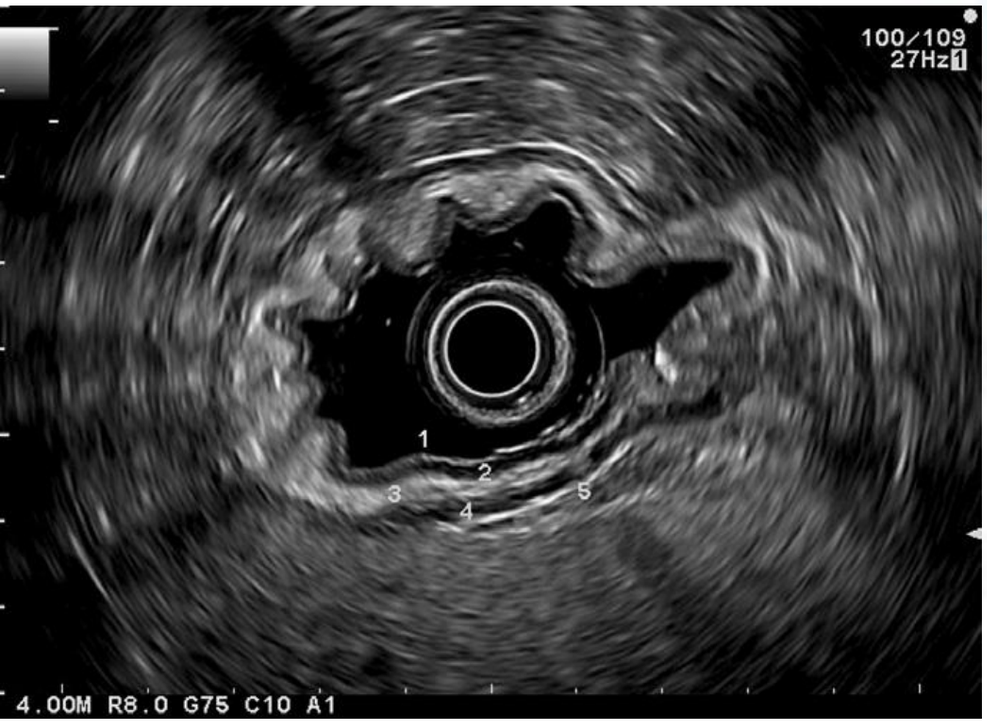
EUS ACADEMY





COSA SI VEDE DALLO STOMACO

PERUGIA 2-3 Febbraio 2022

RITA CONIGLIARO

AOU MODENA

AGENDA

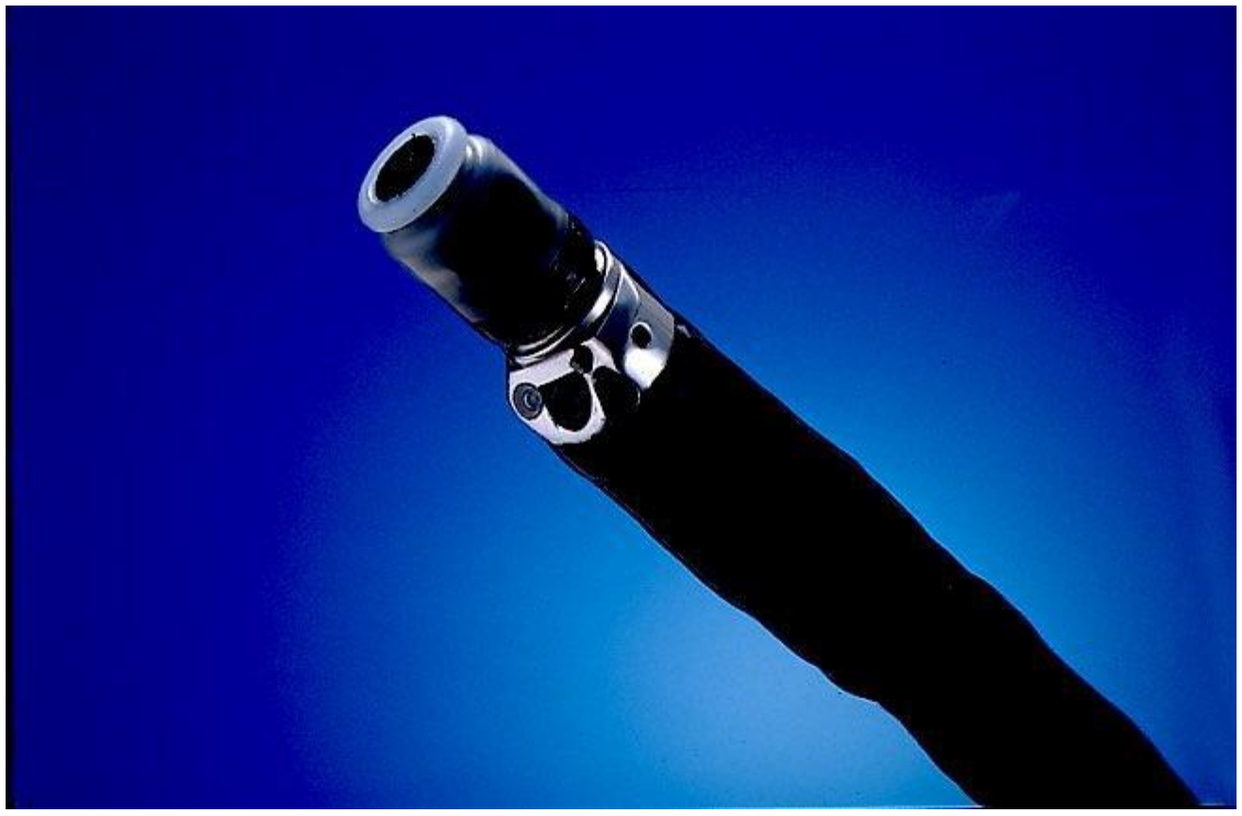
1. **stomaco**: pareti, lesioni sottomucose, lesioni focali

2. **linfonodi**: perigastrici, peripancreatici, celiaci, mesenterici,

3. **pancreas**: parte ant di testa; corpo; coda

4. **VASI : arterie**: aorta add., tripode, mesenterica, ecc **vene**: porta, cava, splenica, mesenterica

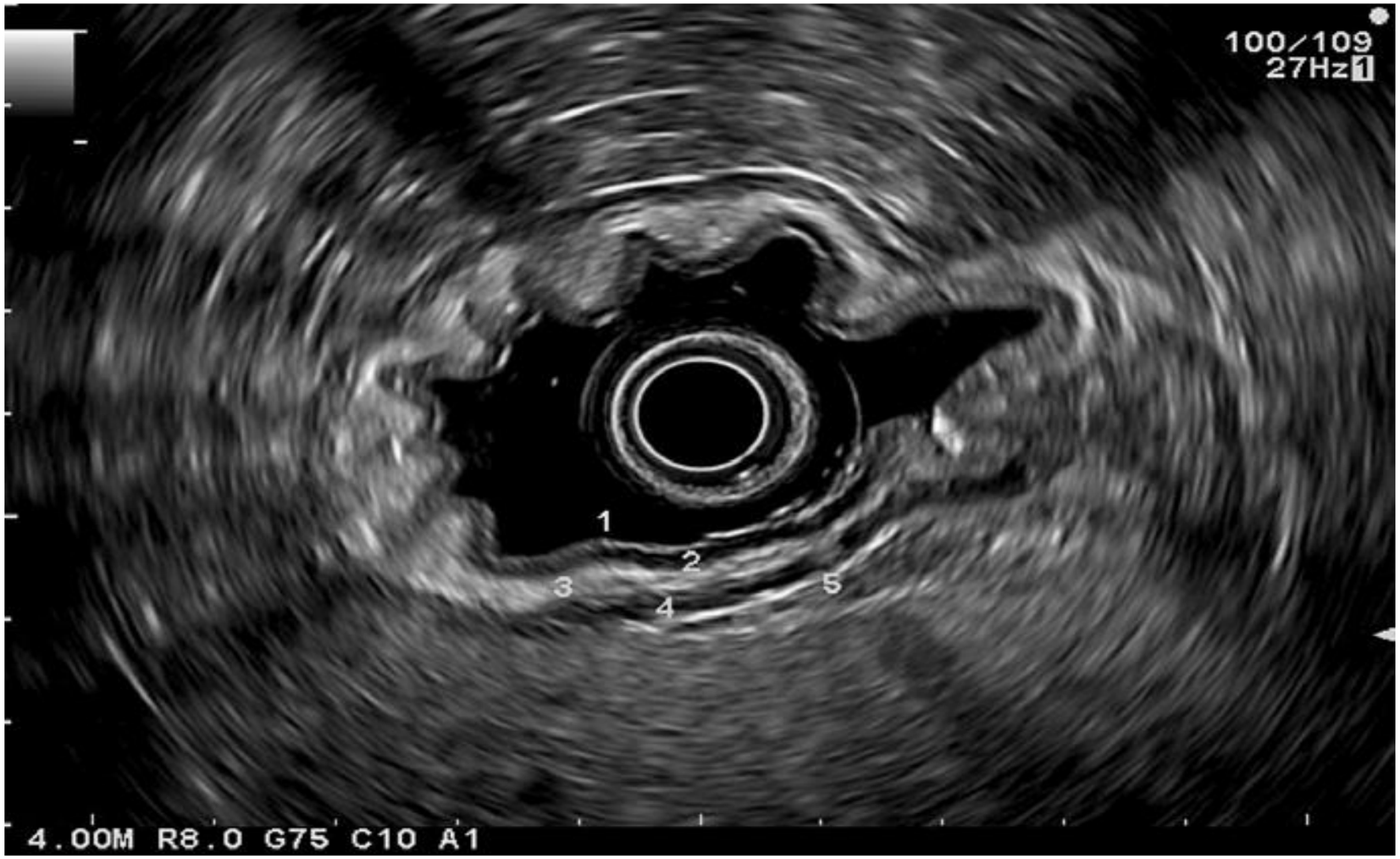
5. **Organi adiacenti**: surrene, rene, milza, fegato, colecisti…..







1. **Lo stomaco…**

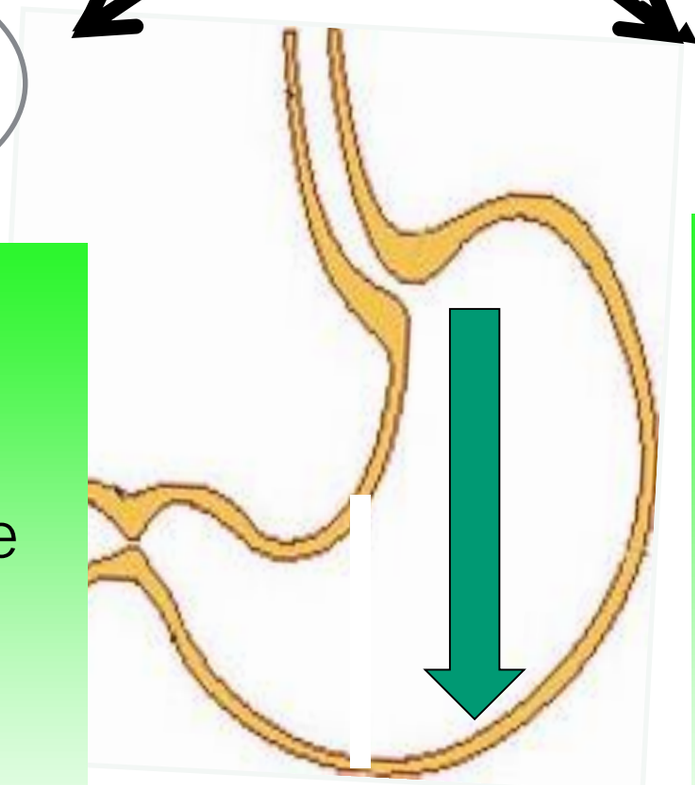


Posizionamento in antro

Gonfiare il pallone

Introdurre acqua

eliminare l'aria
far collabire le pareti
pallone in centro al viscere
attenzione alla distanza focale
seguire le curve
pallone gonfio:
attenzione:
Alla compressione di lesioni focali o compressione sulla parete



perpendicolare
alla parete gastrica

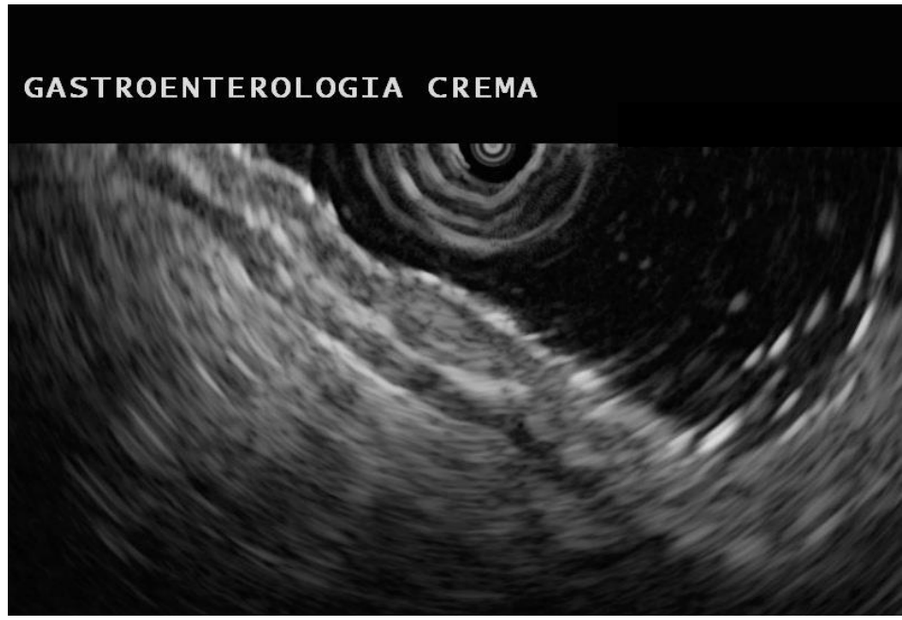
sostituire l'aria con l'acqua
sonda al centro al viscere
attenzione alla distanza focale
mirror effect!!!

attenzione:
Pericolo: ab ingestis/nausea

retrazione lenta dello strumento
"Tecnica in retrazione "



