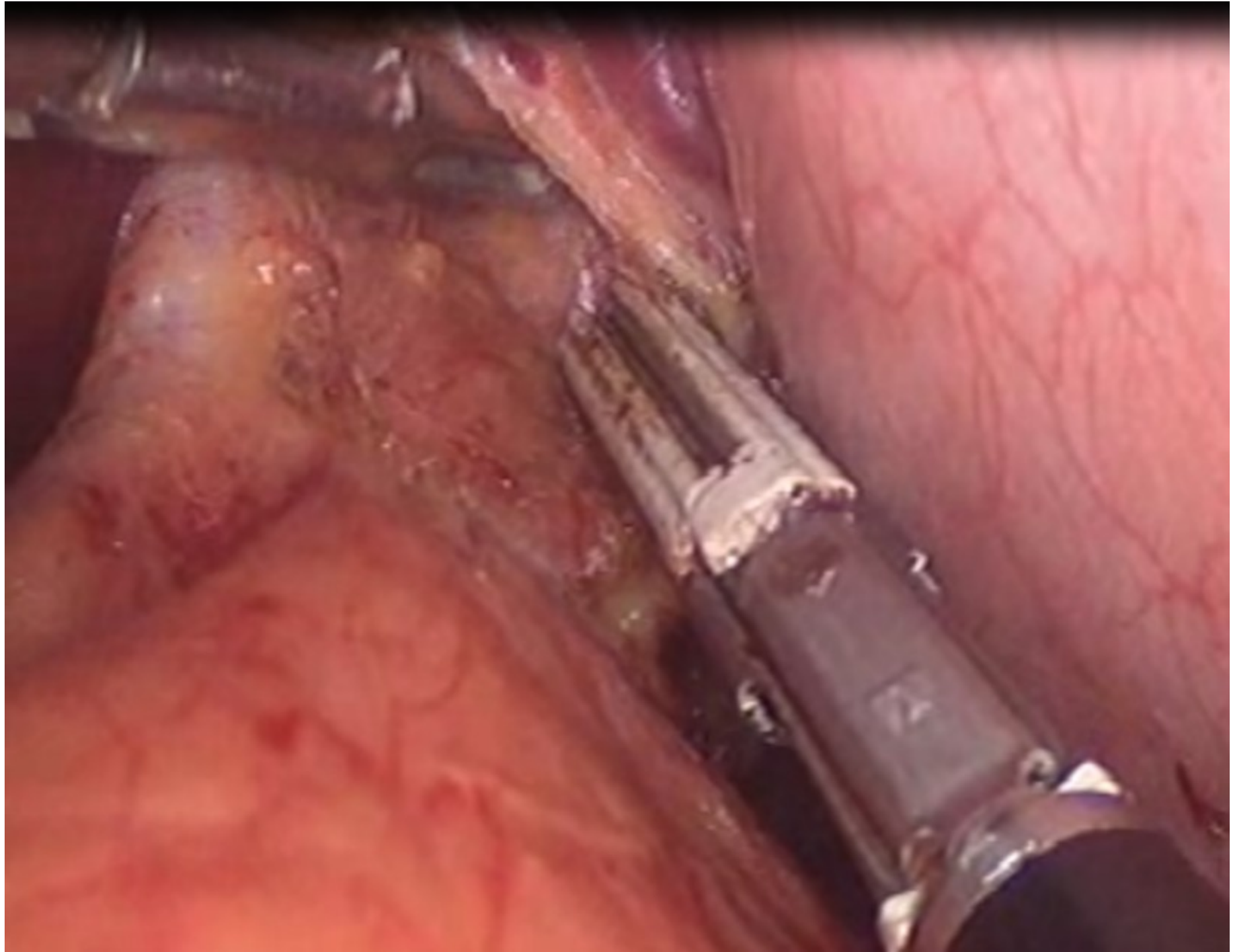
Median arcuate ligament
-anterior border of the aortic hiatus

