



ANATOMIA ECOGRAFICA ADDOME SUPERIORE

SIMG SCUOLA DI ALTA FORMAZIONE

6-7 FEBBRAIO 2015



Fegato e vie biliari

Reni

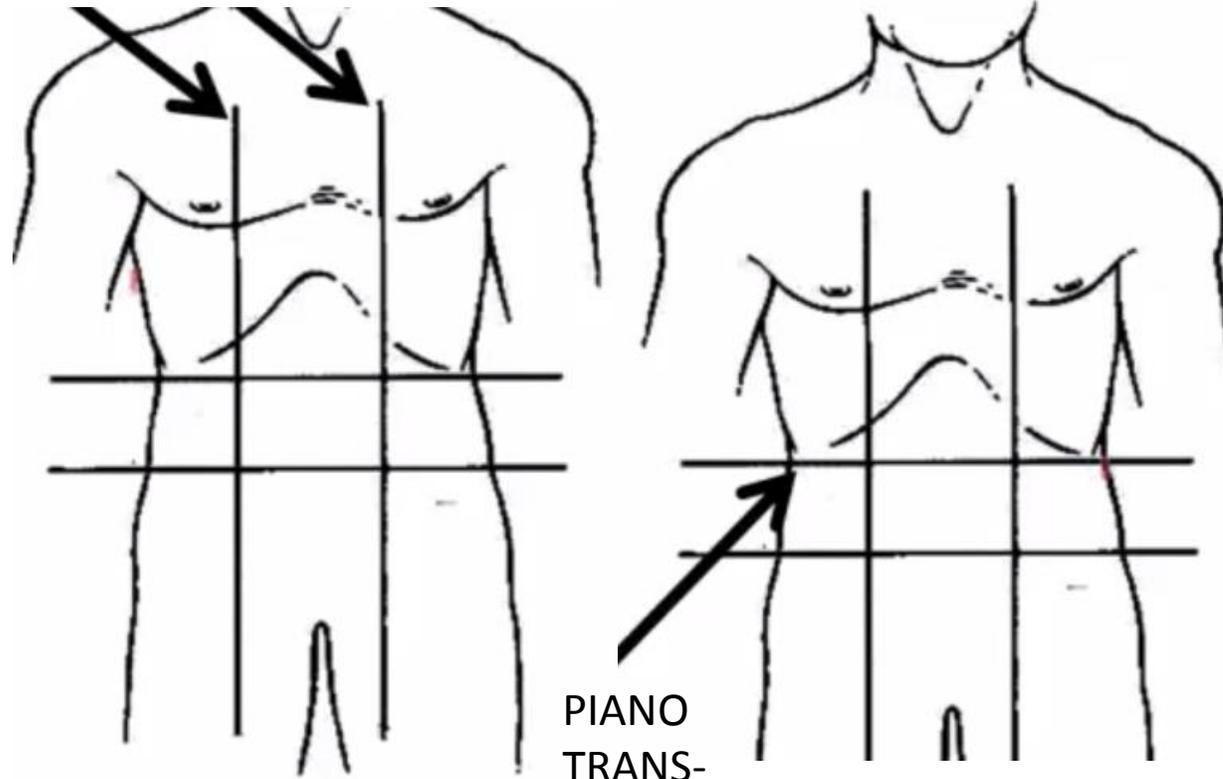
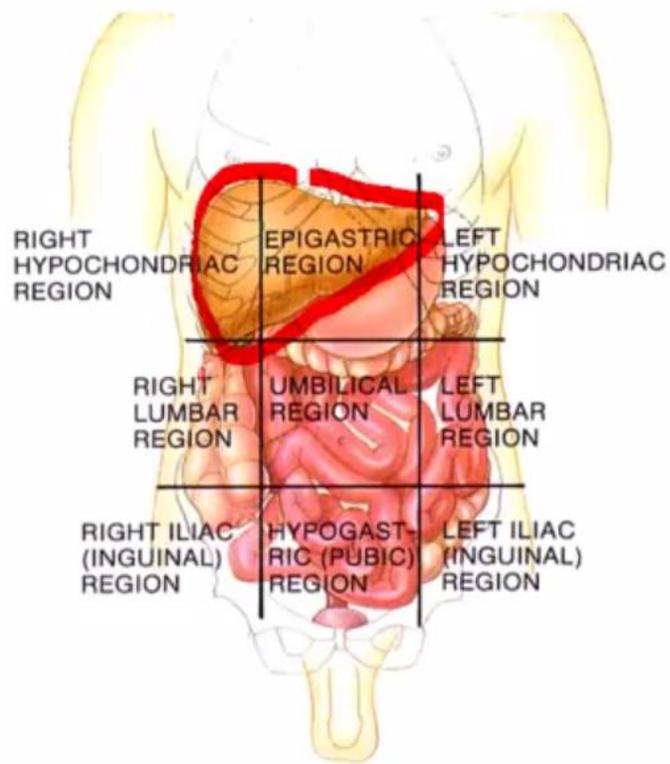
Pancreas

Aorta-Vena Cava Inferiore

Milza

Tecnica di scansione addome superiore

EMICLAVEARI



PIANO
TRANS-
PILORICO

ORGANI INTRA- PERITONEALI

STOMACO

FEGATO

COLECISTI

MILZA

INTESTINO TENUE

COLON

UTERO

OVAIE

VESCICA

ORGANI RETRO- PERITONEALI

➤ RENI

➤ PANCREAS

➤ AORTA

➤ VCI

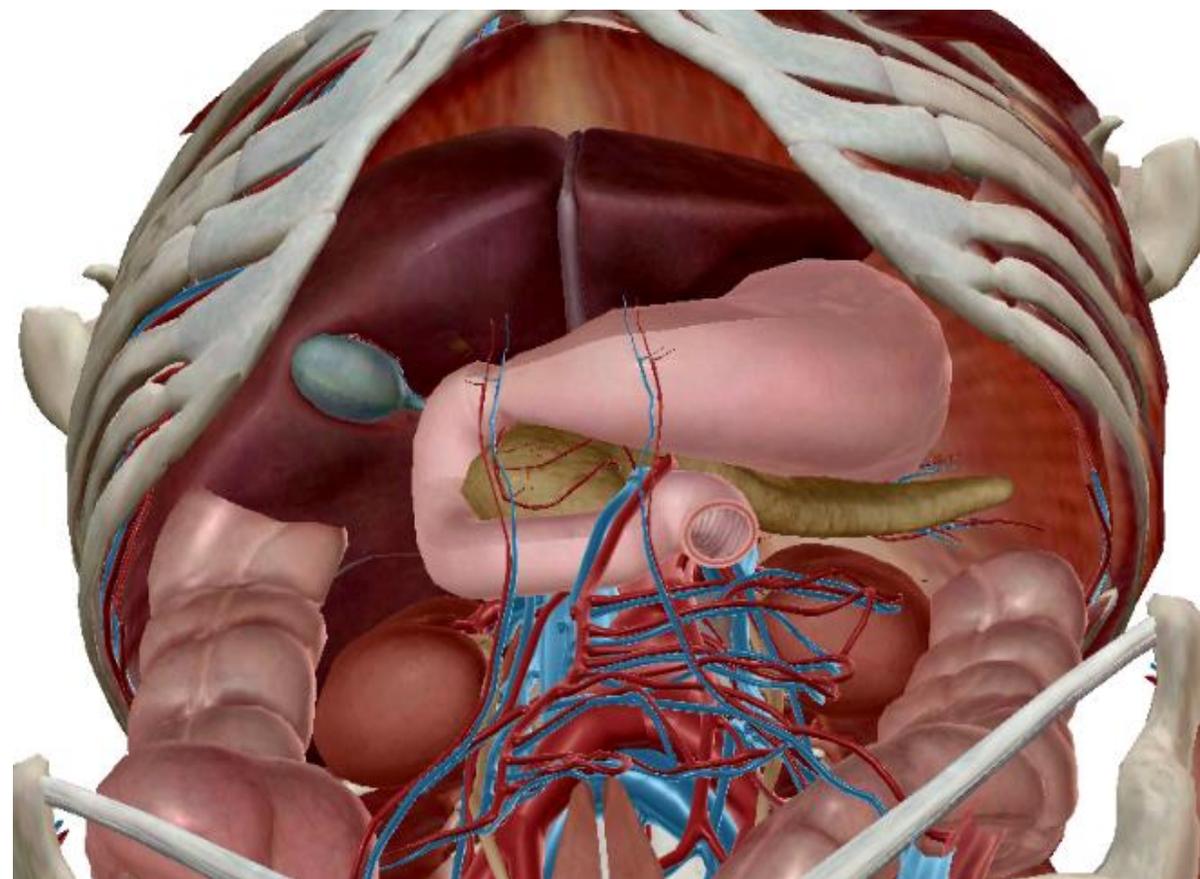
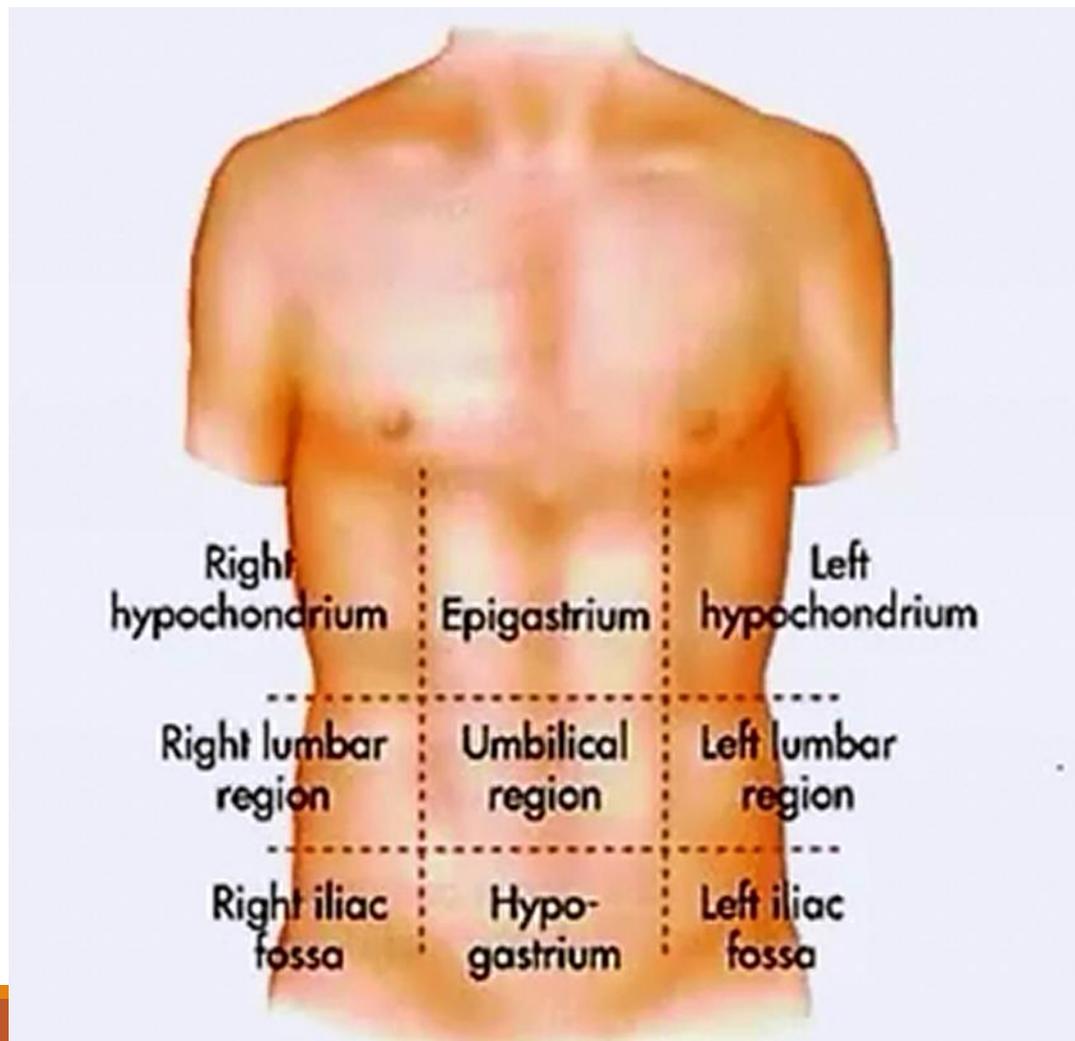
➤ AORTA