fuoco



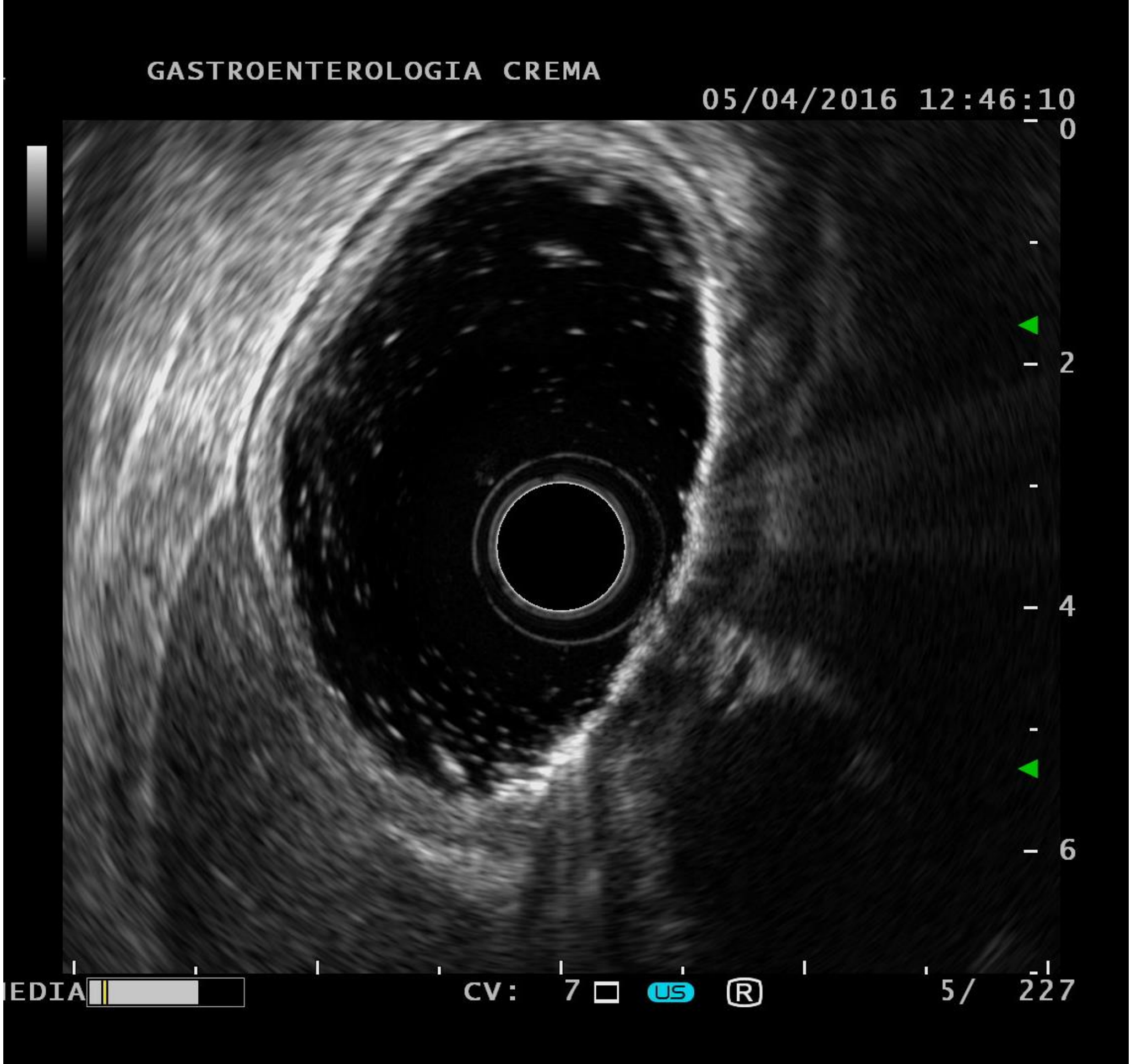
distanza

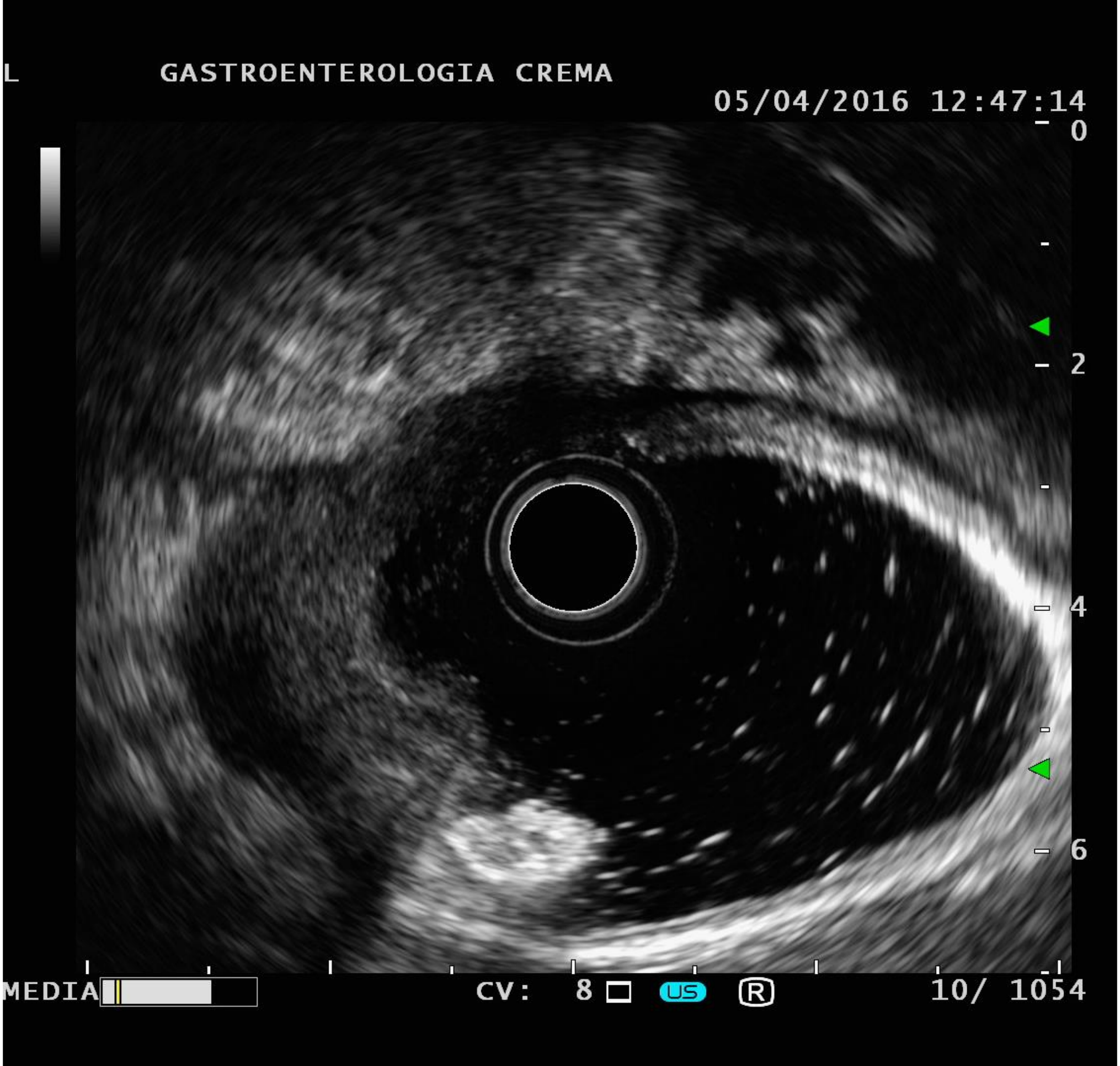


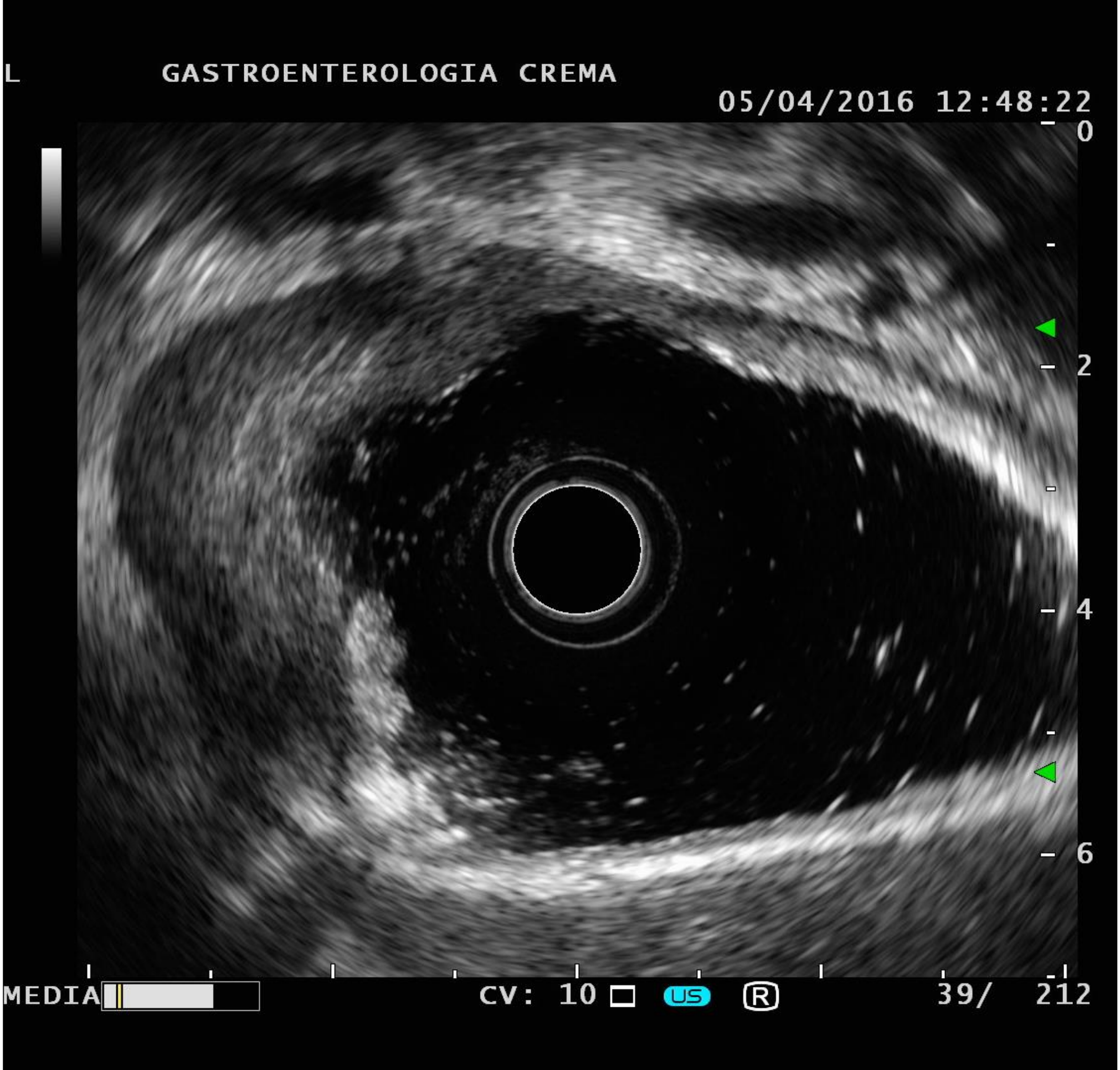
By Courtesy

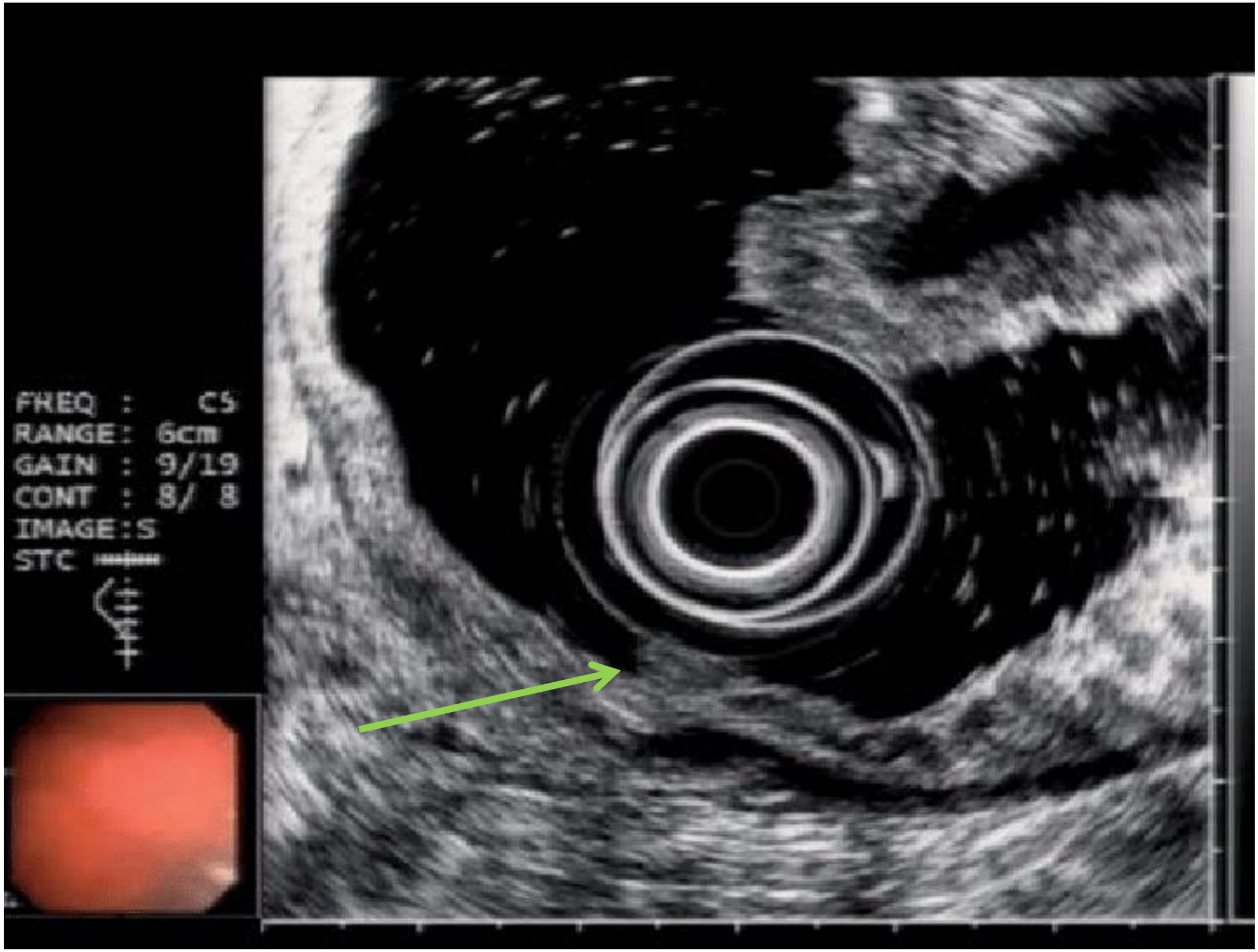
GASTROENTEROLOGIA CREMA



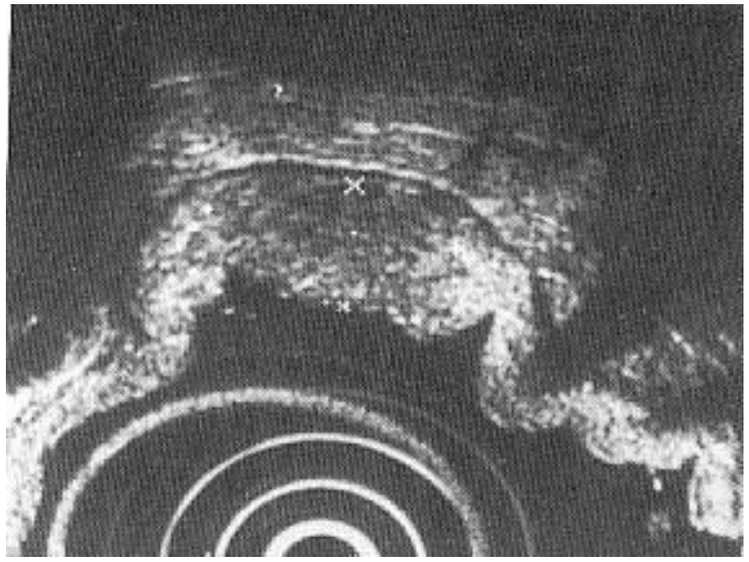

GASTROENTEROLOGIA CREMA
05/04/2016 12:46:10
0
2
4
6
EDIA
CV: 7
US
R
5/ 227


L
GASTROENTEROLOGIA CREMA
05/04/2016 12:47:14
0
2
4
6
MEDIA
CV: 8
US
R
10/ 1054

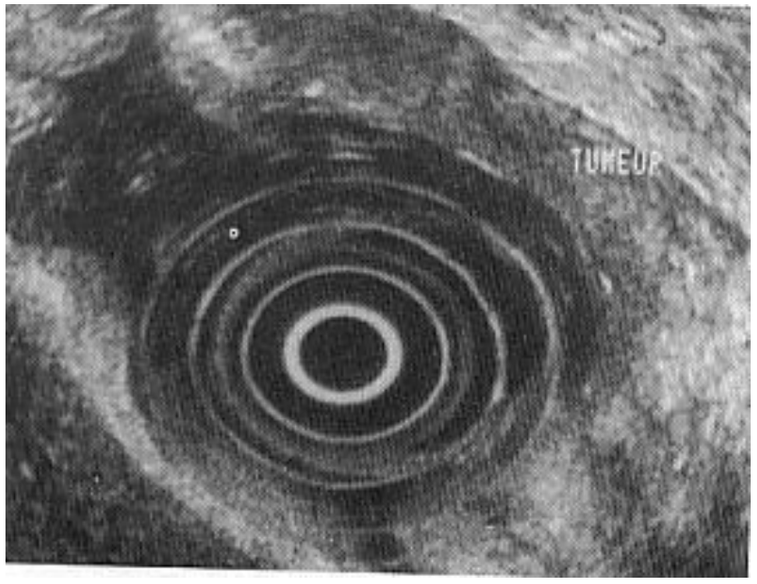

L
GASTROENTEROLOGIA CREMA
05/04/2016 12:48:22
0
2
4
6
MEDIA
CV: 10
US
R
39/ 212


FREQ : C5
RANGE : 6cm
GAIN : 9/19
CONT : 8/ 8
IMAGE:S
STC

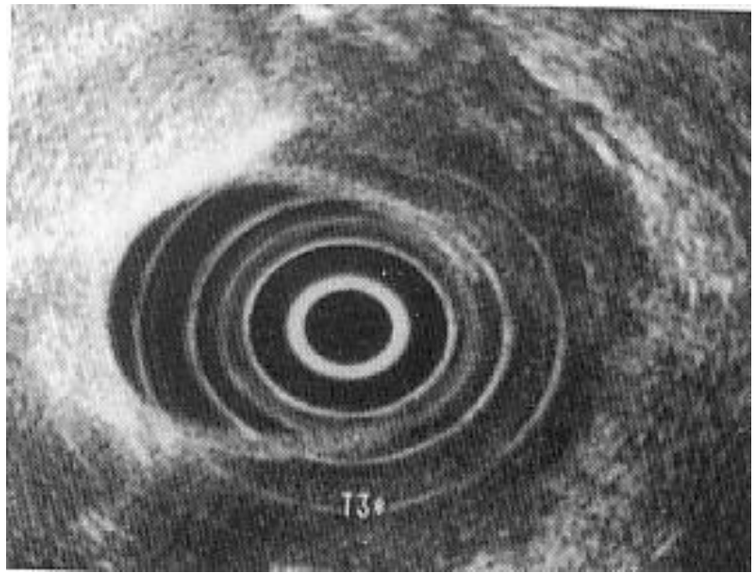
EUS : GASTRIC CANCER



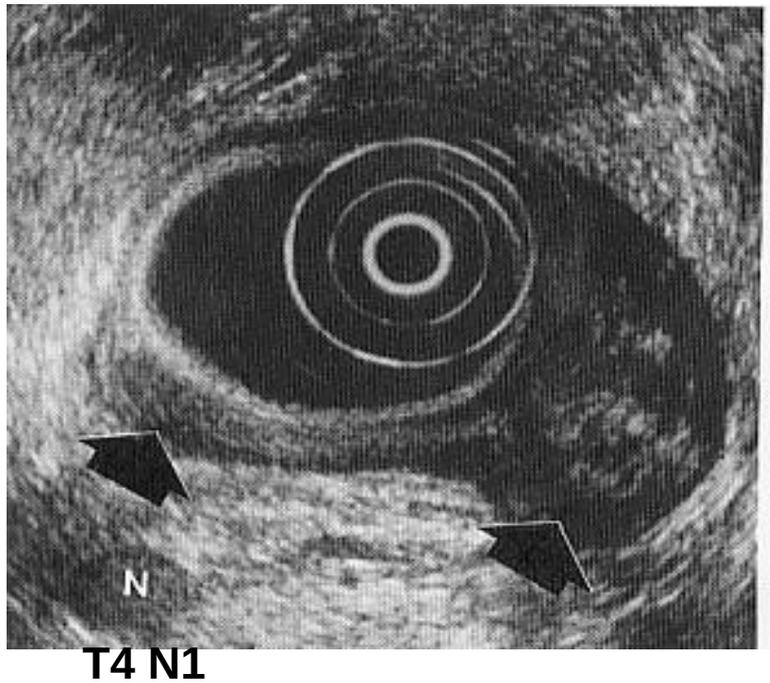
EGC T1



T2



T3



T4 N1

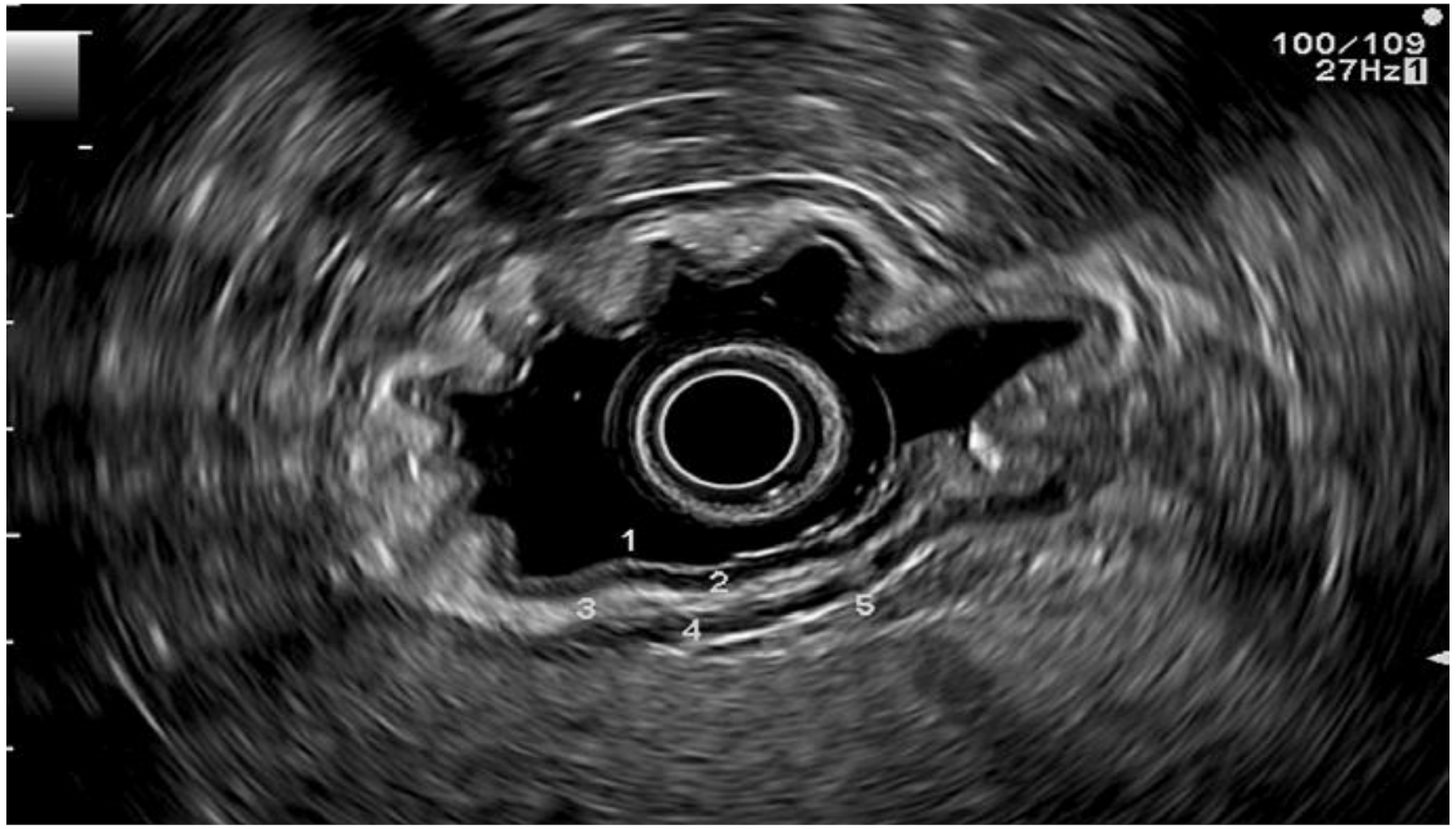
uTNM CLASSIFICATION

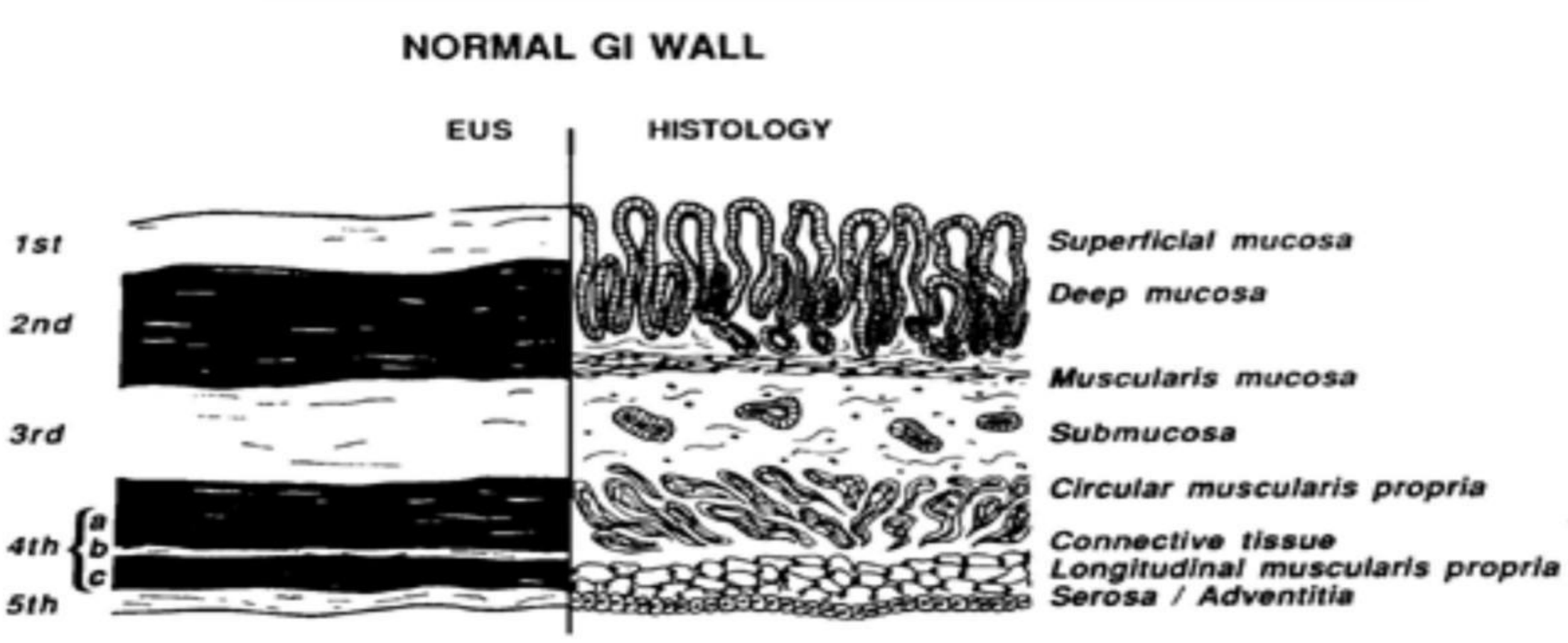
Nella diagnostica del CA gastrico l'EUS viene proposta per:

- differenziare le forme di EGC da quelle avanzate