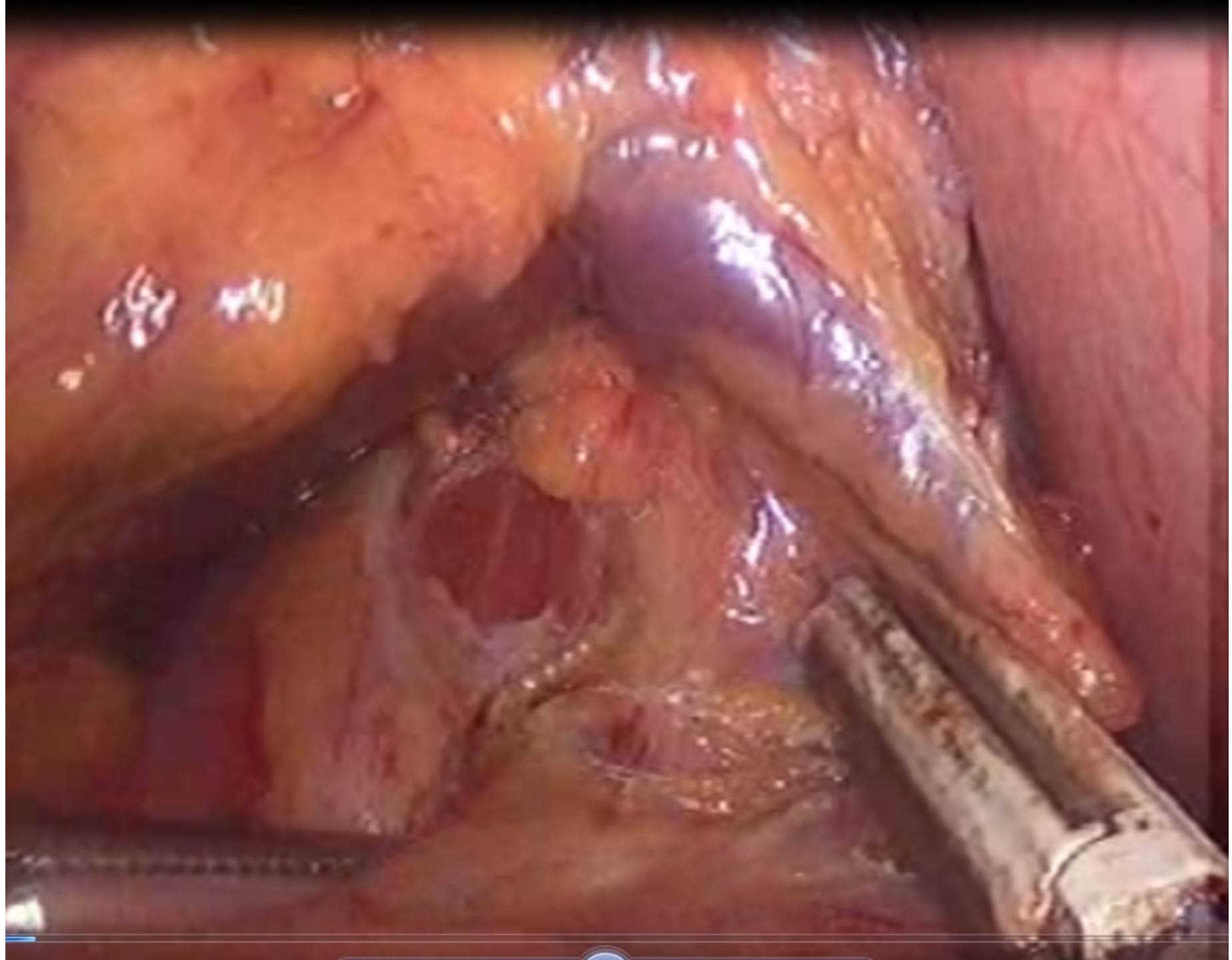
Medial arcuate ligament
-crosses psoas major