➤ URETERI





ANATOMIA ECOGRAFICA EPATOBILIARE

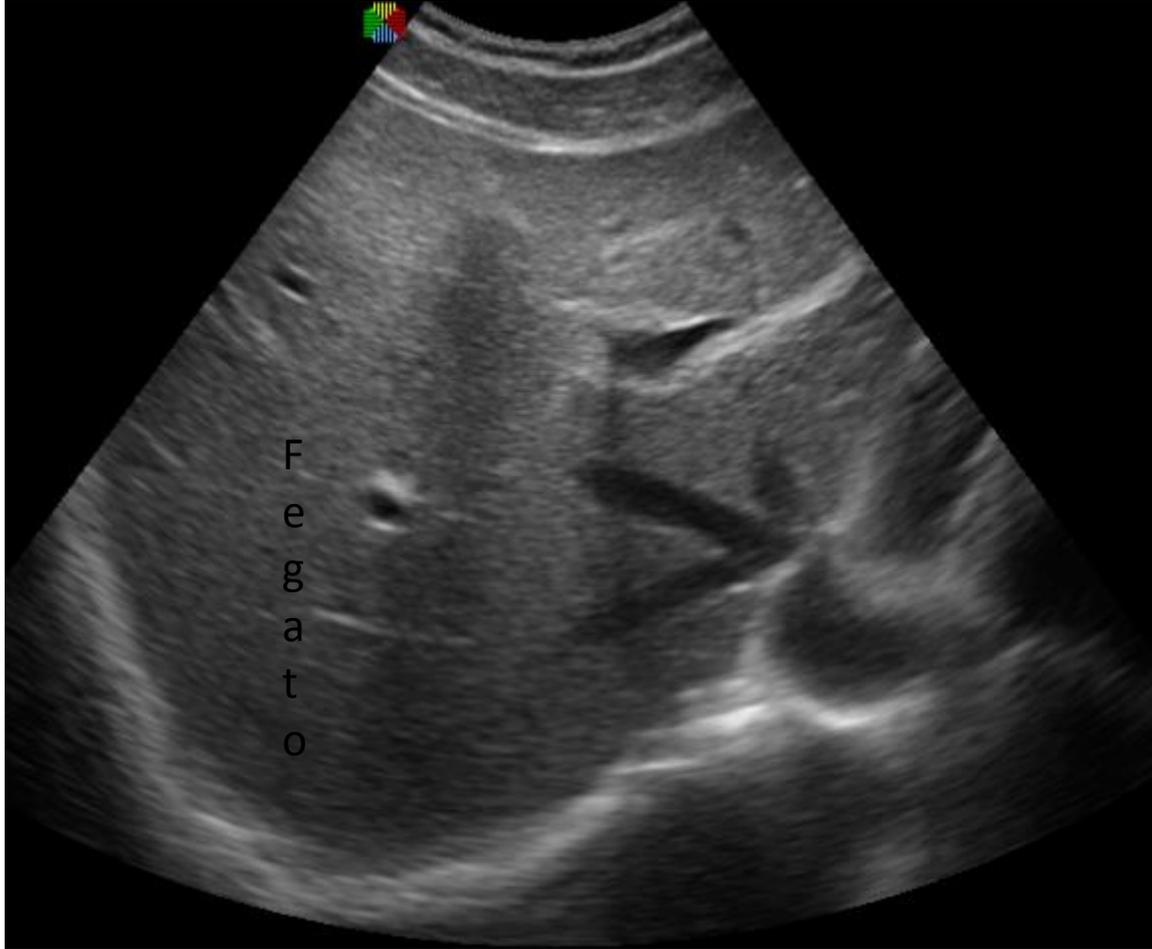


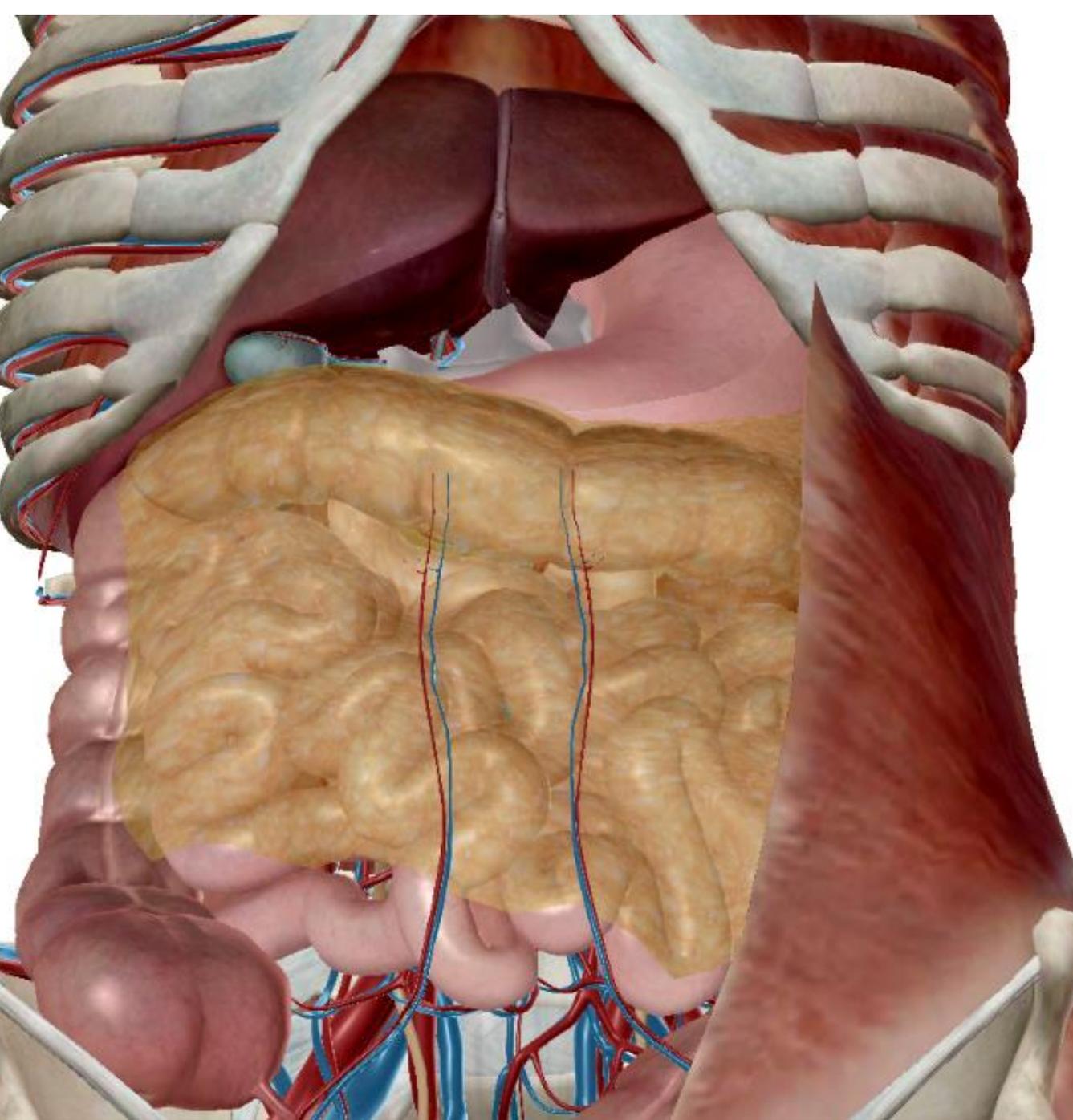
Dr.Italo Paolini

Area office technology

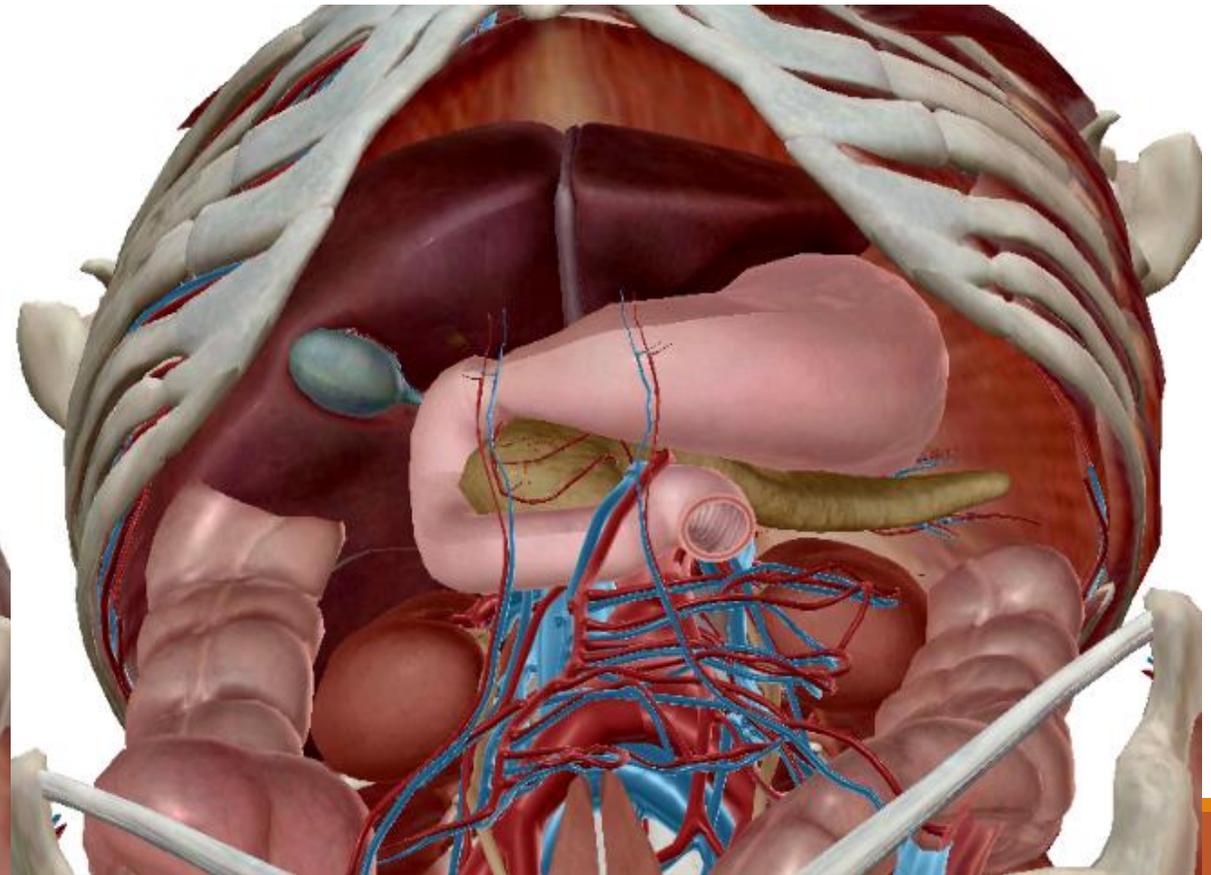
SIMG

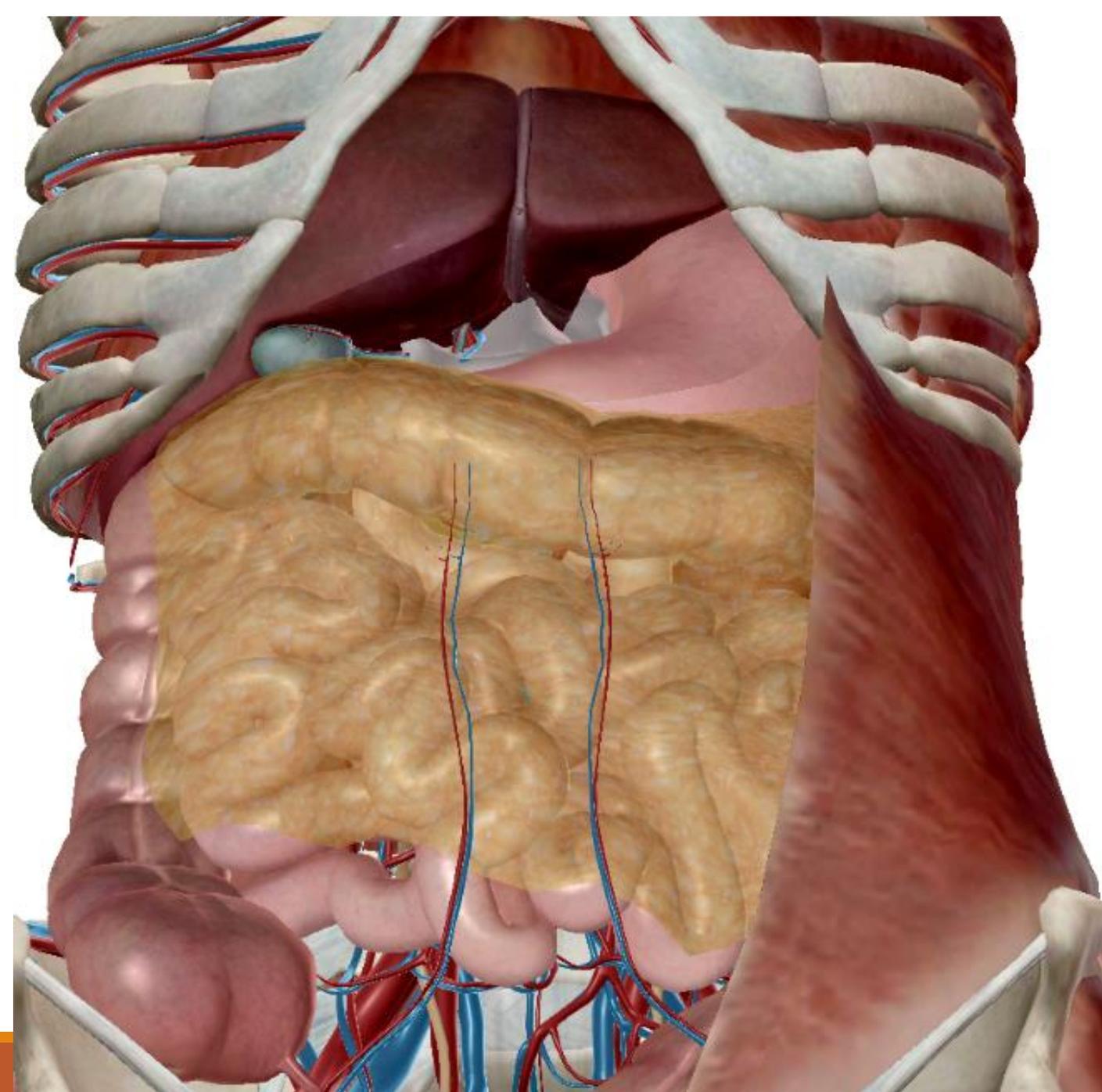
E' l'organo più grande del corpo umano e alquanto accessibile alla valutazione ultrasonografica





Occupa quasi interamente l'ipocondrio destro, la gran parte dell'epigastrio e l'ipocondrio sinistro sin quasi alla linea mammaria