- Stadiazione preoperatoria
- Ristadiazione dopo chemioterapia neoadiuvante

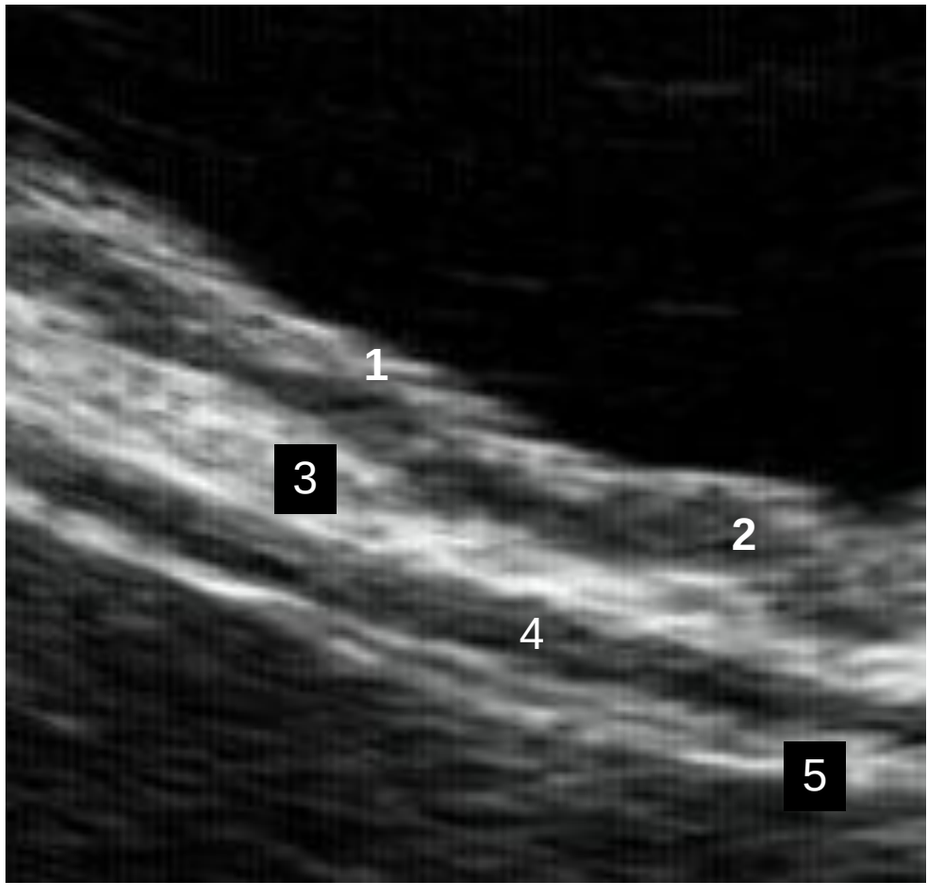
Linee Guida AIOM 2019

GLI STRATI DI PARETE





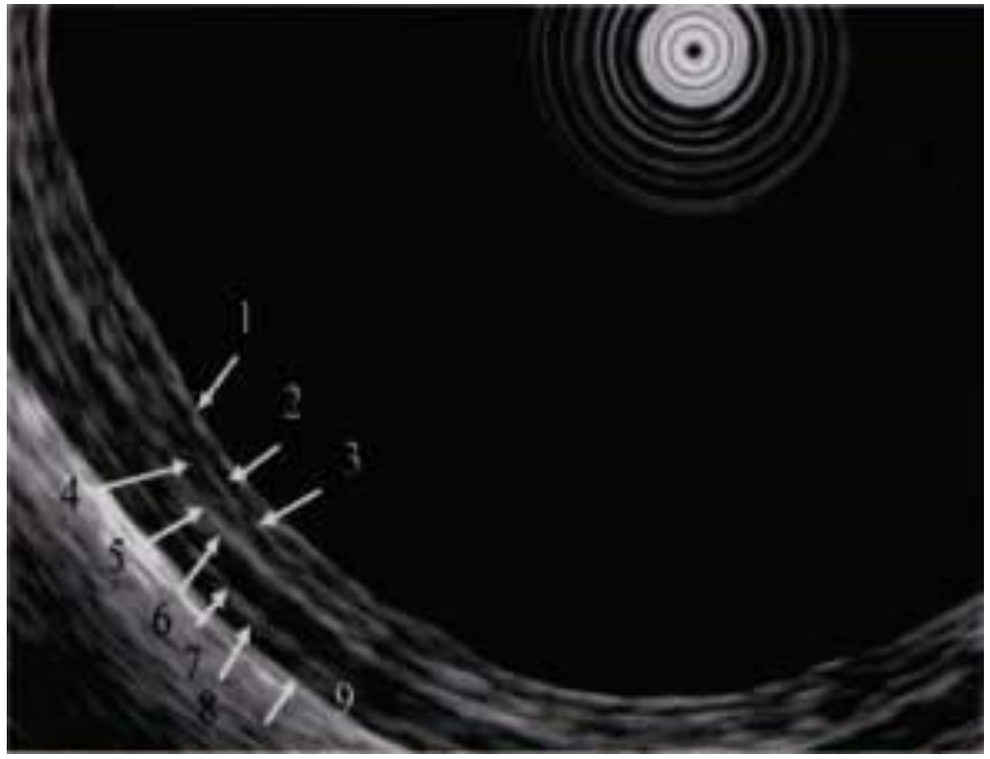
EUS bassa frequenza e parete gastrica (6-12-MHz)





1°strato: iperecogeno interfaccia pallone-mucosa
2°strato: ipoecogeno “muscolaris mucosae”
3°strato: iperecogeno sottomucosa
4°strato: ipoecogeno muscularis propria
5°strato: iperecogeno sierosa

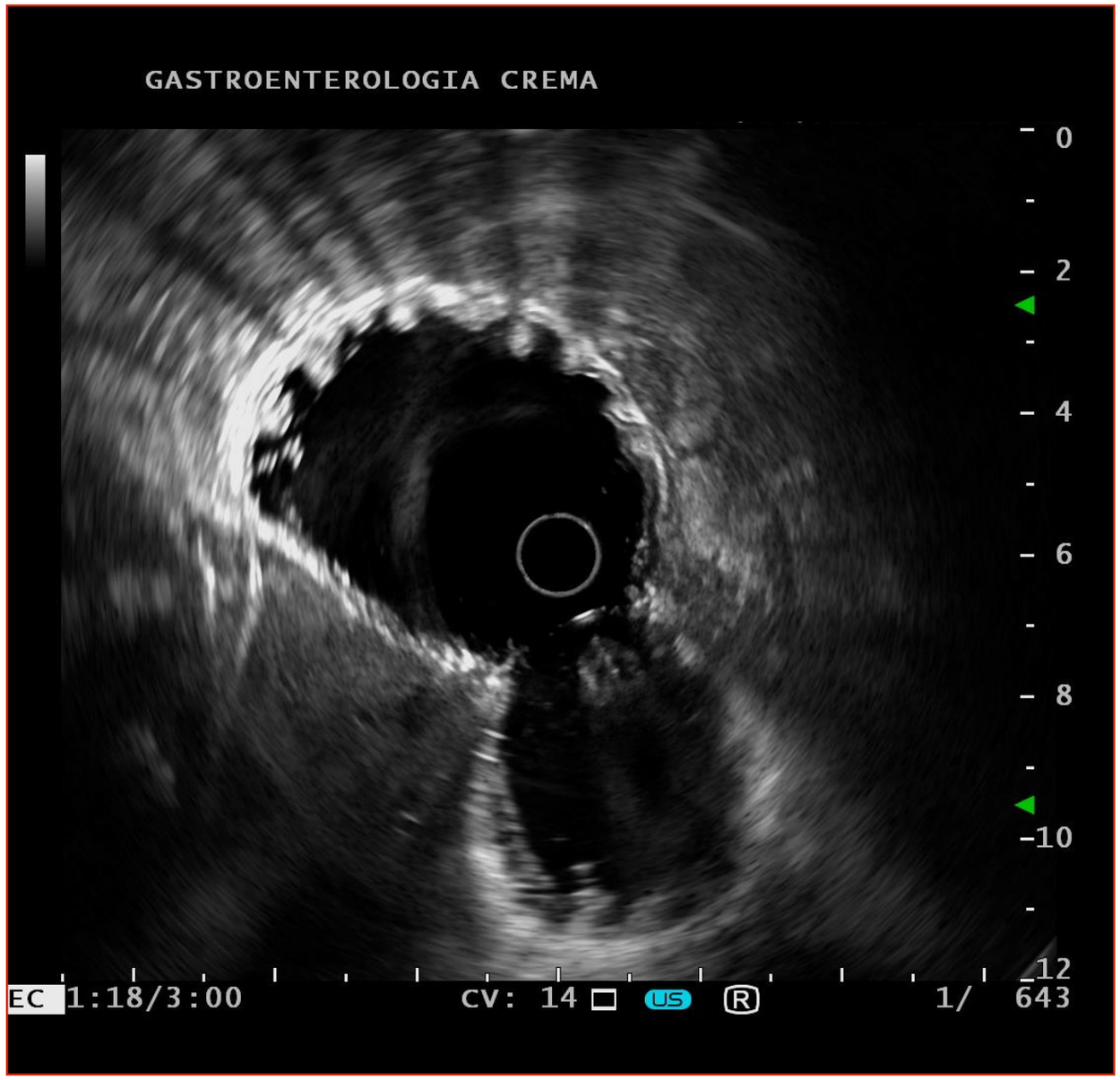
EUS alta frequenza e parete gastrica – Minisonde (12-30 MHz)



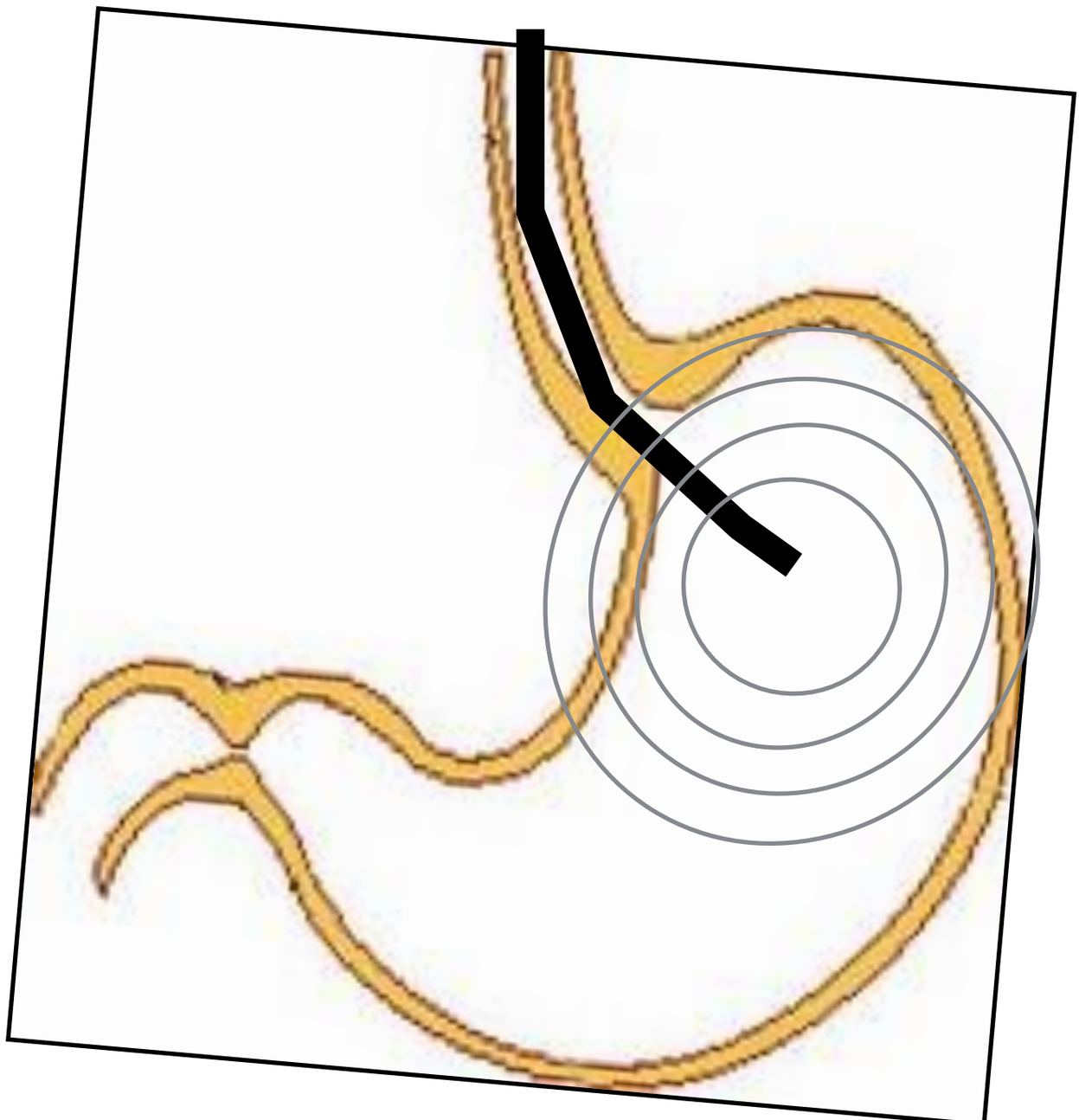




1° iper: interfaccia tra lume e mucosa+epitelio superficiale
2° ipo: epitelio profondo
3° iper: lamina propria
4° ipo: muscolaris mucosae
5° iper: sottomucosa
6° ipo: tonaca muscolare circolare interna
7° iper: sottile banda ecogena
8° ipo: tonaca muscolare longitudinale esterna
9° iper: avventizia/sierosa



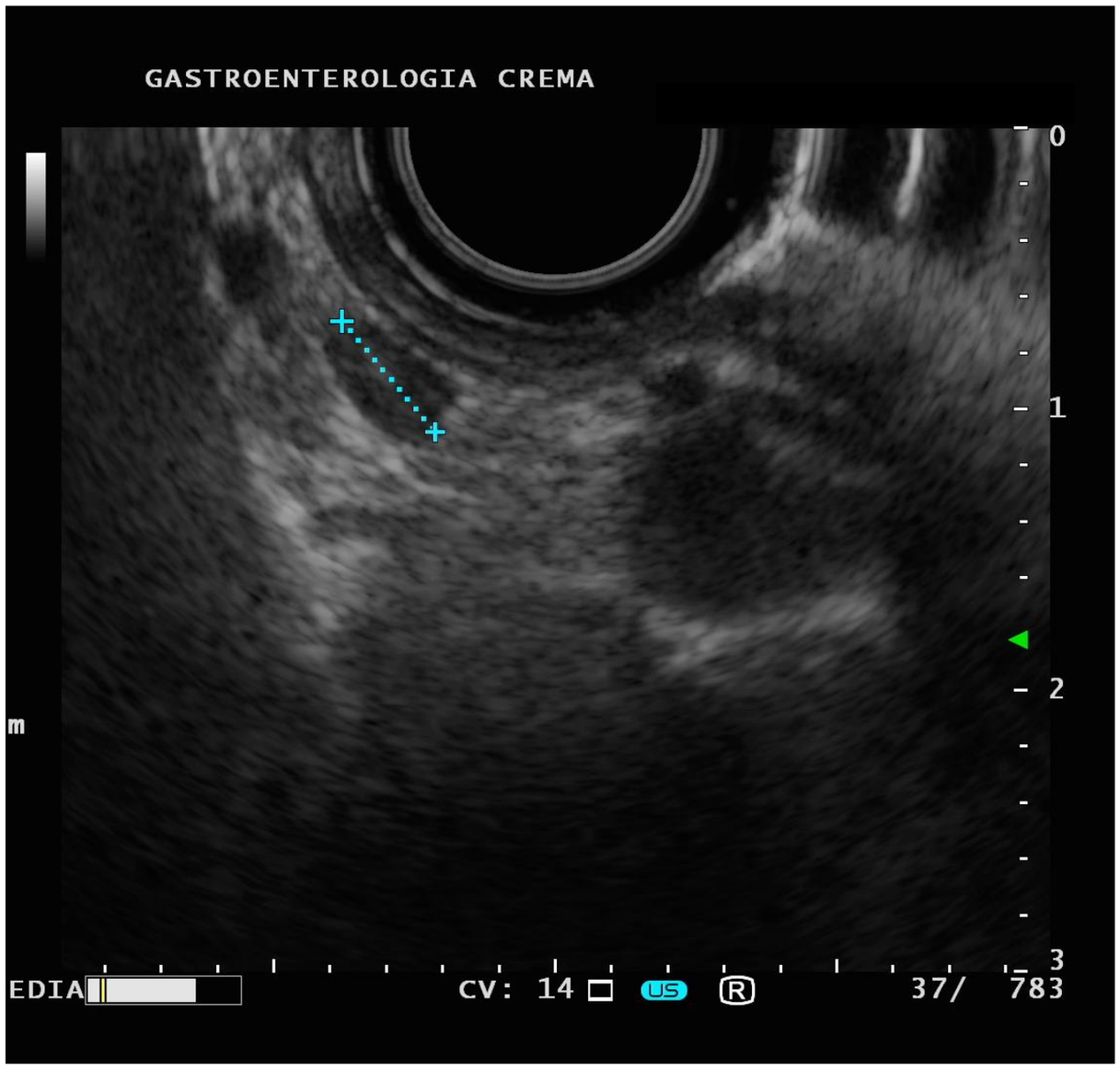
Più difficile ….