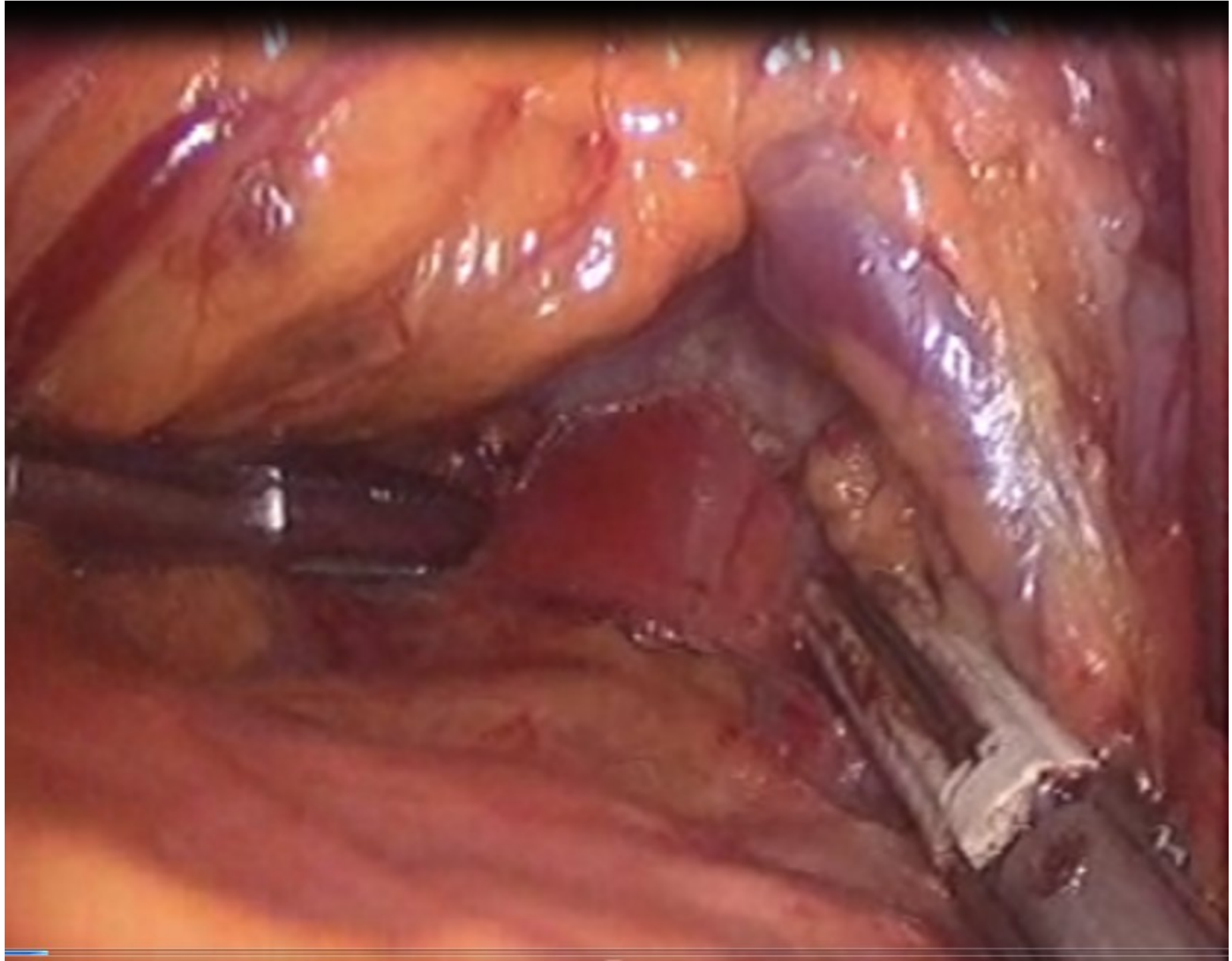
Lateral arcuate ligament
-crosses quadratus lumborum