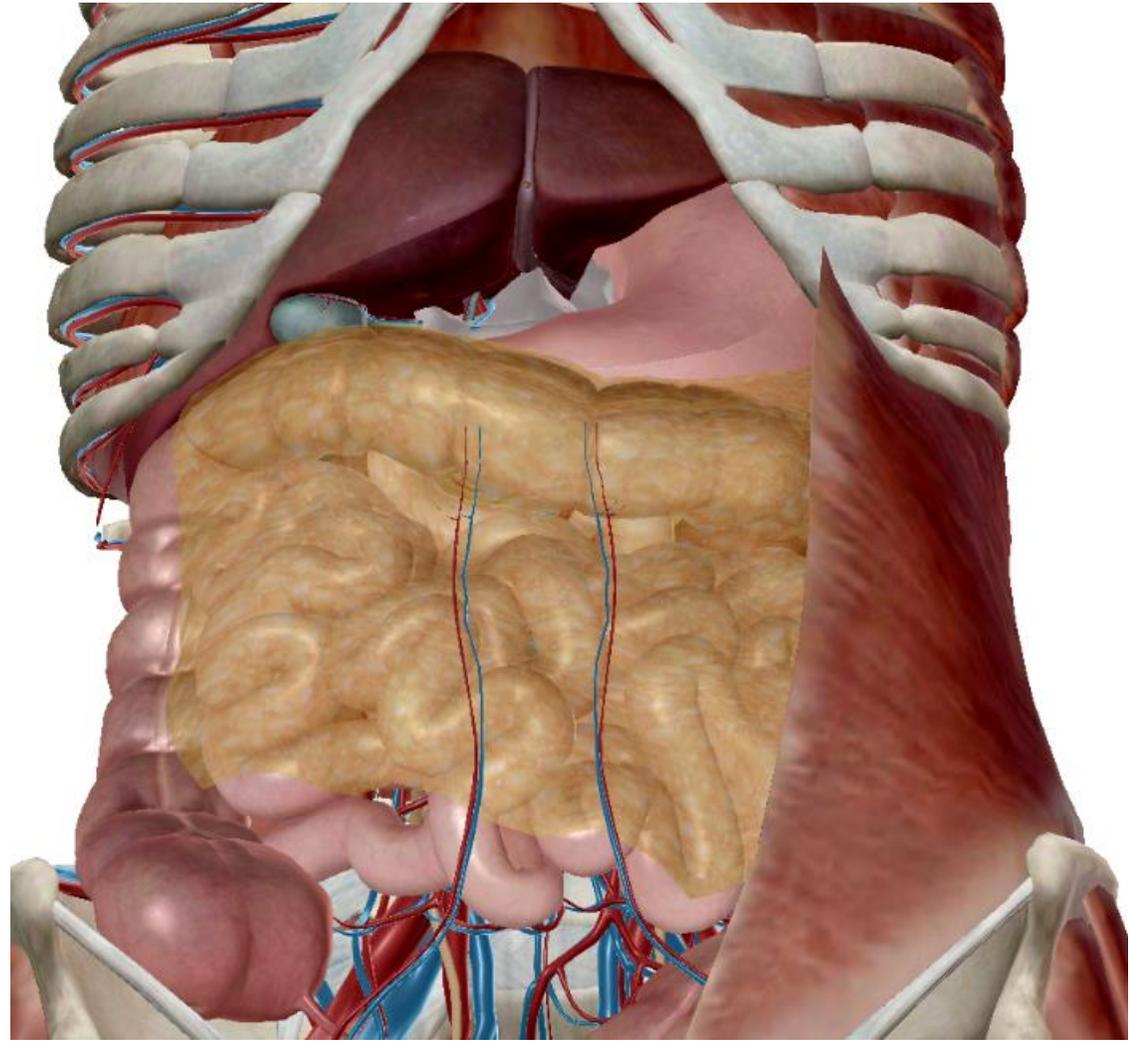
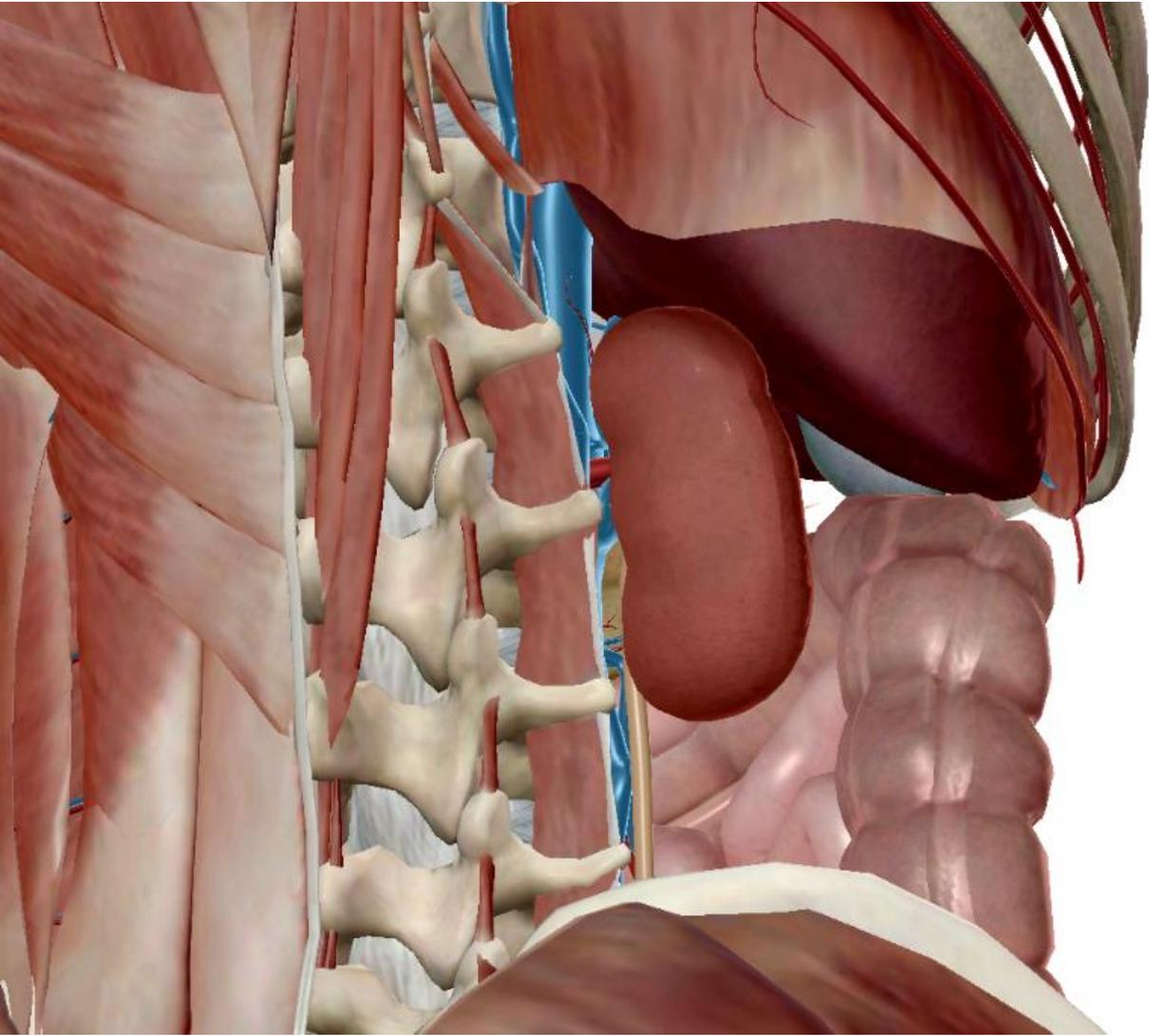




Le coste coprono la gran parte del lobo destro (di solito solo una piccola parte del lobo destro è in contatto con la parete addominale.

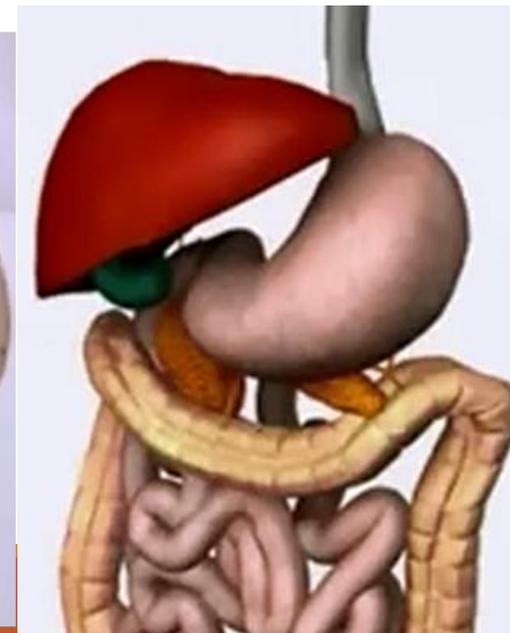
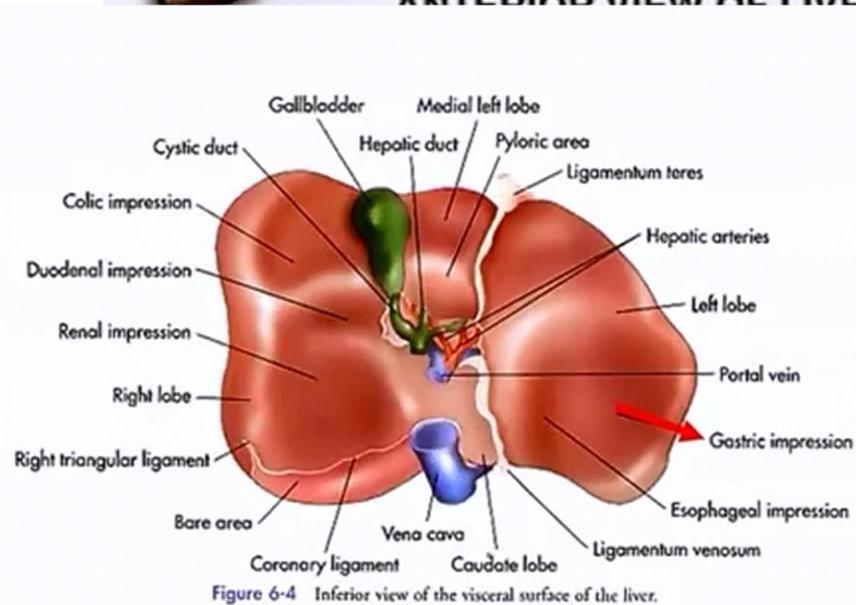
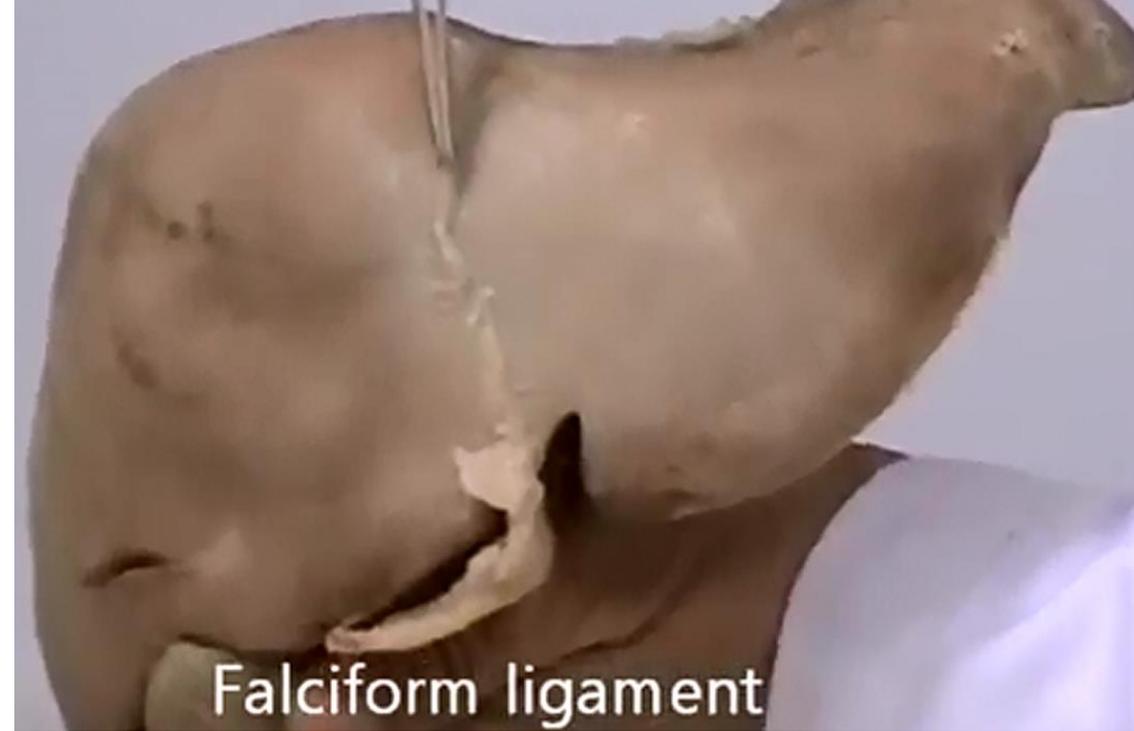
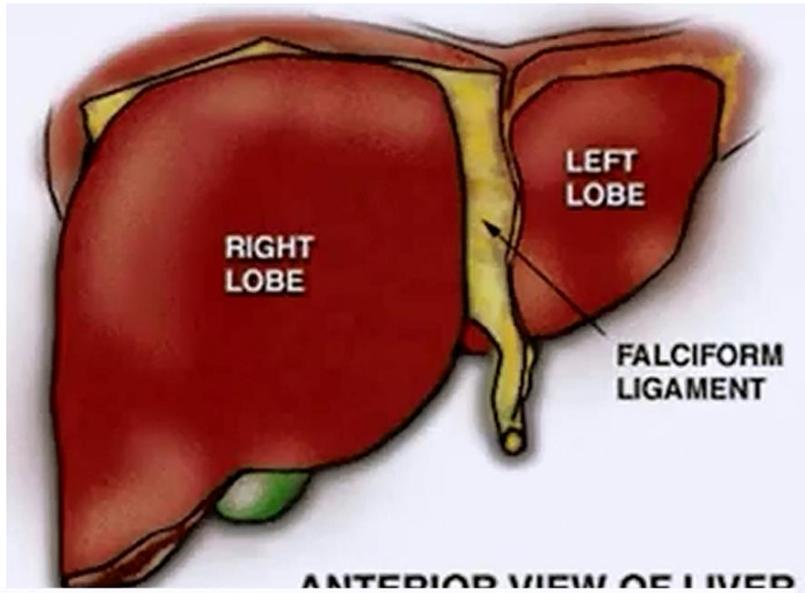
Nella regione epigastrica il fegato è sotto la parete addominale, per alcuni cm. in sede subxifoidea