Fondo gastrico

artefatti a specchio
mancato riempimento
non retroversione
cardias

2. Linfonodi e TNM……



Linfonodi:

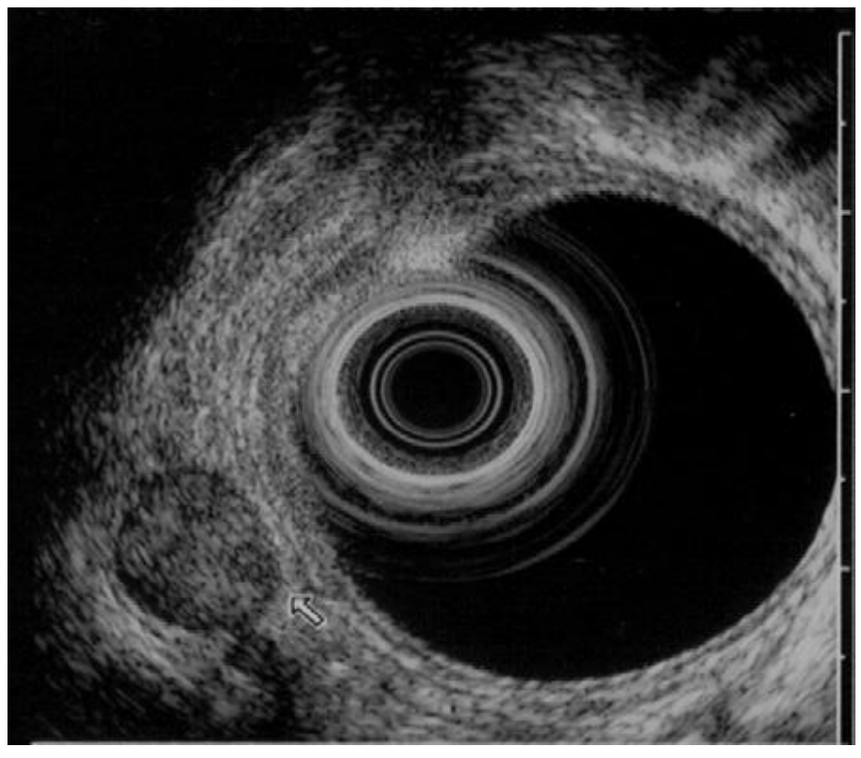
II DUODENO: retropancreatici e interaortocavali

BULBO: preportali (stazione epatica)

STOMACO: gastrica di sinistra, celiaci, pericardiali , peripancreatici, perivisceralI in genere.

***valutazione sistematica*:**

Antro Corpo Fondo



Reperi :

Parete Anteriore : fegato

Parete Posteriore : pancreas

Grande Curva: milza

Piccola Curva: giunzione tra parete anteriore e posteriore

N0 No regional lymph node metastases

N1 Metastases in 1-2 regional lymph nodes

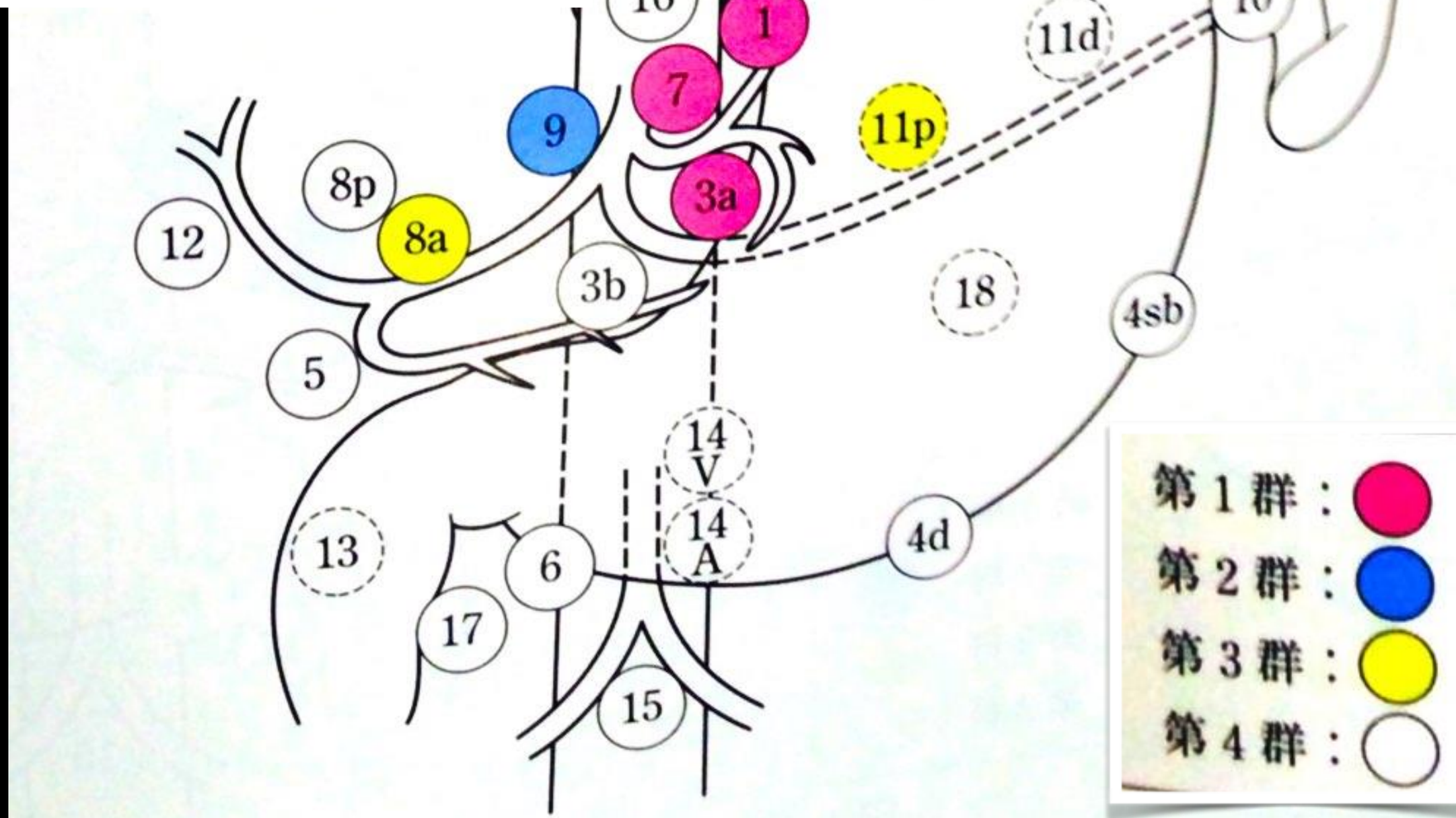
N2 Metastases in 3-6 regional lymph nodes

N3a Metastases in 7-15 regional lymph nodes

N3b Metastasis in 16 or more regional lymph nodes

[redacted]

[redacted]