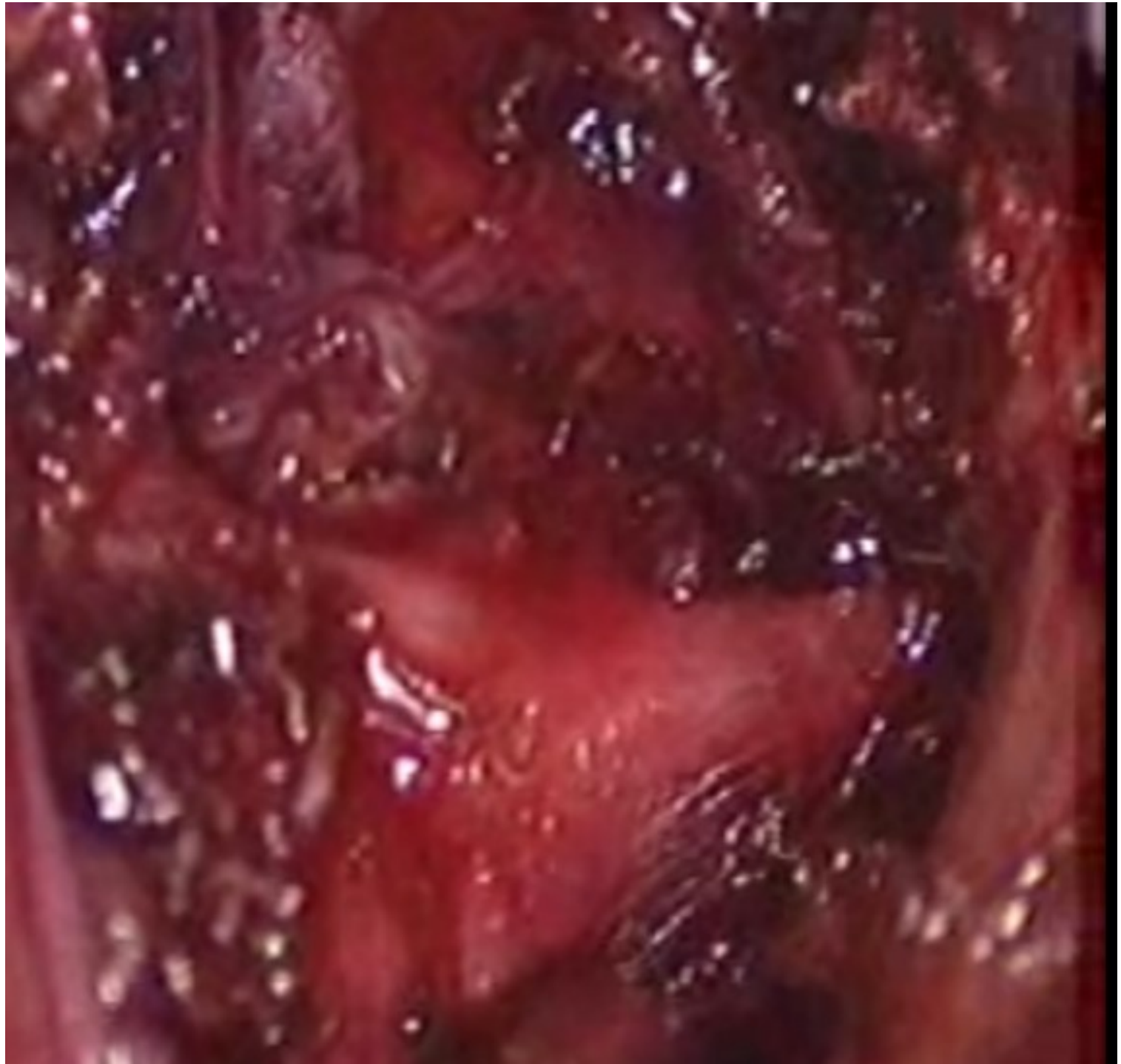


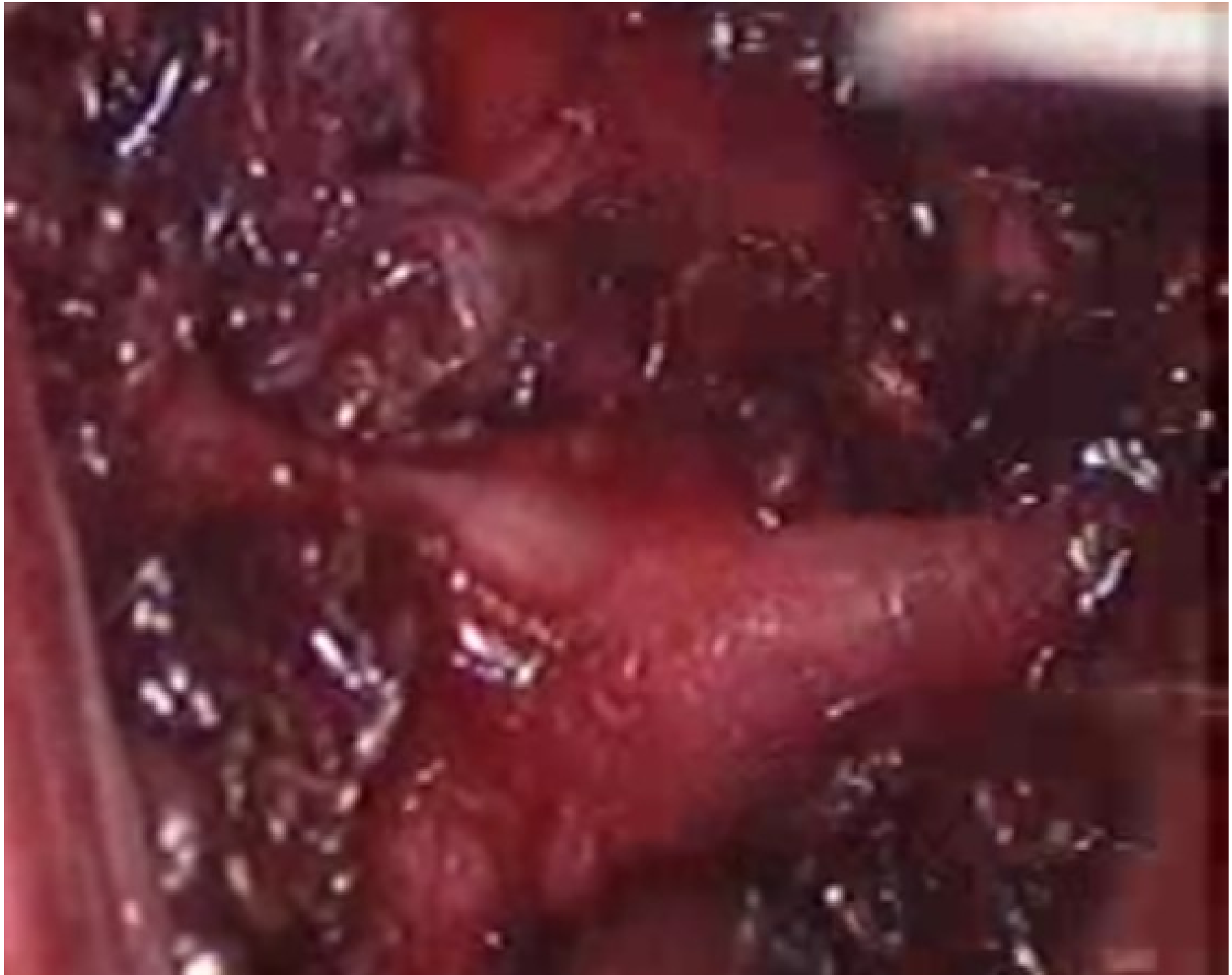


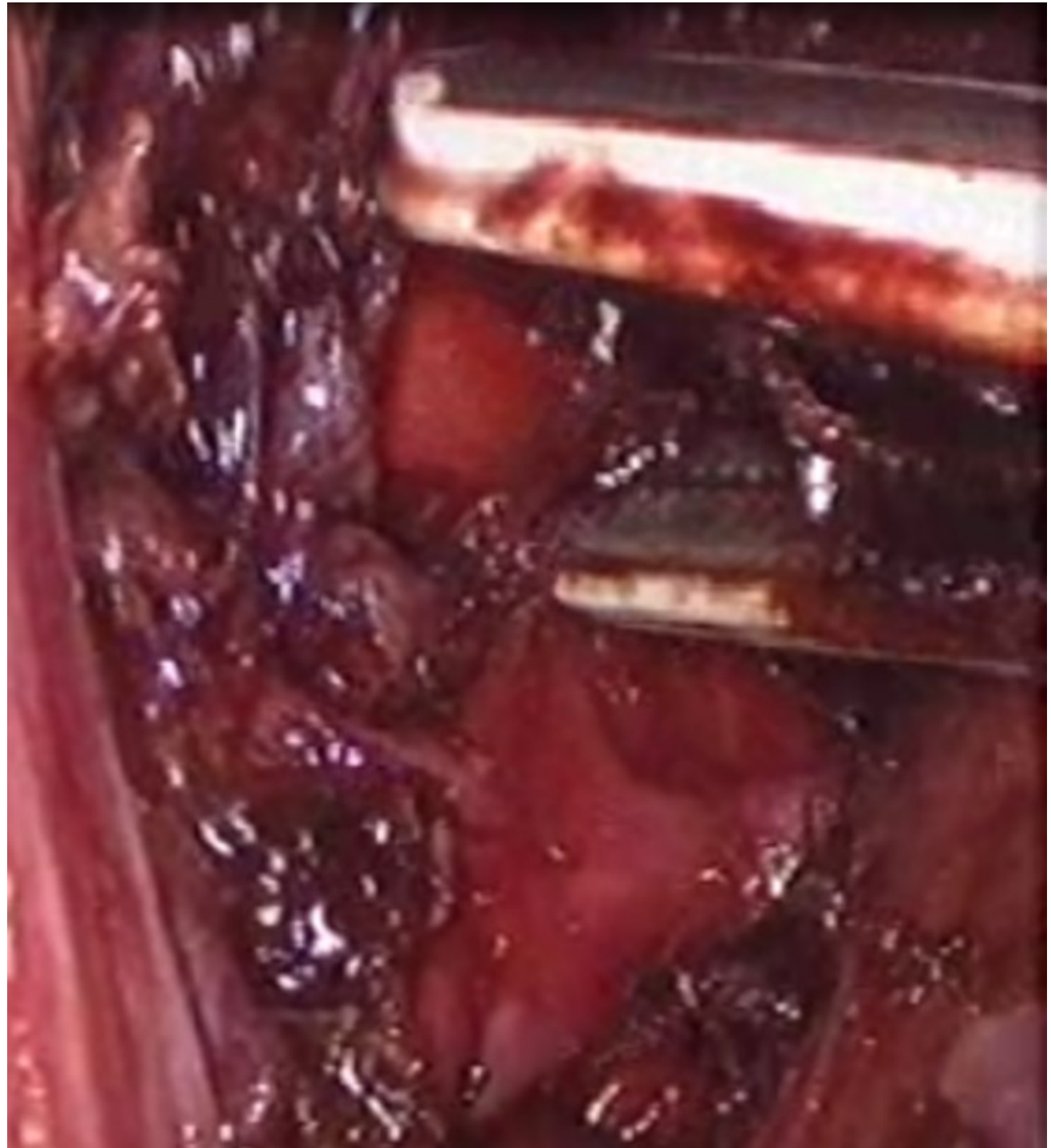








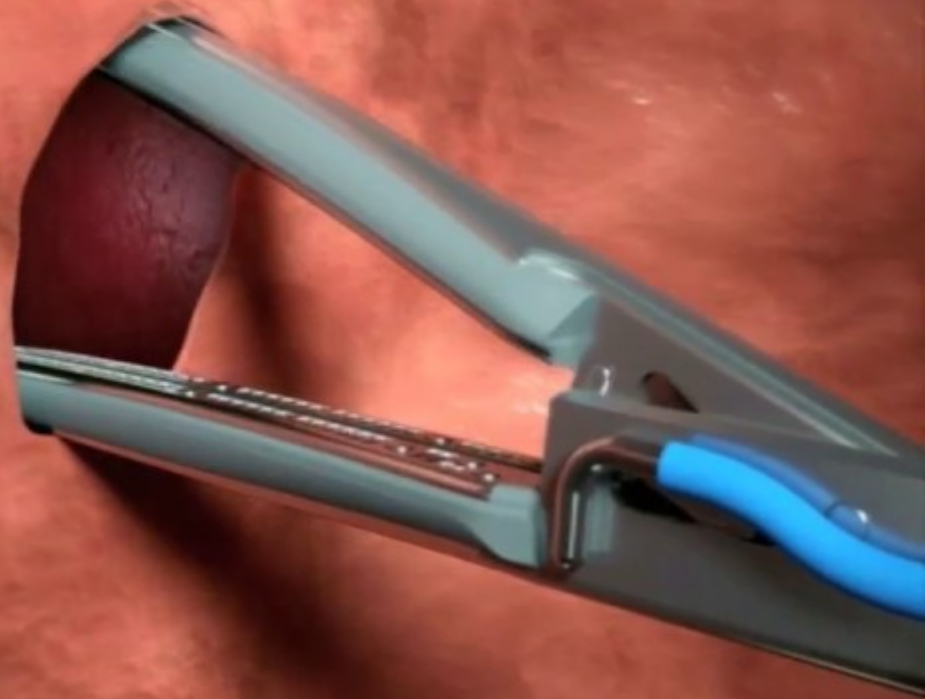




Safest way to dissect & release.

COVIDIEN

BLUNT DISSECTION[3]



Referred by: Prof. Hisham Moustafa

ID: 1819769

256 MULTISLICE CT ANGIOGRAPHY OF THE AORTA AND MESENTERIC ARTERIES

TECHNIQUE:

- Timed multi slice helical CT acquisition with automatic high flow IV non ionic contrast medium infusion to obtain axial sections in arteriographic phase.
- The obtained sections were processed to obtain angiographic images.

FINDINGS:

** Given history of previous intervention. Correlation to the last available studies dated 4/8/2018 and 1/9/2018.

- Patent normal caliber of the celiac trunk with no current, extrinsic indentation, focal stenotic segments or intraluminal filling defects.
- Normal appearance of the opacified abdominal aortic segment. No focal areas of stenosis, aneurysmal dilatation or intimal

7

1. Preparation
2. Access.
3. Approach.
4. Target area.
5. Leader to the celiac trunk.
6. Leader to the MAL
7. Safest way to dissect & release.