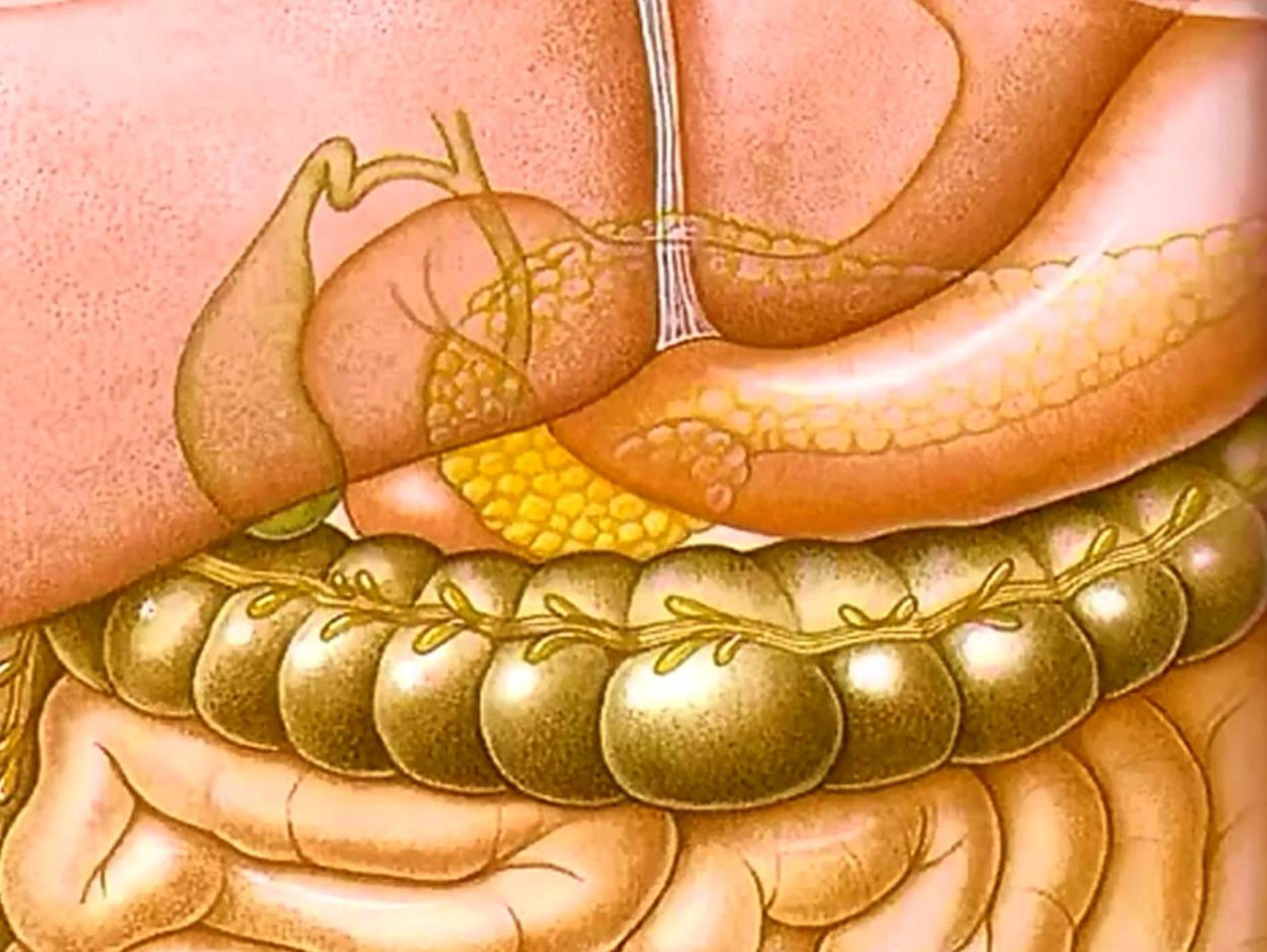
Anche una buona parte del lobo sinistro è coperta dalle coste. La proporzione lobo dx./ lobo sin. è circa 6:1