LNH

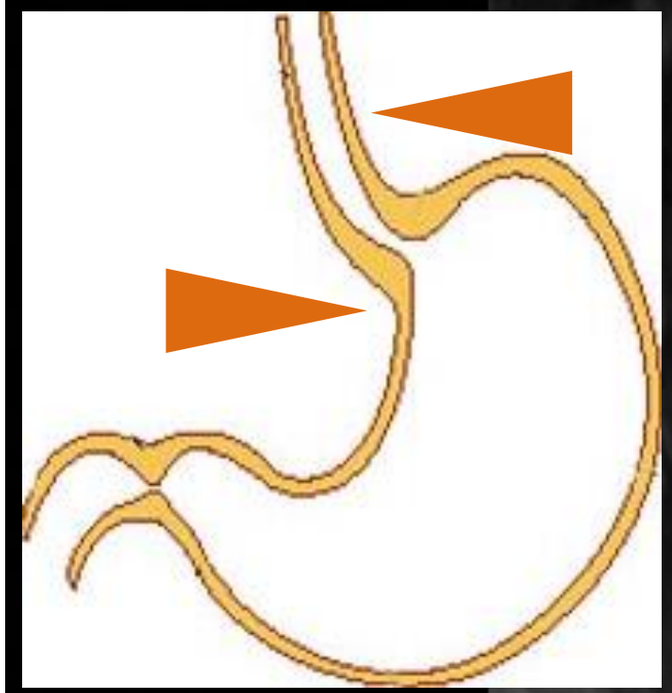
GASTROENTEROLOGIA CREMA

26/04/2016 09:39:58

TX :100%
MI :<0.4
TIS:<0.4

10MHz

G :11
C : 4

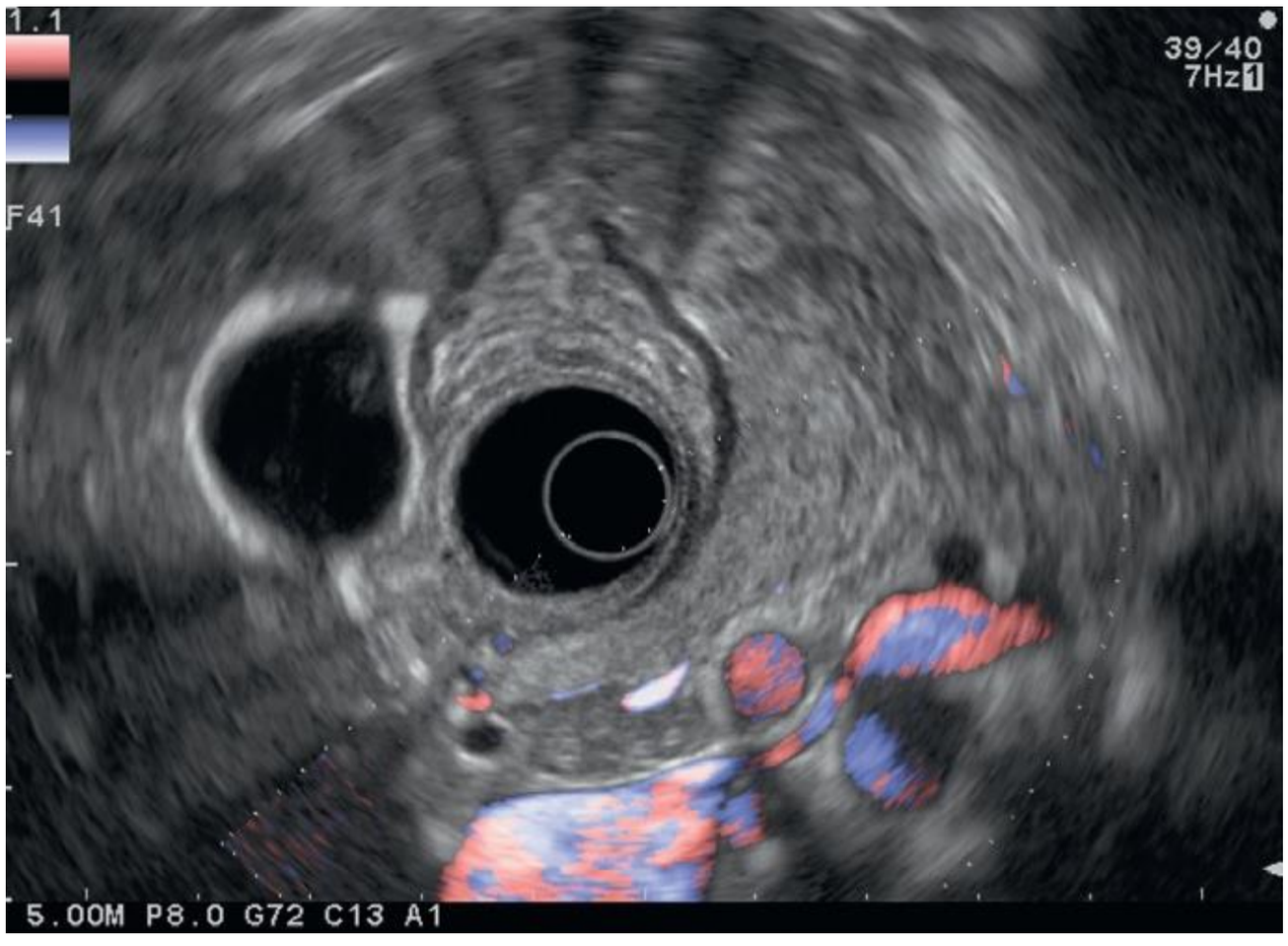


0
1
2
3
4
5

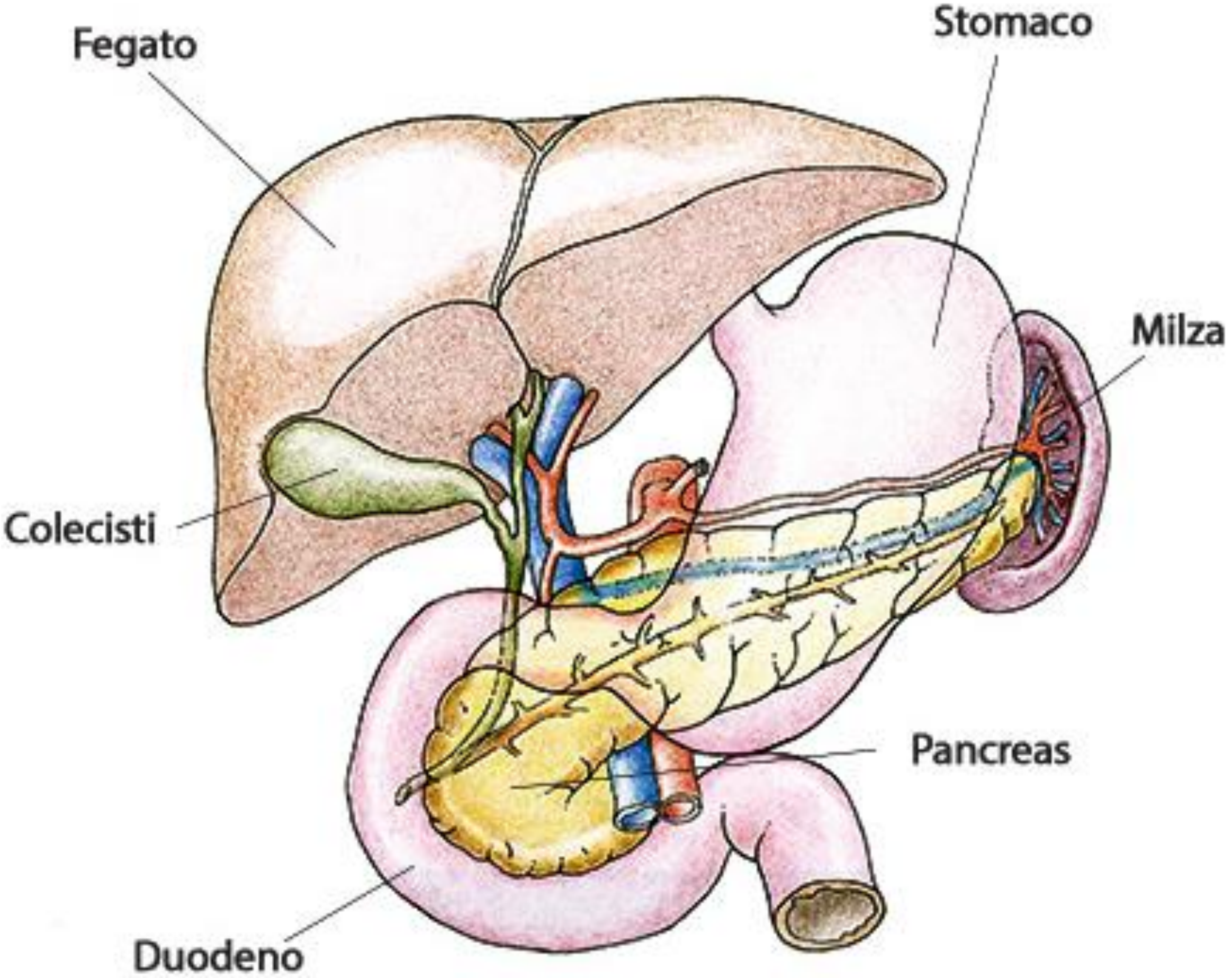
PB 5cm MEDIA

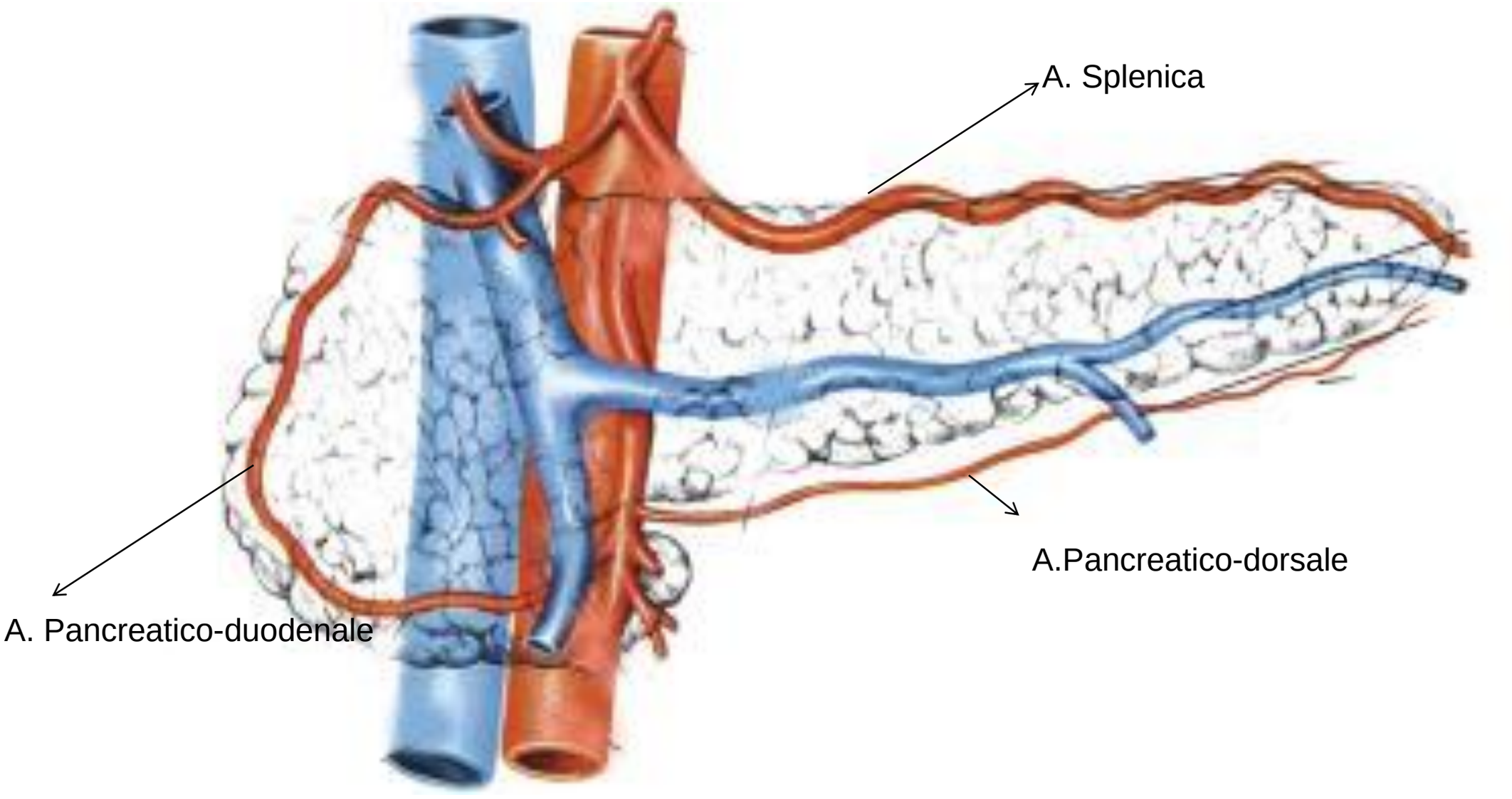
CV: 10 US R

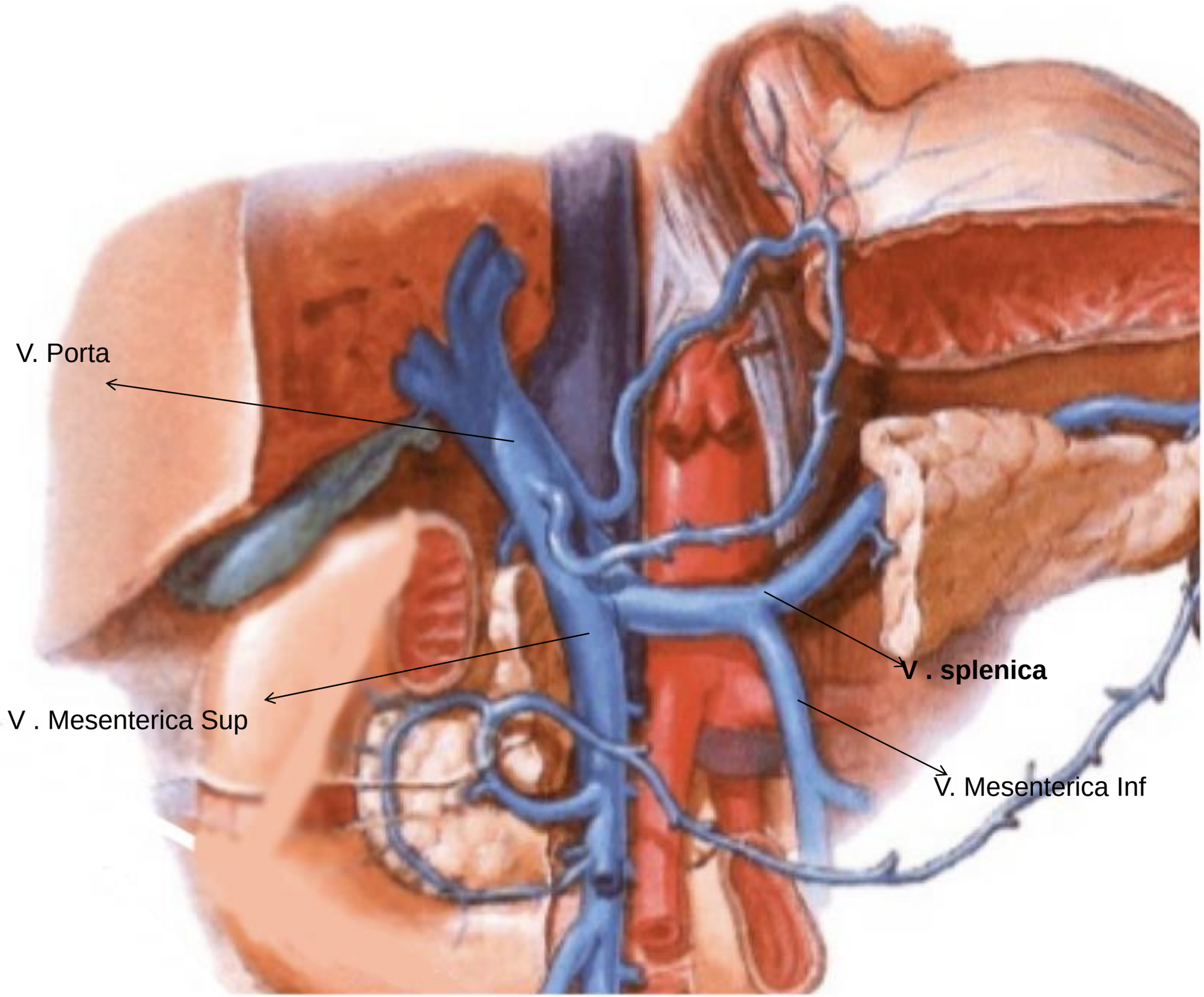
3. 4 . Il pancreas e vasi

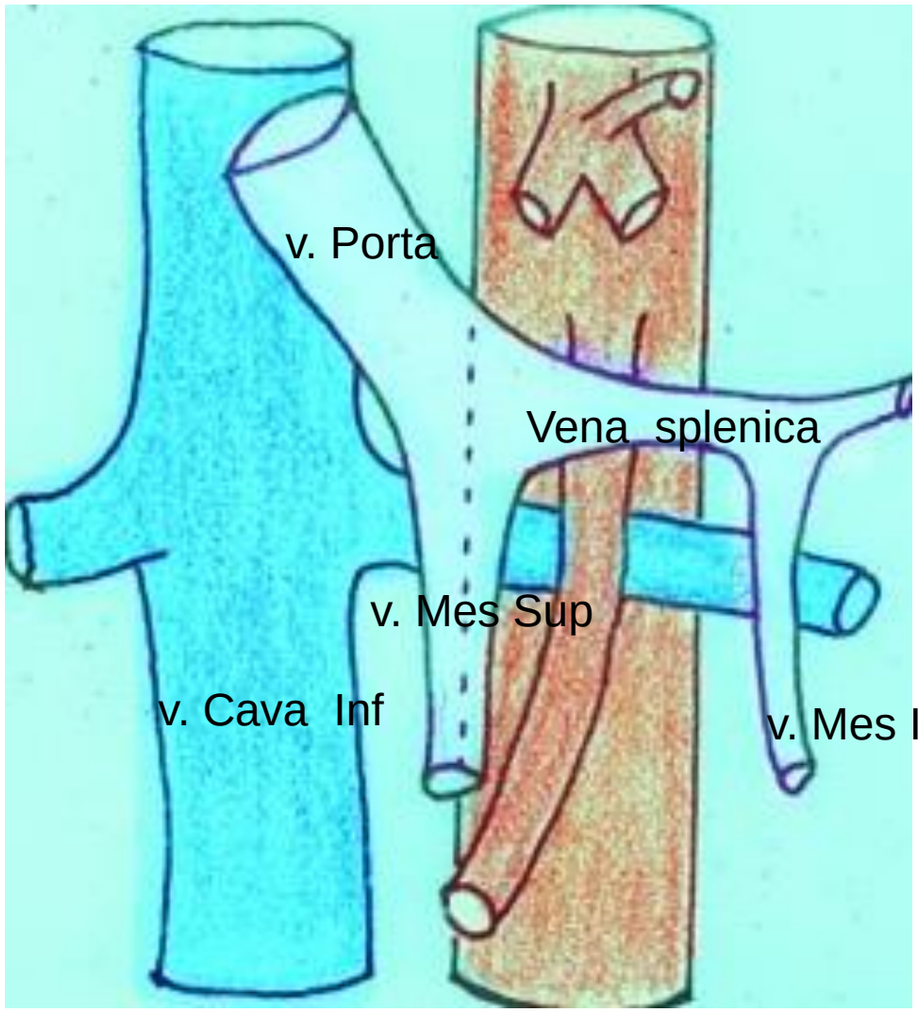


By Courtesy L. Palazzo

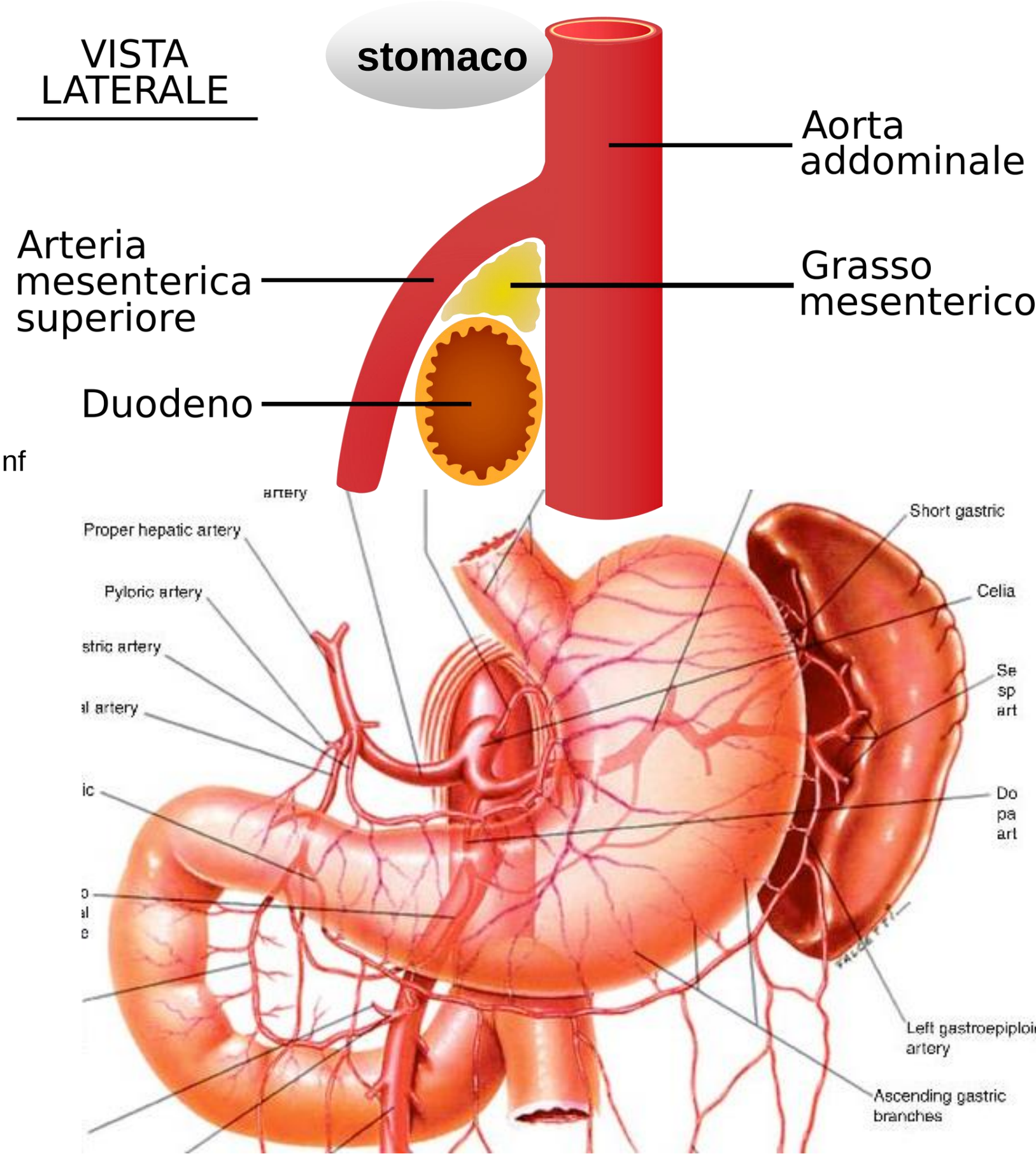

Fegato
Stomaco
Milza
Colecisti
Pancreas
Duodeno


A. Splenica
A. Pancreatico-duodenale
A.Pancreatico-dorsale


V. Porta
V . Mesenterica Sup
V . splenica
V. Mesenterica Inf



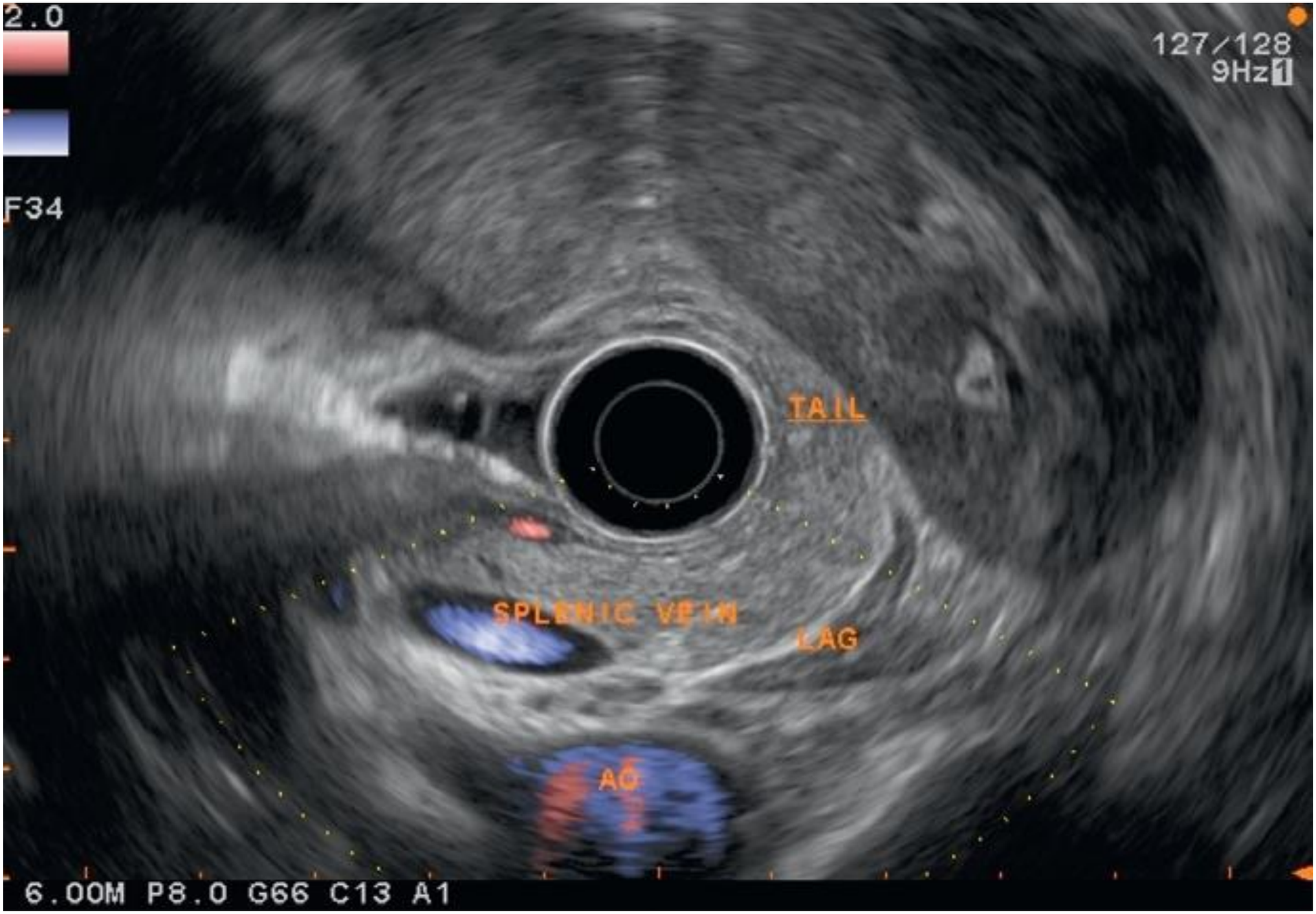
VISTA LATERALE



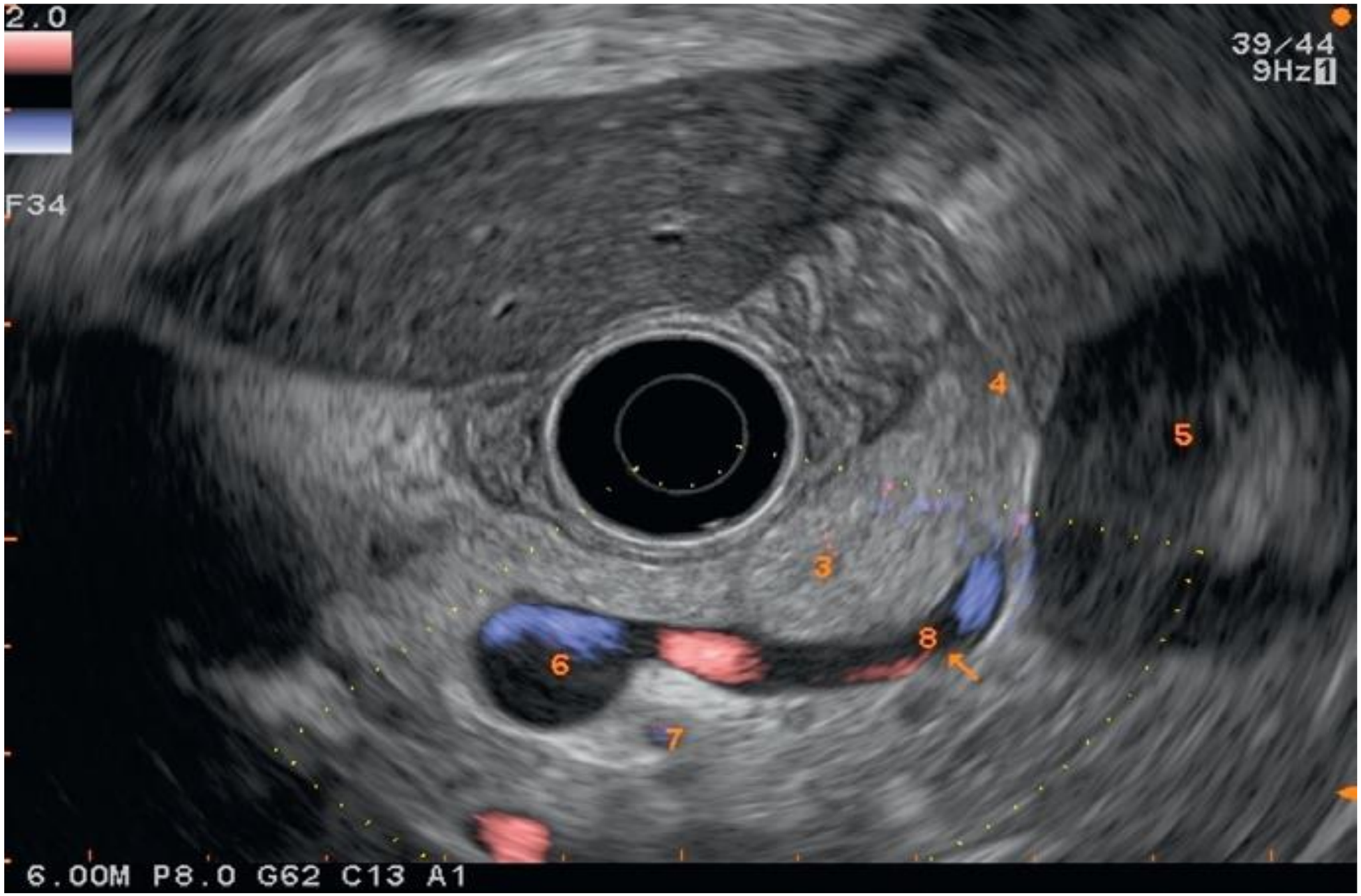


In retrazione dal bulbo- piloro

(A) Neutral position for the examination of the body and the tail of the pancreas. (B) Conf, portal vein confluence; SMA, superior mesenteric artery; W, Wirsung duct.