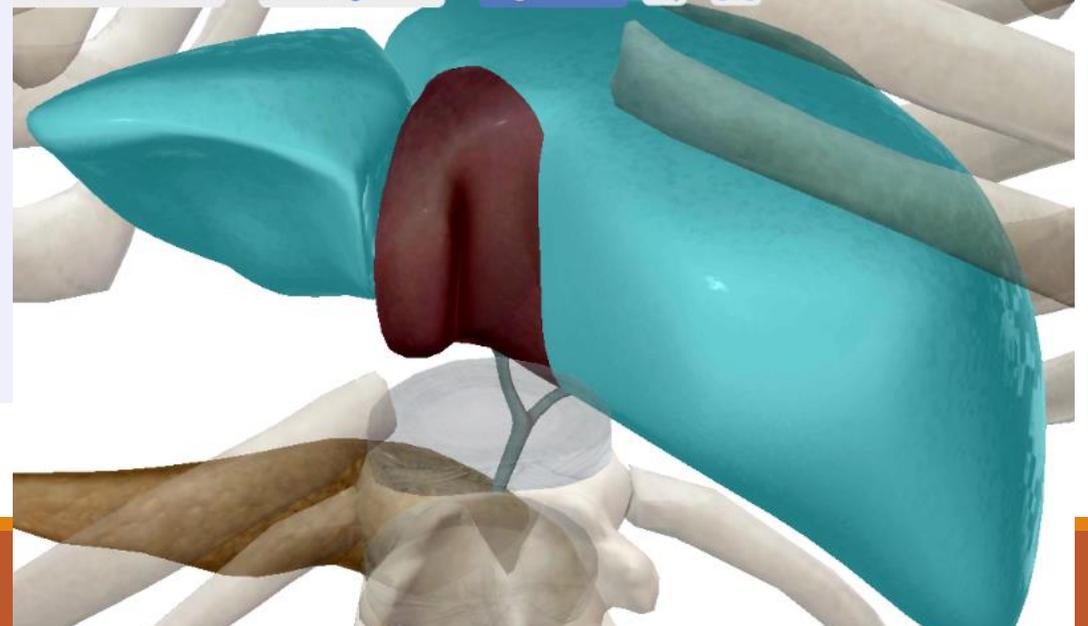
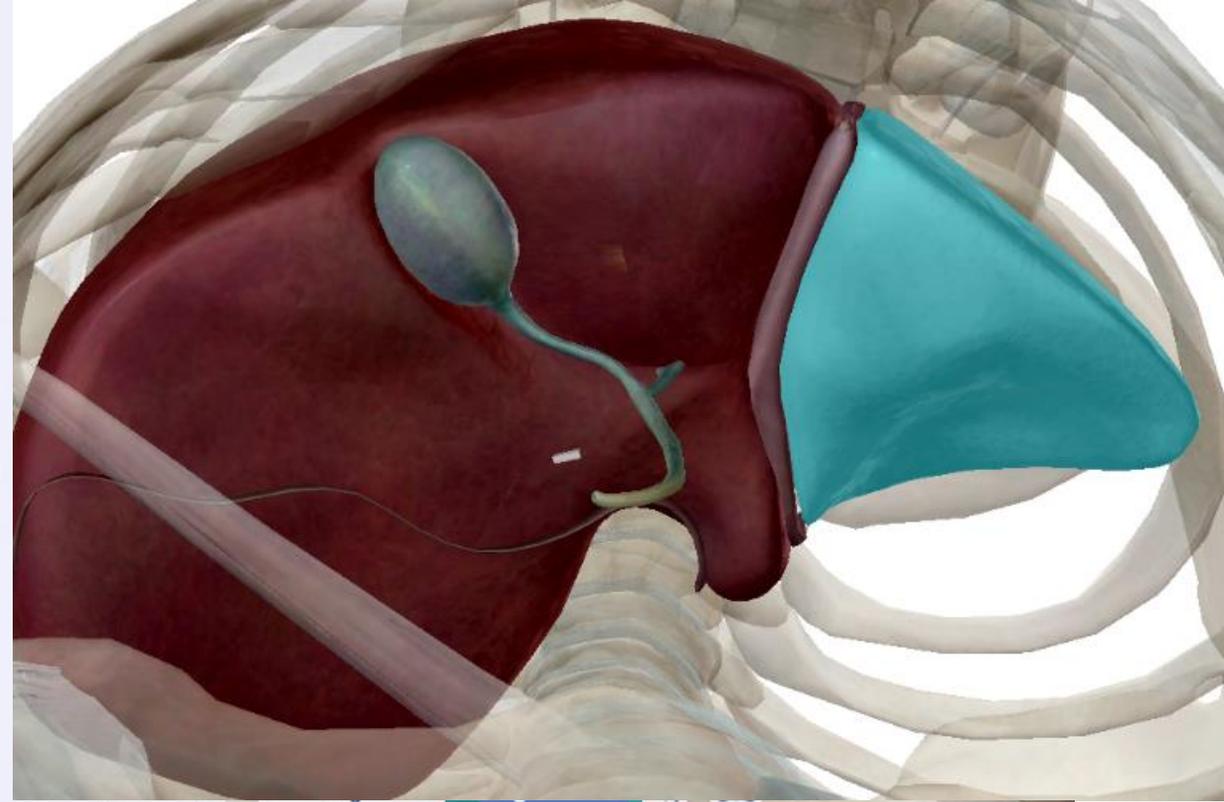
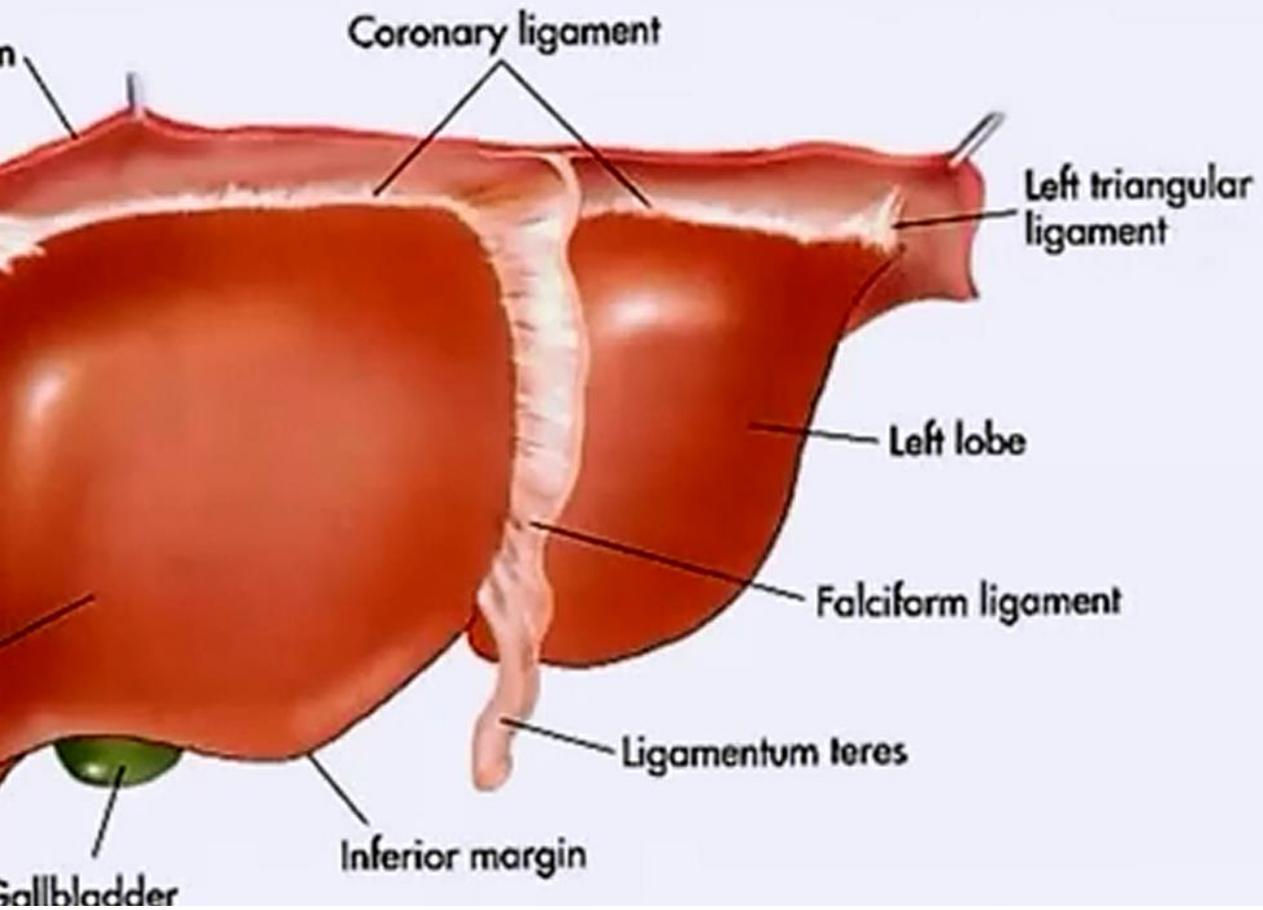
VIENE RICOPERTO ANTERIORMENTE E SUPERIORMENTE DAL DIAFRAMMA



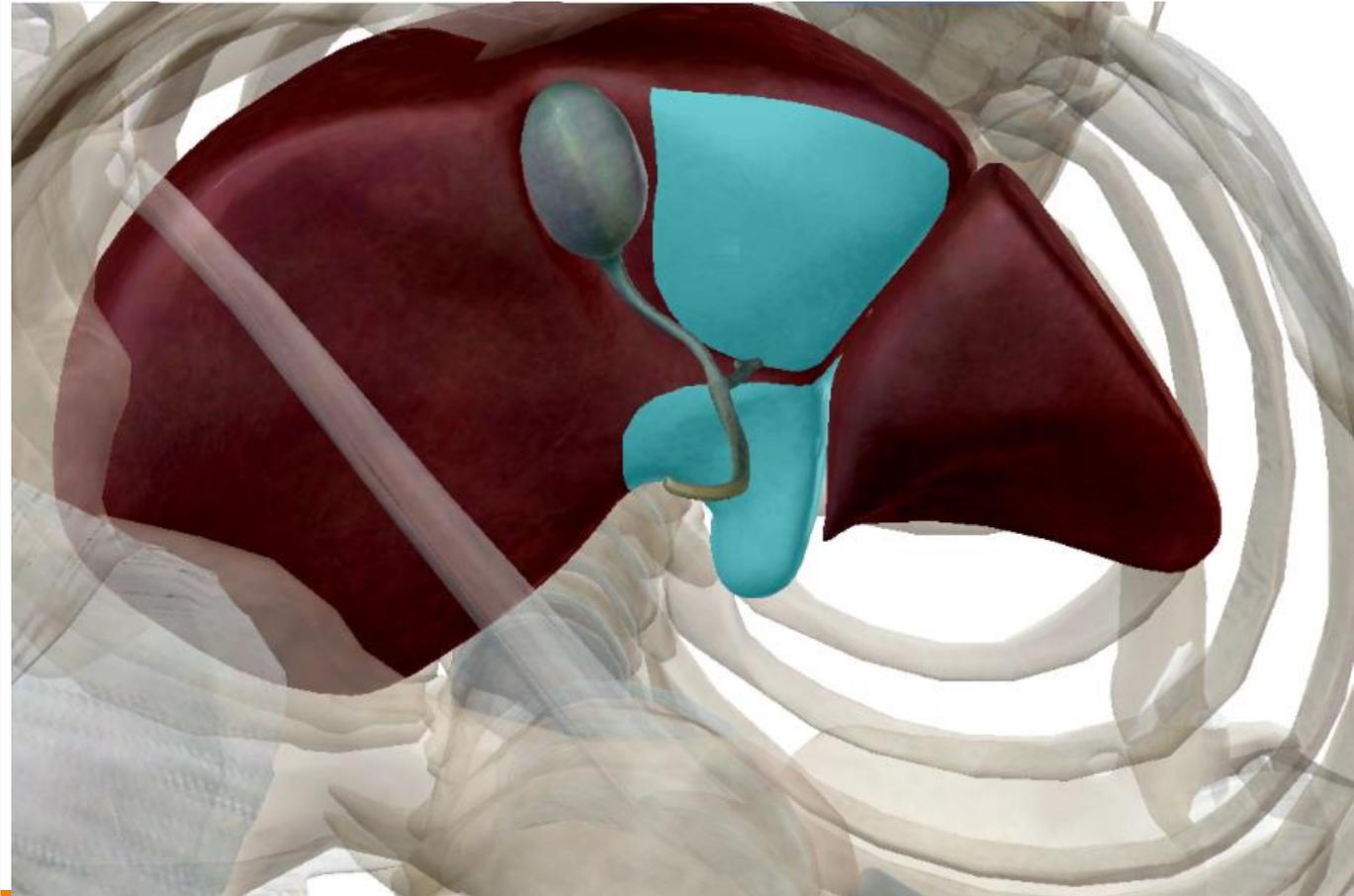
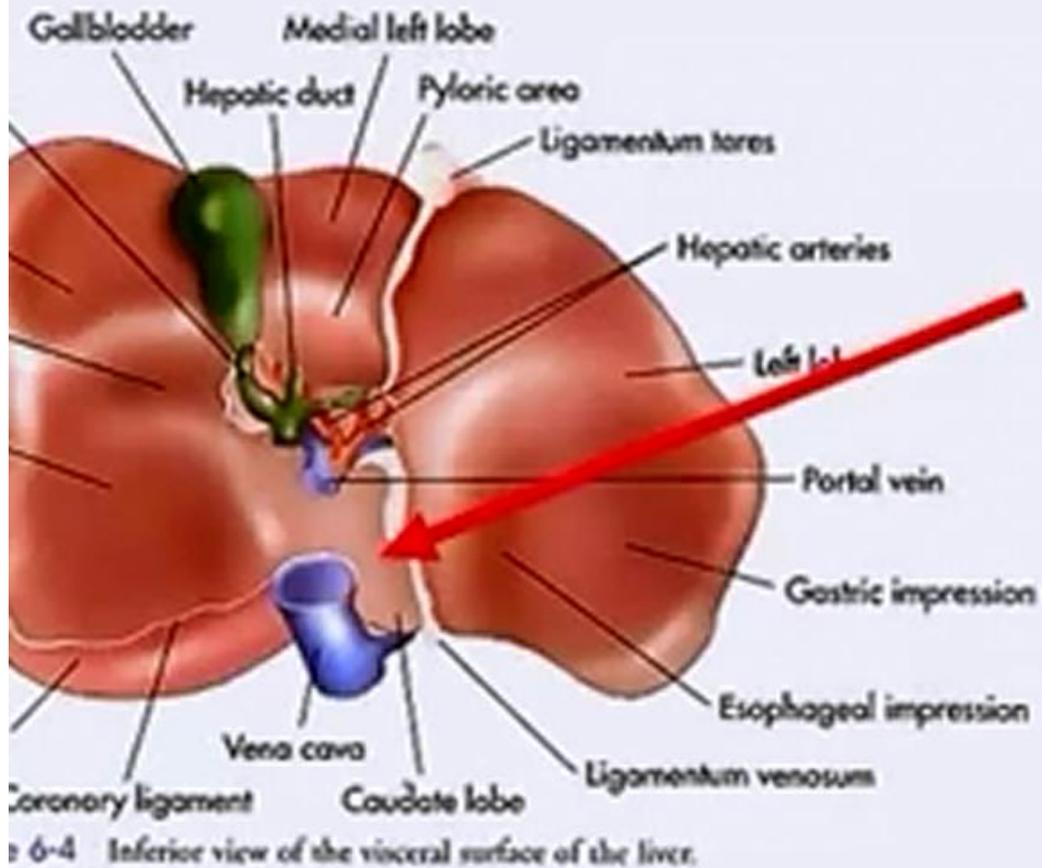


Il duodeno è
adiacente al
lobo destro del
fegato e
posizionato
medialmente
rispetto al lobo
sinistro

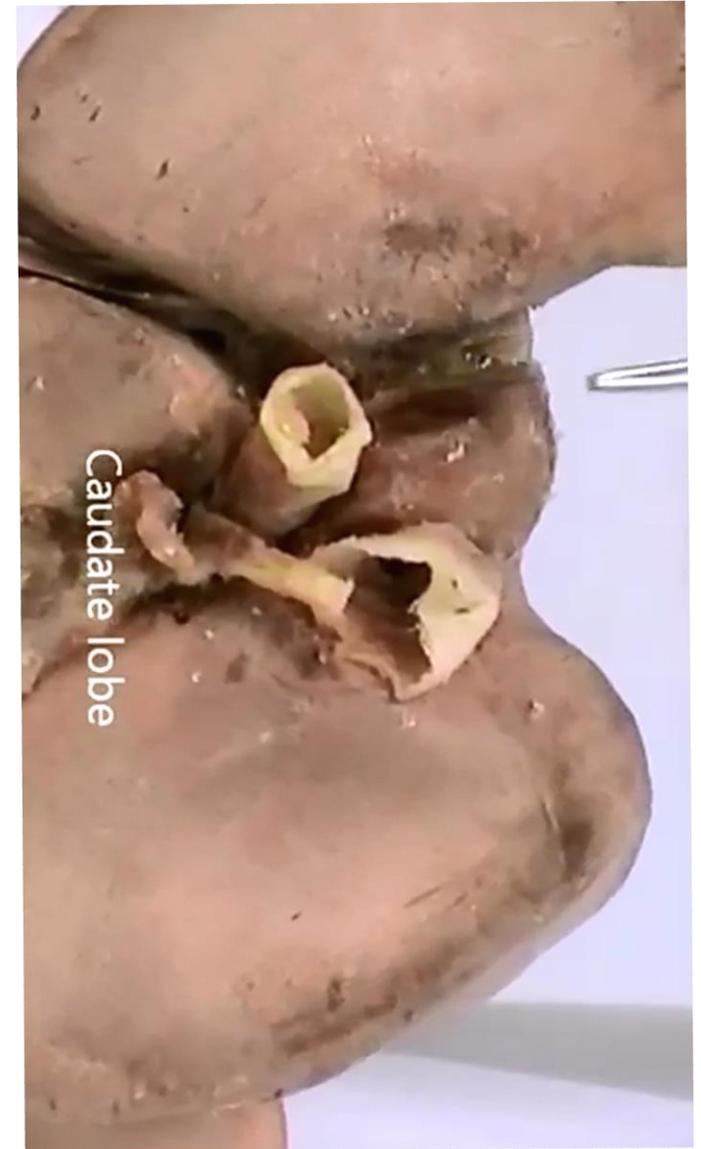
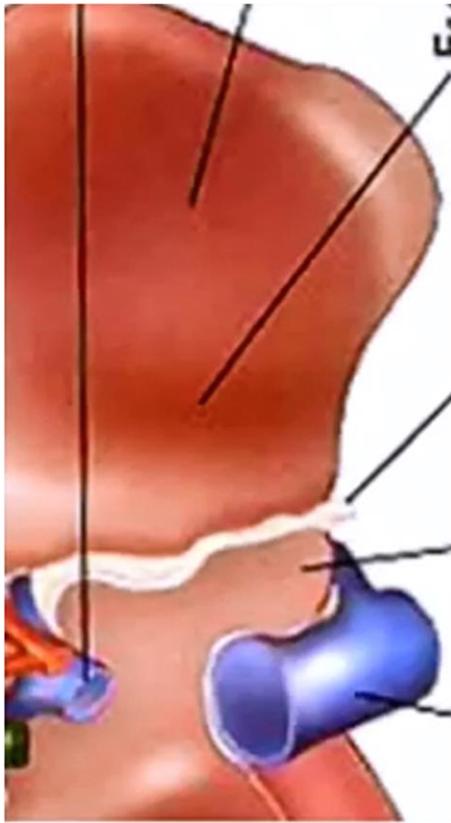
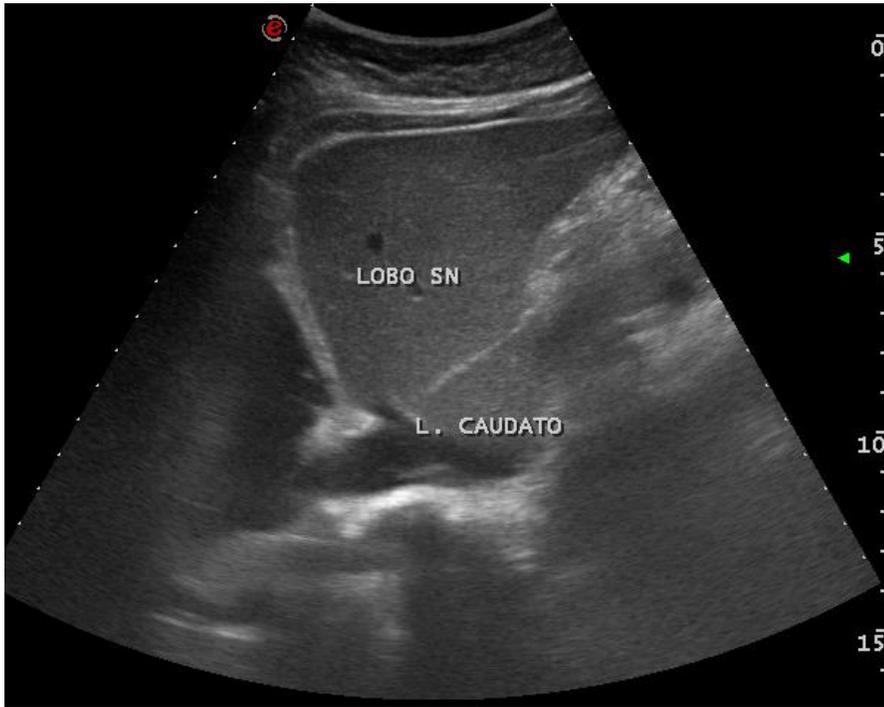
Left lobe.