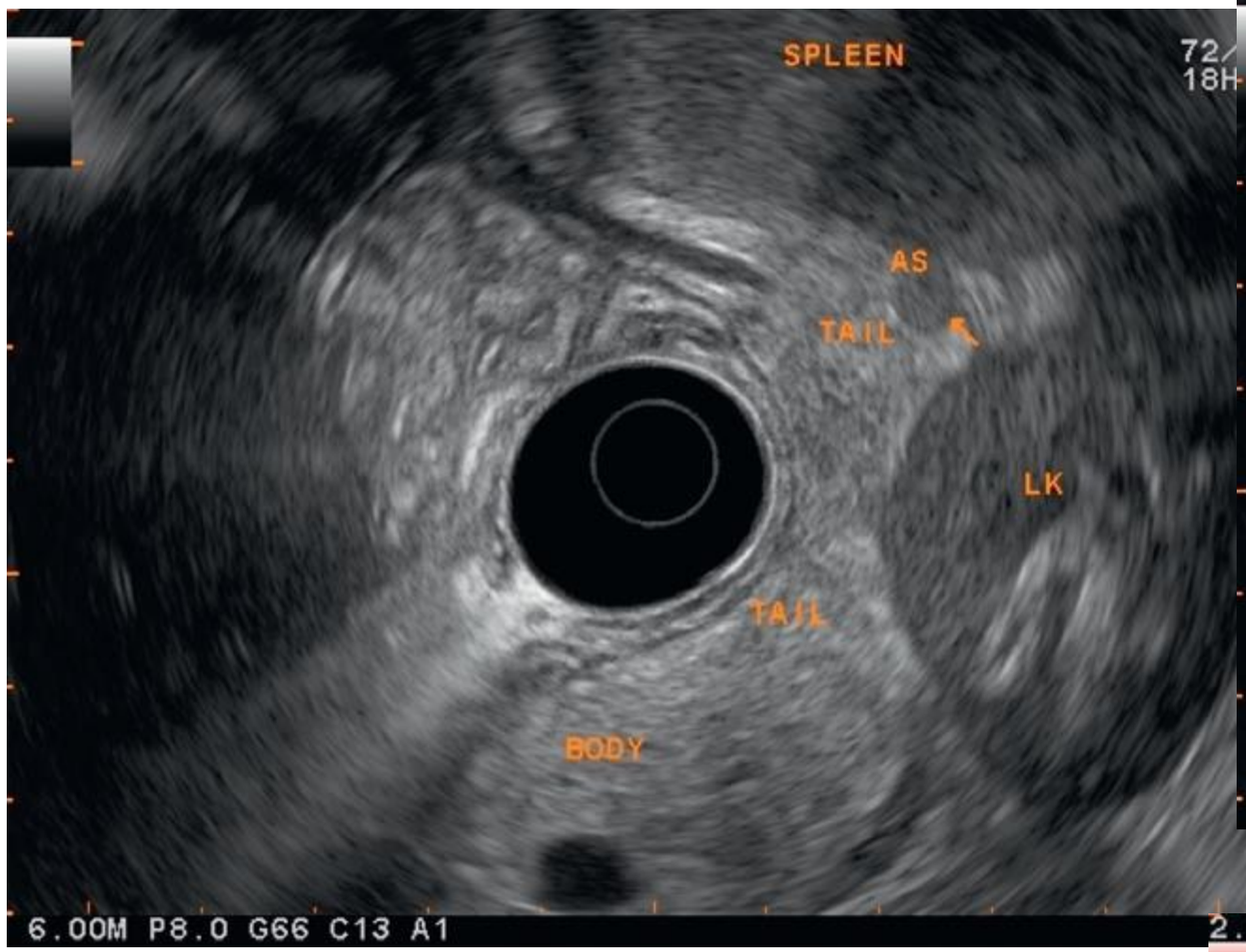


AO, aorta; LAG, left adrenal gland.

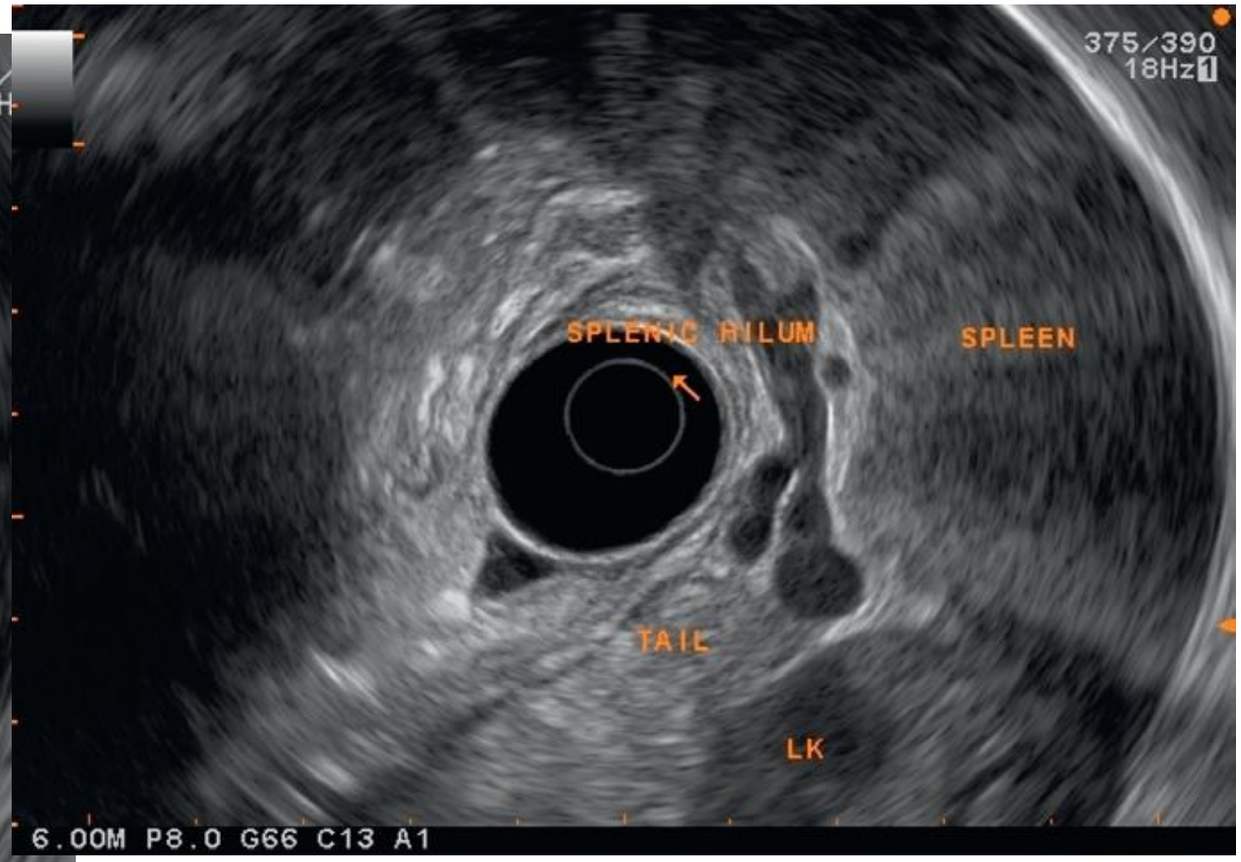


Dalla piccola Curva

(1) Left lobe of the liver, (2) neck of the pancreas, (3) body of the pancreas, (4) tail of the pancreas, (5) left kidney, (6) portal vein confluence, (7) SMA, (8) splenic vein

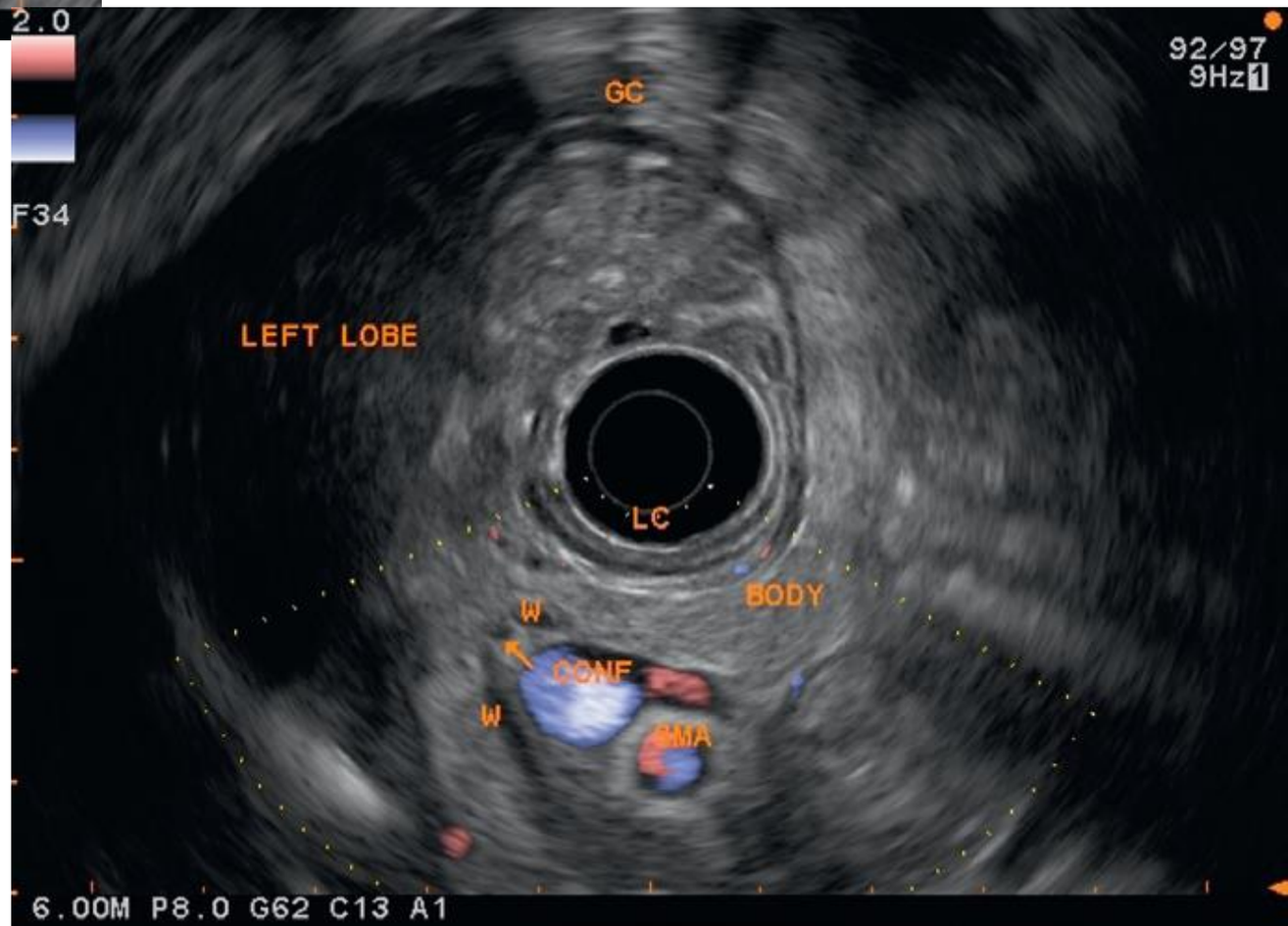


LK, left kidney; AS, accessory spleen.

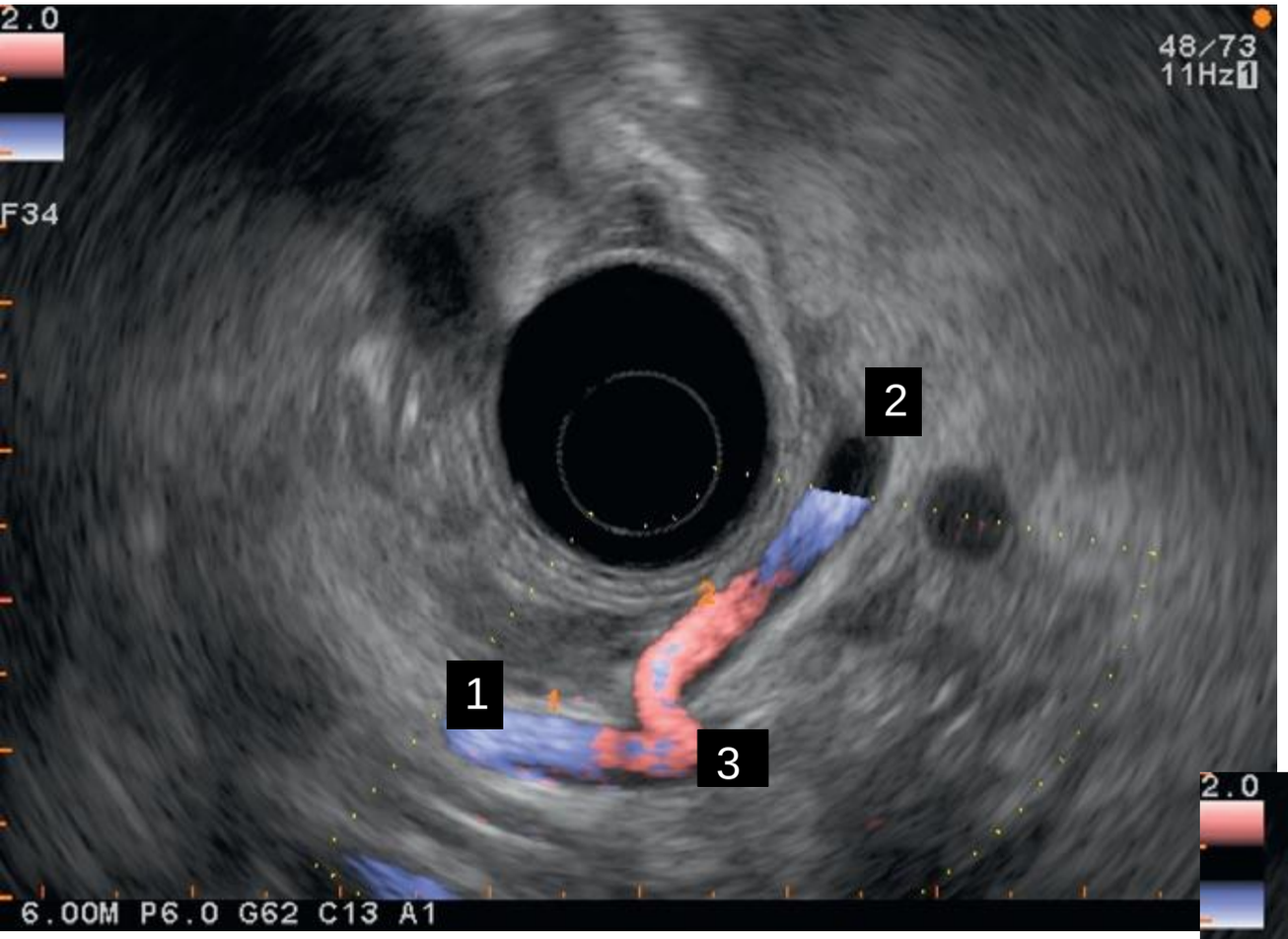


LK, left kidney.

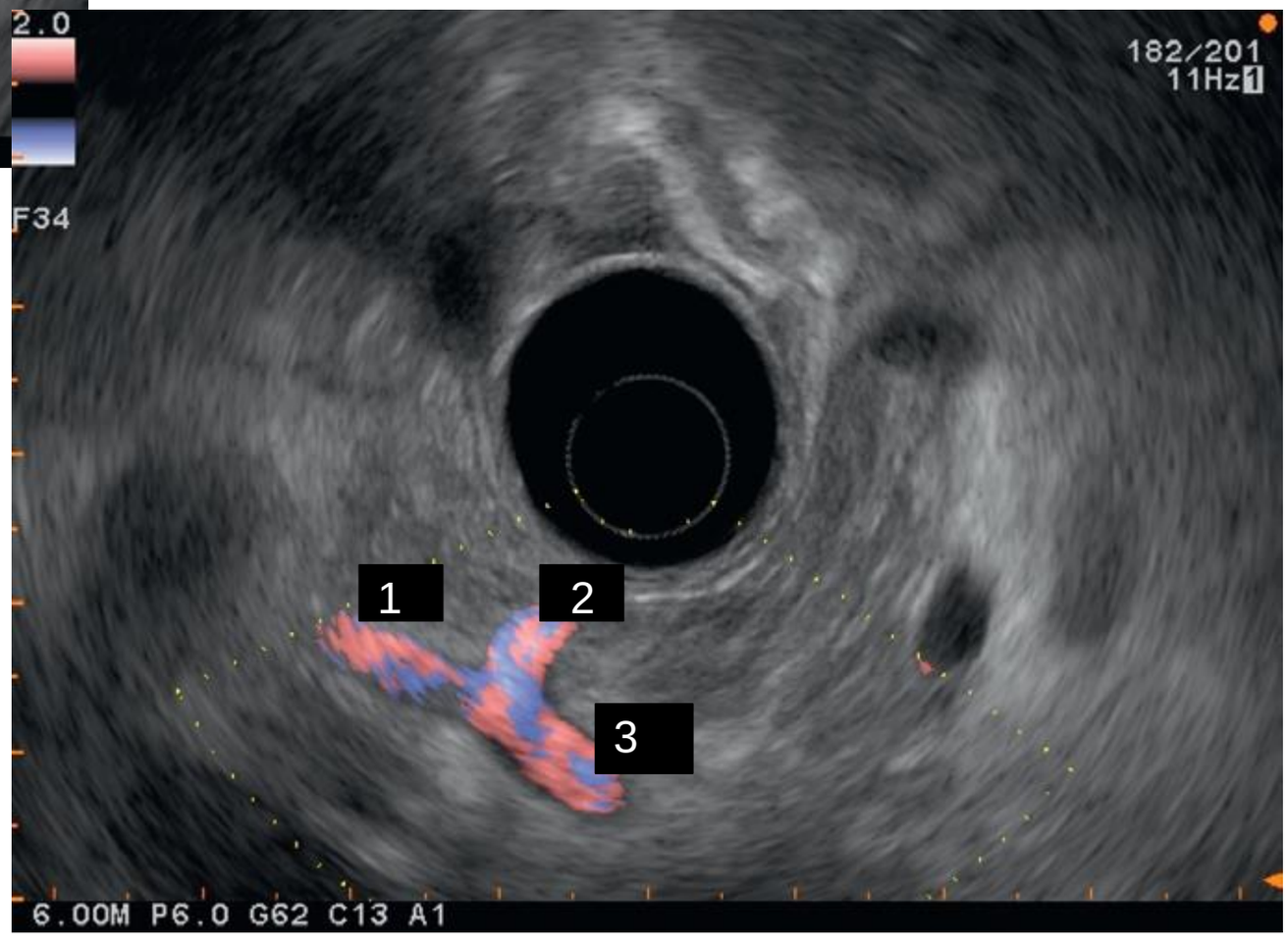
In rotazione verso sin dal corpo gastrico



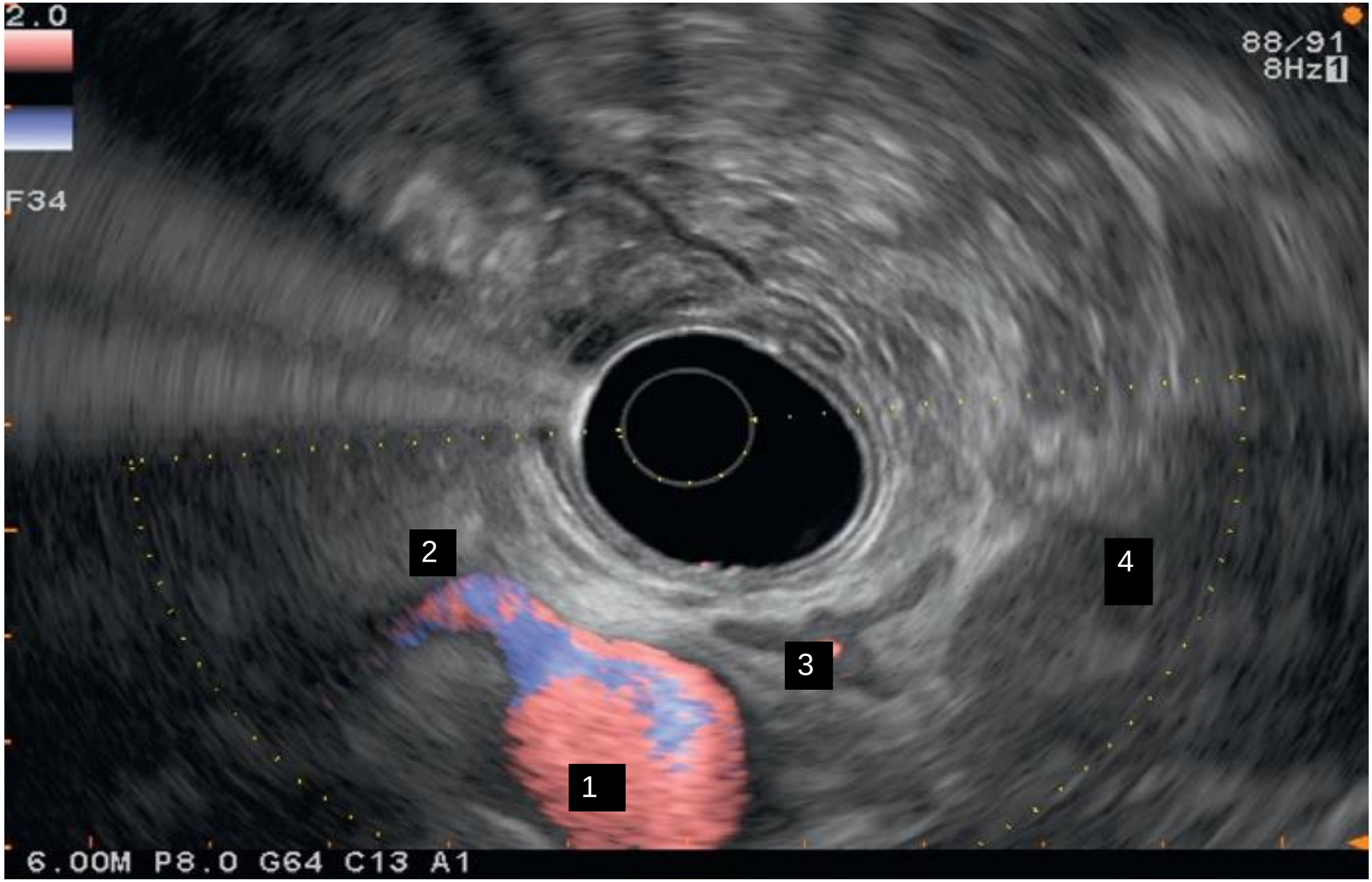
W, Wirsung duct; LC, lesser curve; GC, greater curvature; SMA, superior mesenteric artery; conf, portal vein confluence.



In retrazione , ritirando 1 cm dall'istmo : Regione Celiaca



(1) hepatic artery, (2) splenic artery, (3) celiac axis.



(1) celiac axis, (2) aorta, (3) left adrenal gland, (4) left kidney.

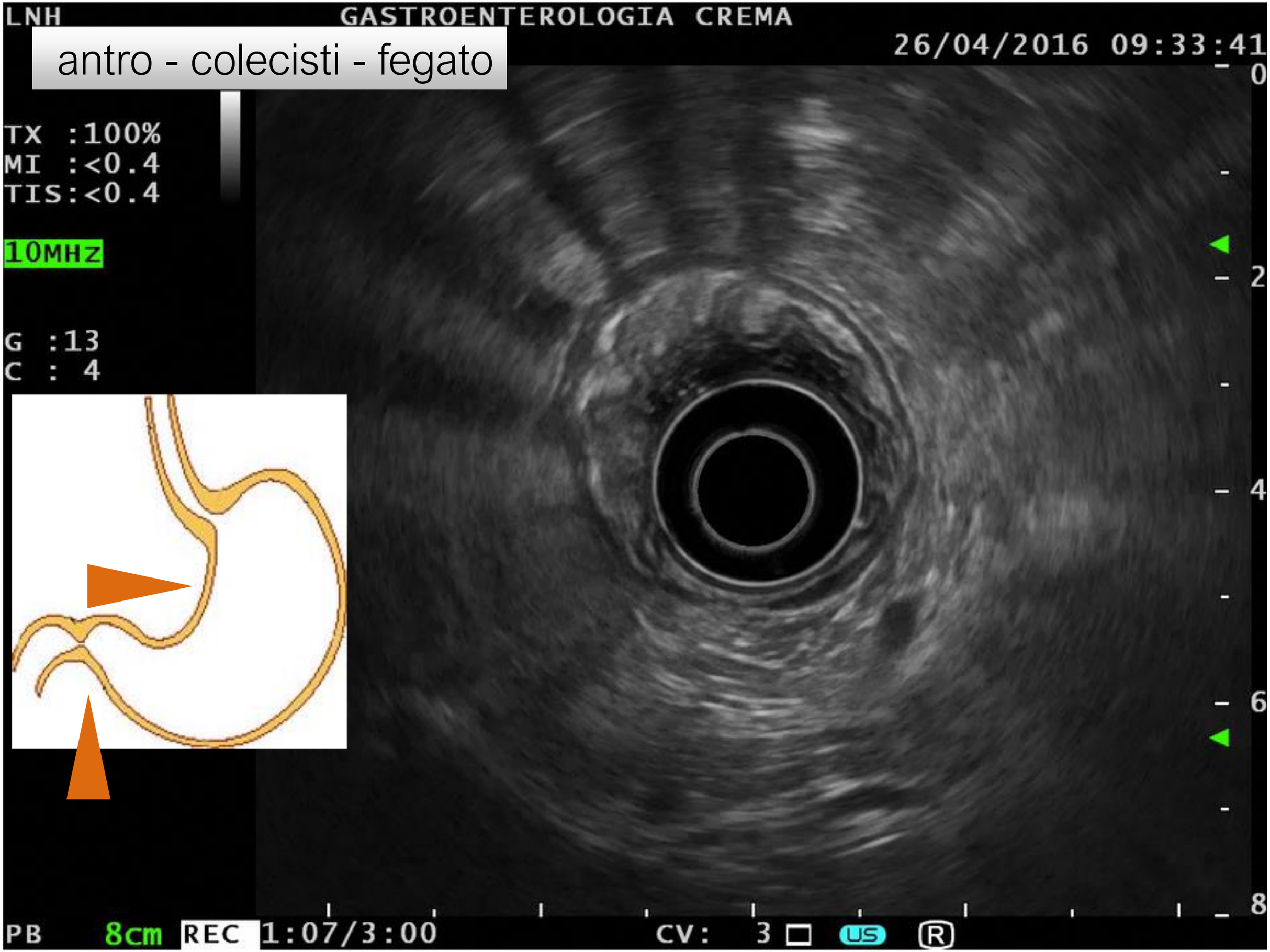
Regione Celiaca : dal cardias scendendo seguendo l’aorta lungo la grande curva

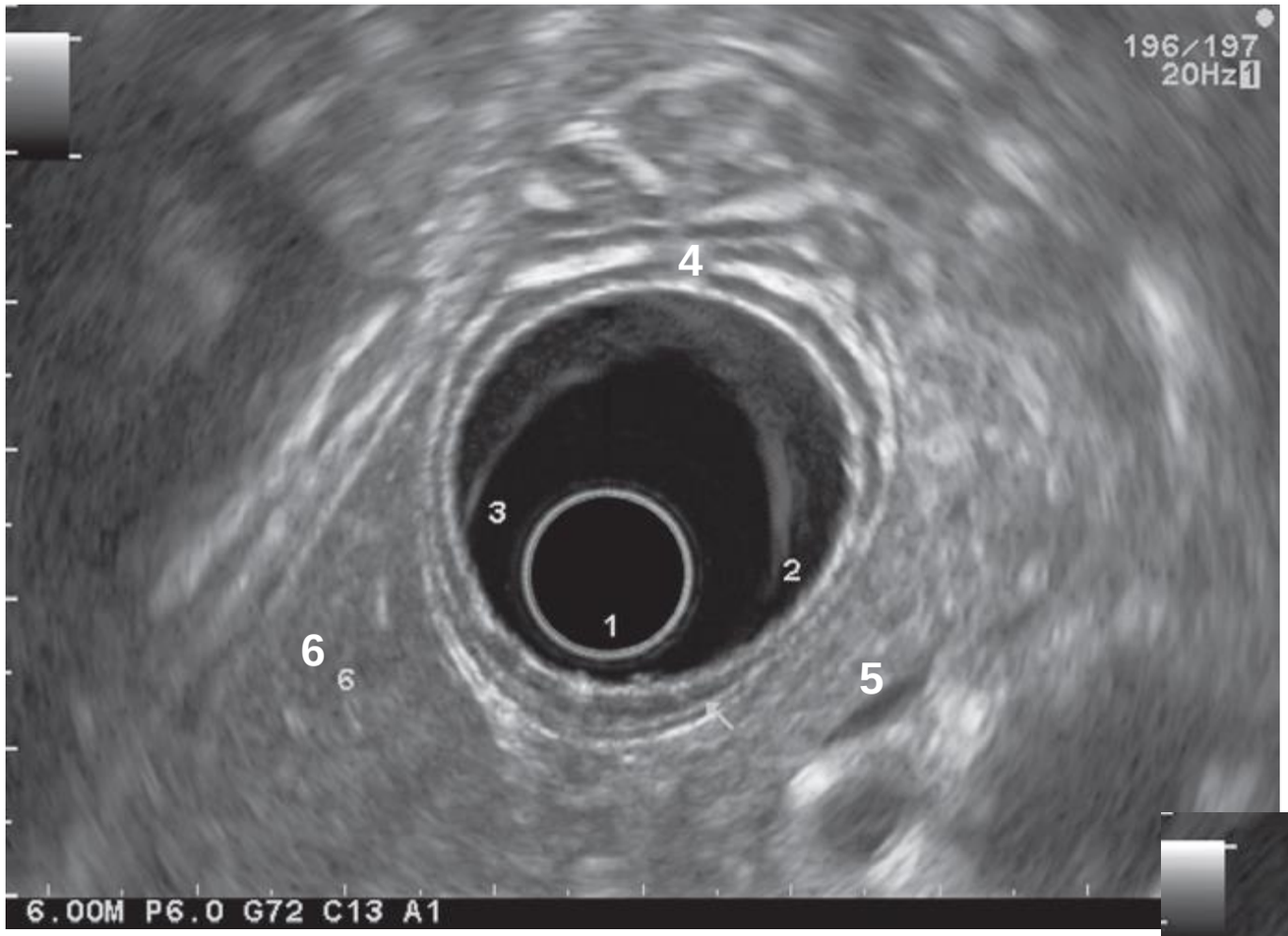
varie & eventuali




LNH
GASTROENTEROLOGIA CREMA
26/04/2016 09:30:44
TX :100%
MI :<0.4
TIS:<0.4
6MHz
G : 6
C : 7
piloro
0
2
4
6
PB
7cm
REC 0:23/3:00
CV: 1
US
R

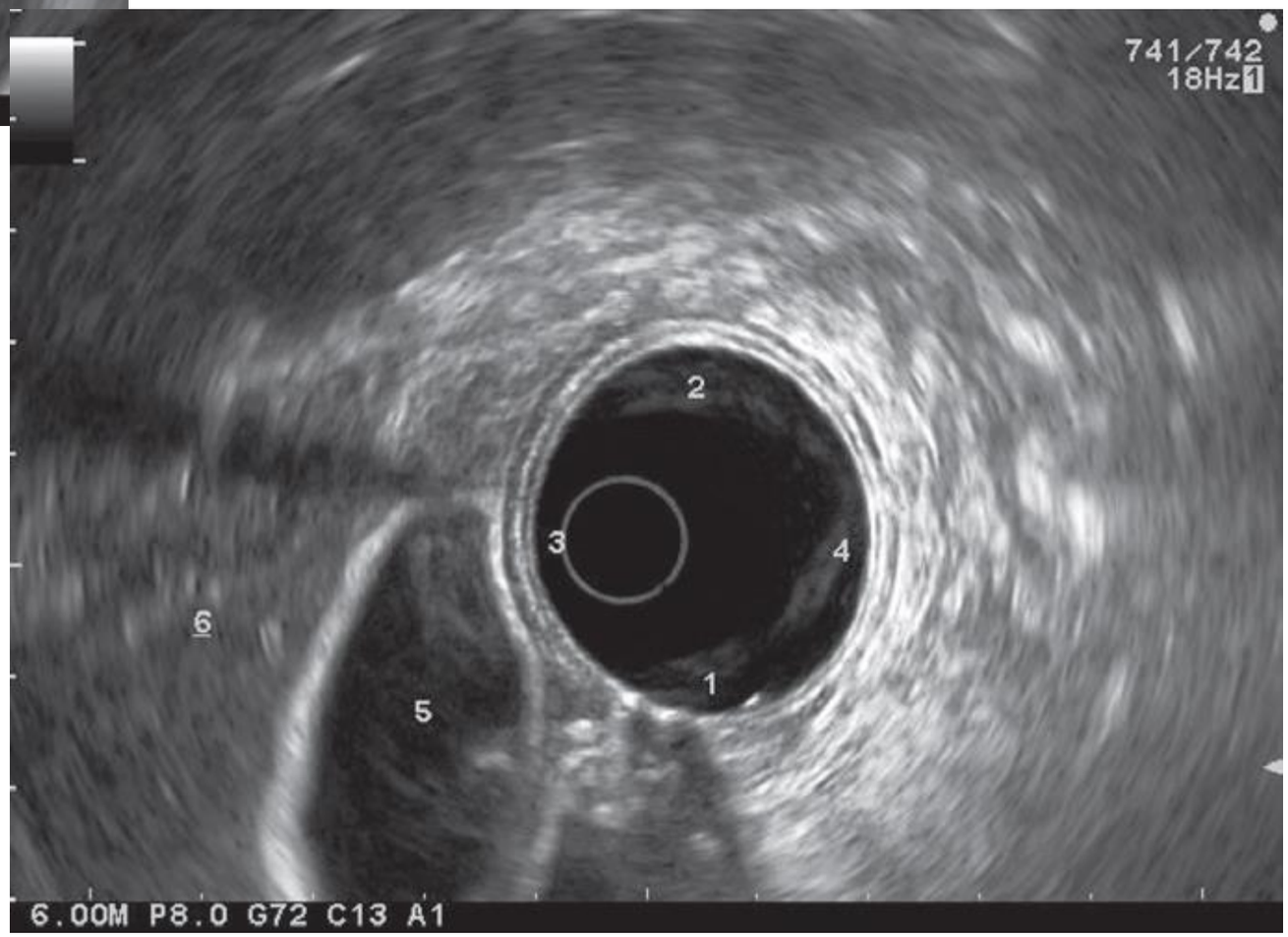
antro - colecisti - fegato





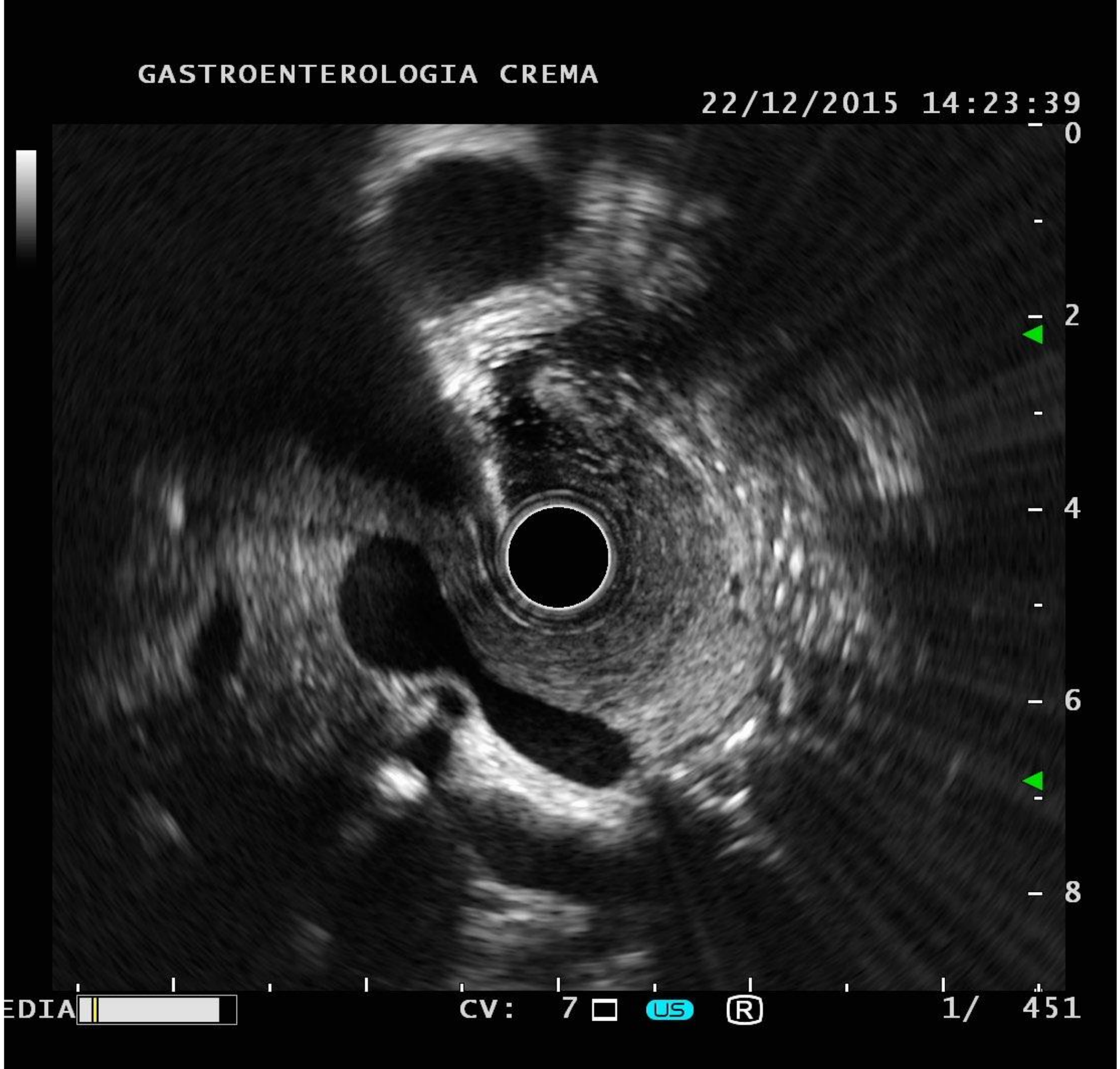
Dall ’Antro gastrico con punta in Up

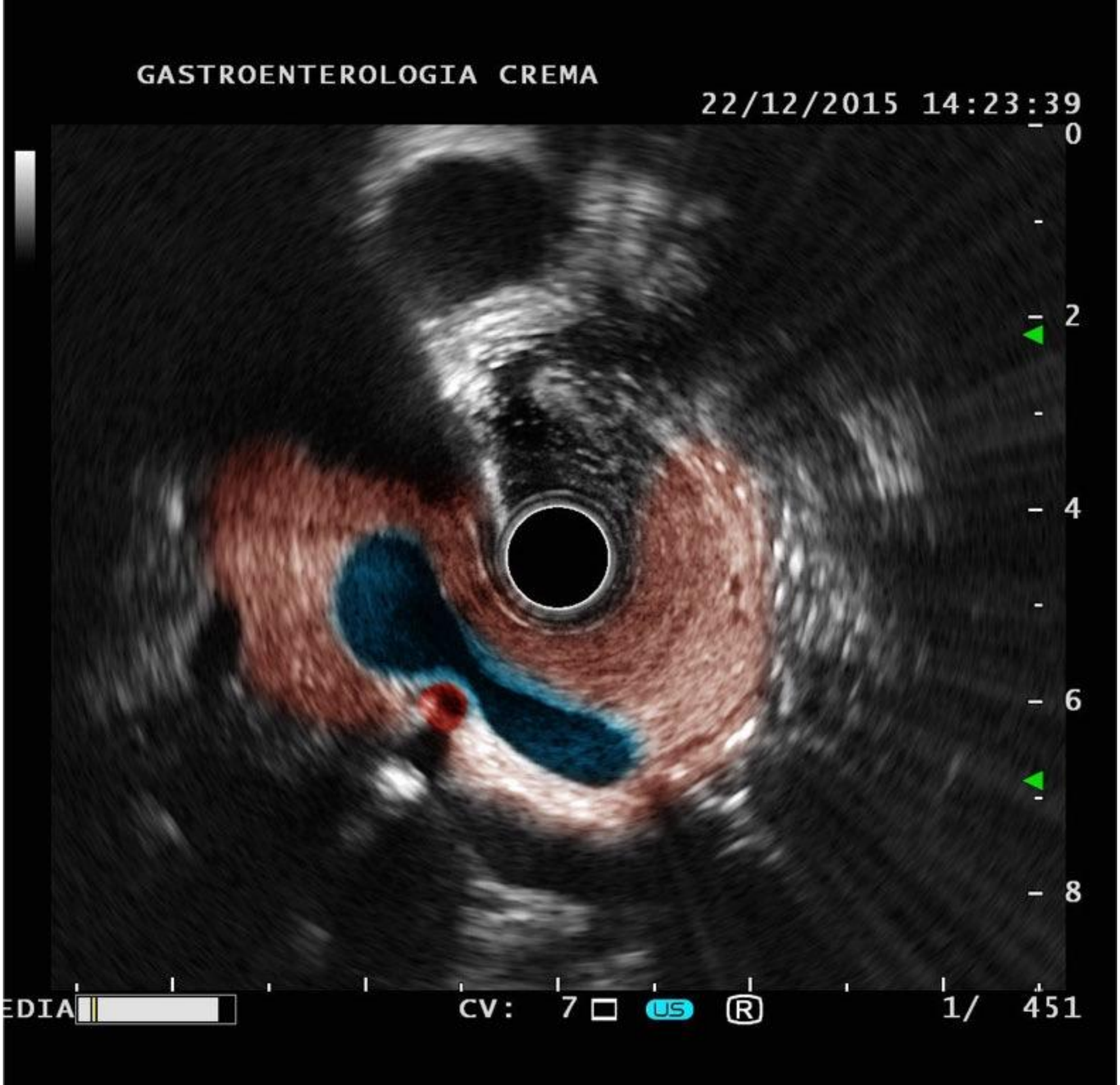
The lesser curve (1) is between the anterior side of the antrum which is facing the **gallbladder** (5) and the liver (6). (4) posterior side and the antrum. (2) greater curve of the antrum.

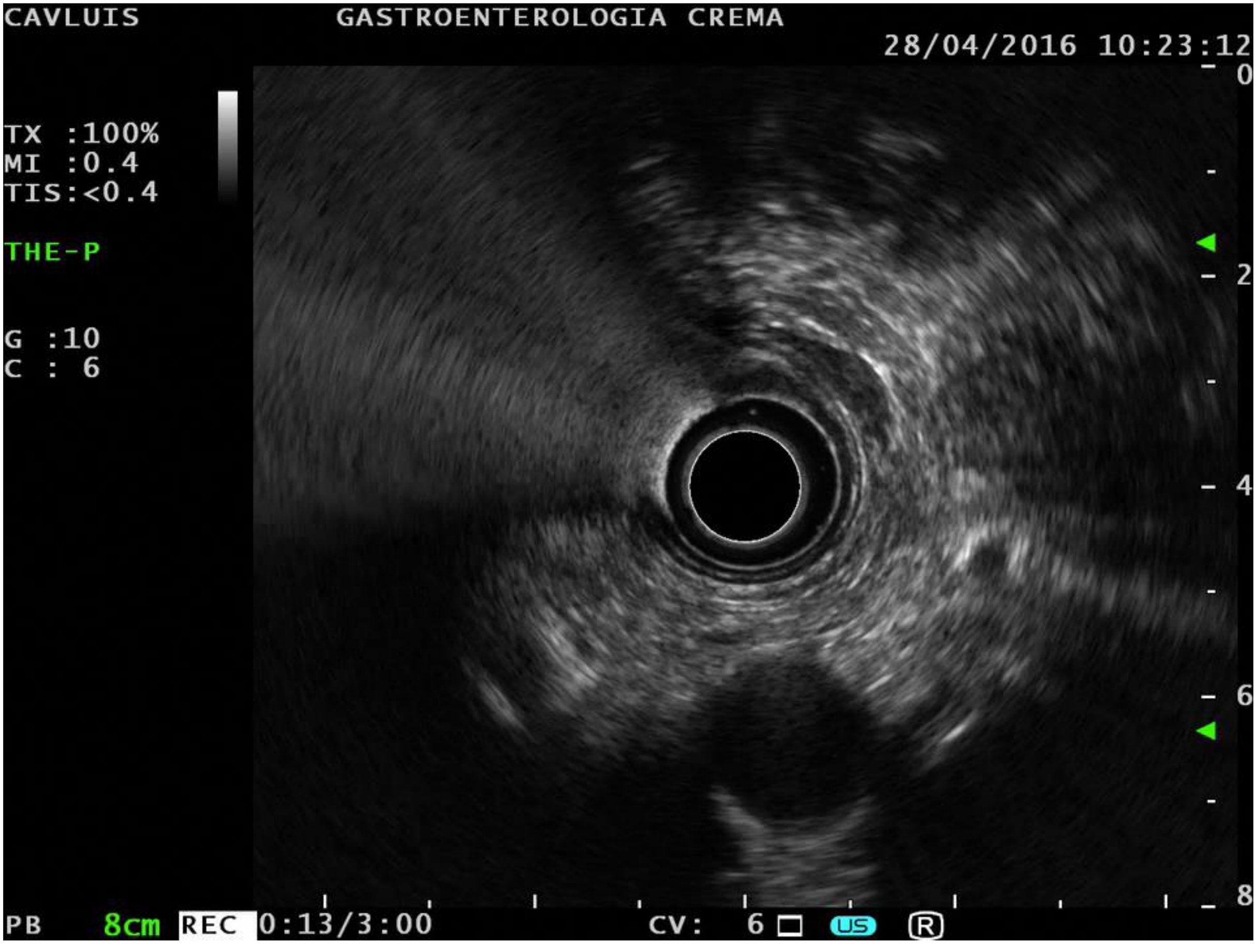


Dalla Piccola Curva

(1), between the posterior side (2), the anterior side (3), in front of the greater curve (4) between the left lobe of the liver (6) and the body of the pancreas (5).


GASTROENTEROLOGIA CREMA
22/12/2015 14:23:39
0
2
4
6
8
EDIA
CV: 7
US
R
1/ 451


GASTROENTEROLOGIA CREMA
22/12/2015 14:23:39
0
2
4
6
8
EDIA
CV: 7
US
R
1/ 451


CAVLUIS
GASTROENTEROLOGIA CREMA
28/04/2016 10:23:12
TX :100%
MI :0.4
TIS:<0.4
THE-P
G :10
C : 6
0
2
4
6
8
PB
8cm
REC
0:13/3:00
CV: 6
US
R


CAVLUIS
GASTROENTEROLOGIA CREMA
28/04/2016 10:24:10
TX :100%
MI :0.4
TIS:<0.4
THE-P
G :10
C : 6
0
2
4
6

Sintesi

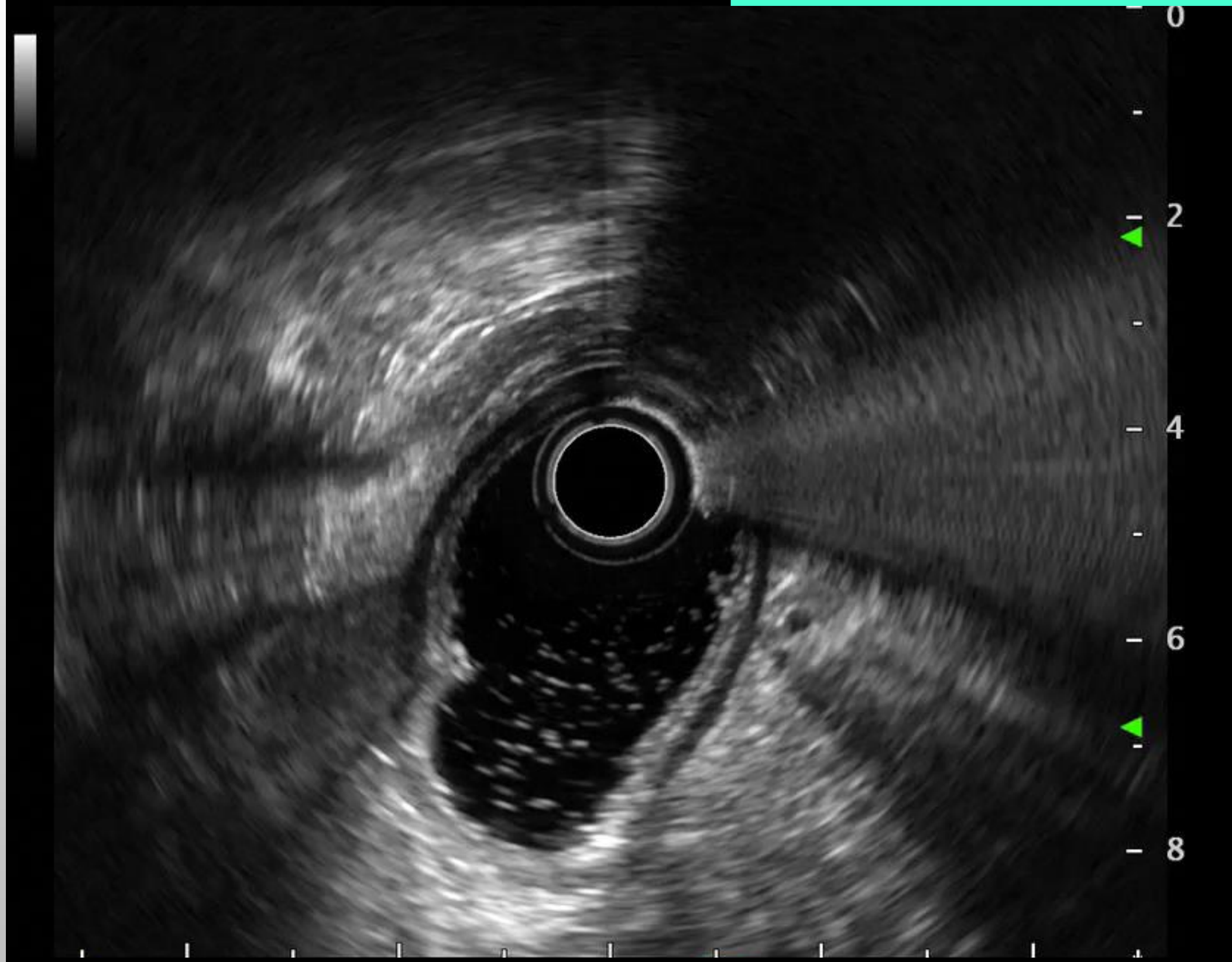
palloncino
acqua

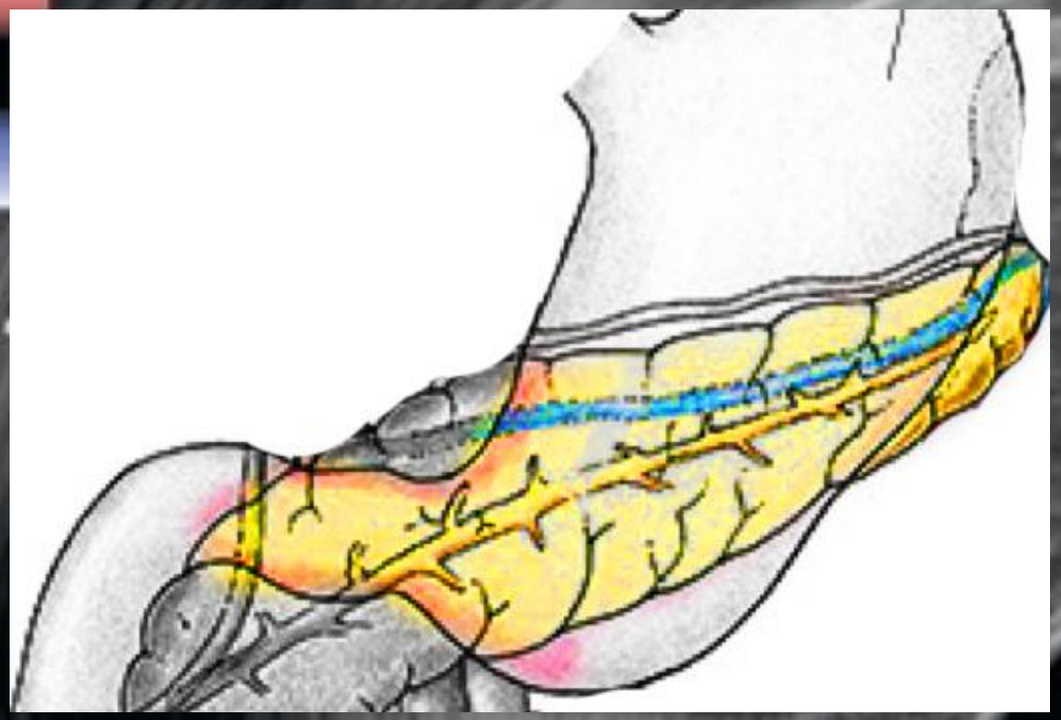
frequenza
migliore

antro
corpo
fondo

linfonodi

reperi:
organi
vasi





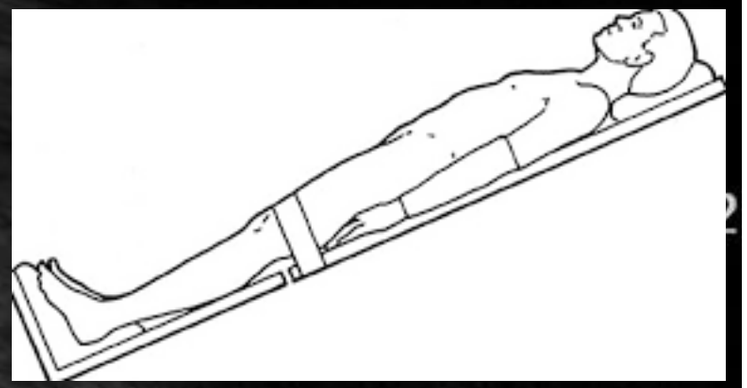
Pancreas Vasi

STOMACO

fondo

cardias

esofago



G : 6
C : 7

ab ingestis

artefatto: specchio

PB 12cm REC 1:07/3:00 CV: 14 US R

Thank you for yuor attention...



Grazie dell'attenzione !!

Digestive Endoscopy Unit
Baggiovara- Policlinico , Modena
Dir. Rita Conigliaro