IL LOBO CAUDATO E' UN PICCOLO LOBO SITUATO
NELLA SUPERFICIE POSTERO-SUPERIORE DEL
LOBO SINISTRO

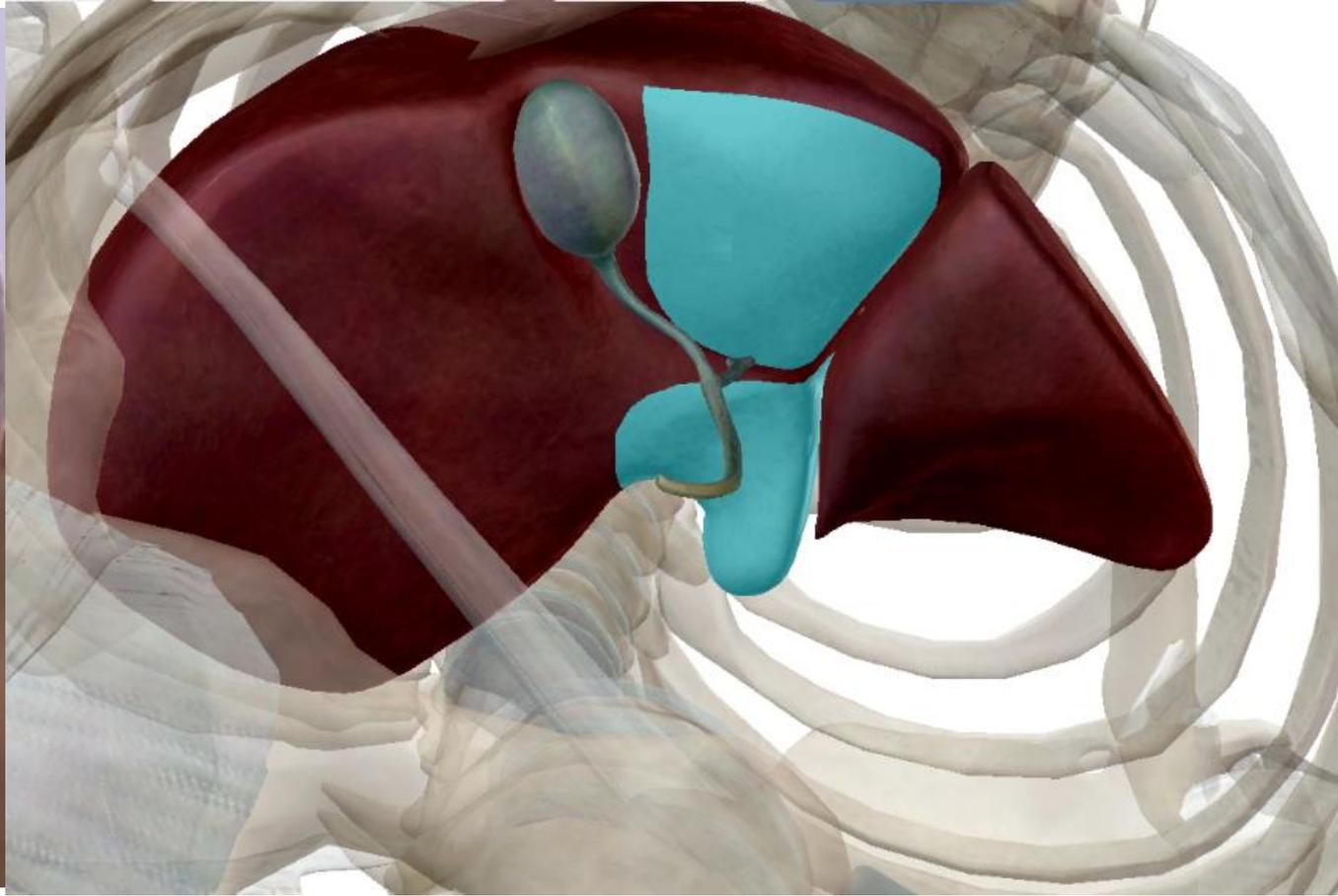


- LOBO CAUDATO
 - CAUDATO INTESO COME CODA, APPENDICE..
 - FUNZIONALMENTE AUTONOMO:
 - APPROVIGIONATO DAL RAMO DX. E SINISTRO DEL TRONCO PORTALE
 - DRENA IL SANGUE VENOSO DIRETTAMENTE NELLA IVC
- EFFETTO PSEUDOMASSA





Quadrate lobe



LEGAMENTI E SOLCHI

Vi sono alcuni importanti legamenti e solchi da ricordare nell'anatomia epatica:

- **Capsula glissoniana**
- **Legamento falciforme**
- **Ligamentum teres (rotondo)**
- **Ligamentum venosum**

Il fegato è ricoperto da uno spesso involucro di tessuto connettivo chiamato capsula di Glisson. Essa riveste completamente la superficie del fegato ed è più spessa a livello della vena cava inferiore e dell'ilo epatico

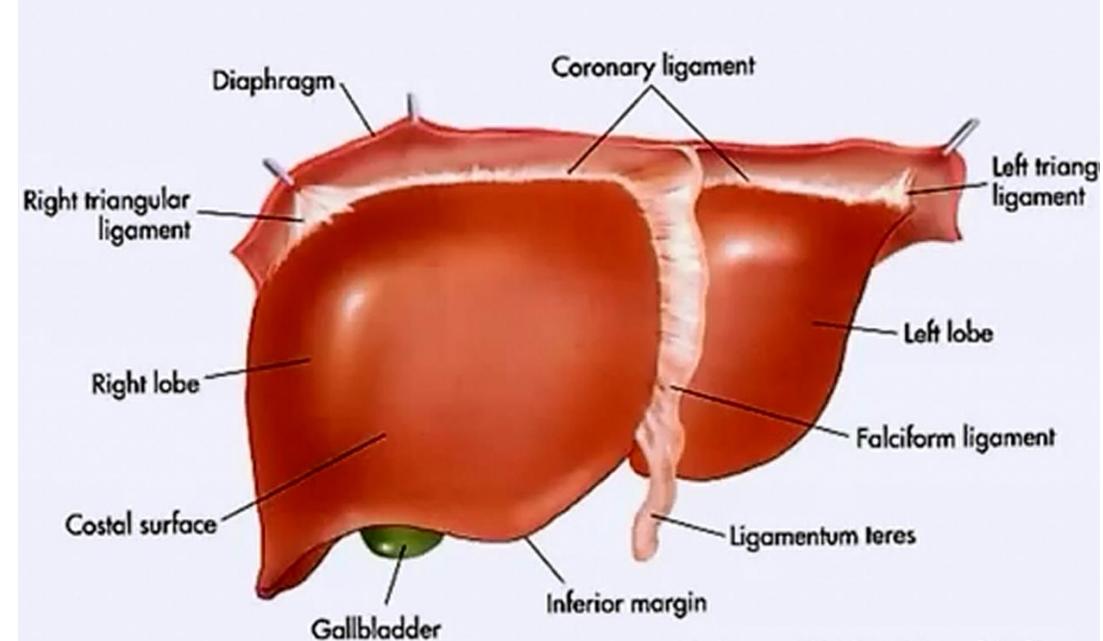


Figure 6-2 Anterior view of the liver. The right lobe is the largest of the four lobes of the liver.

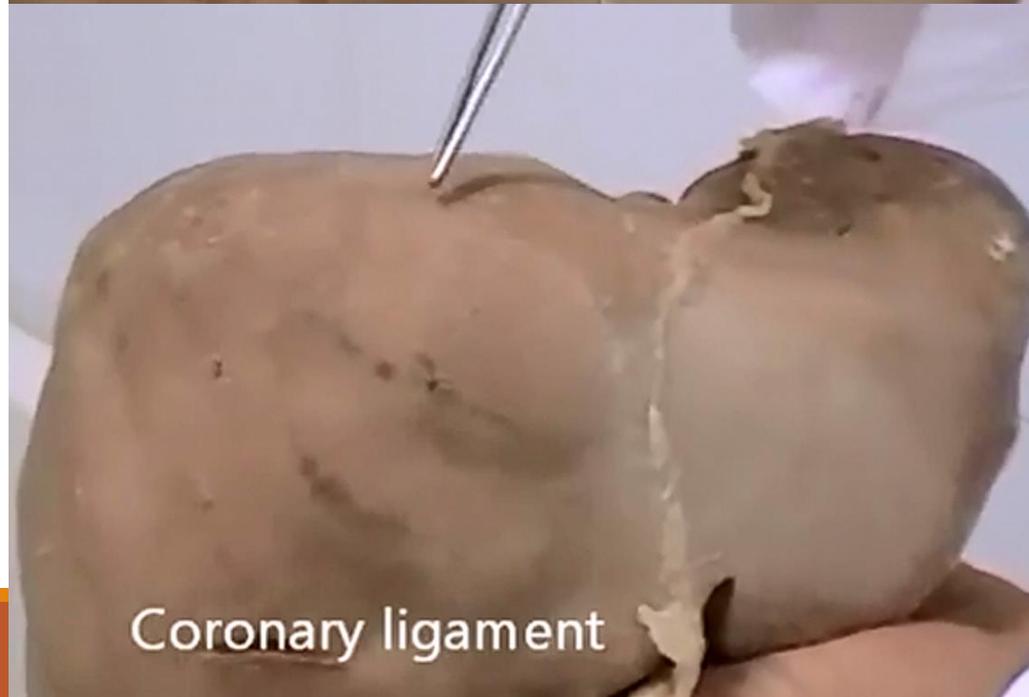


Left triangular ligament

Il fegato è «attaccato» al diaframma e alla parete addominale anteriore tramite il legamento falciforme e, al diaframma da una riflessione dei foglietti peritoneali

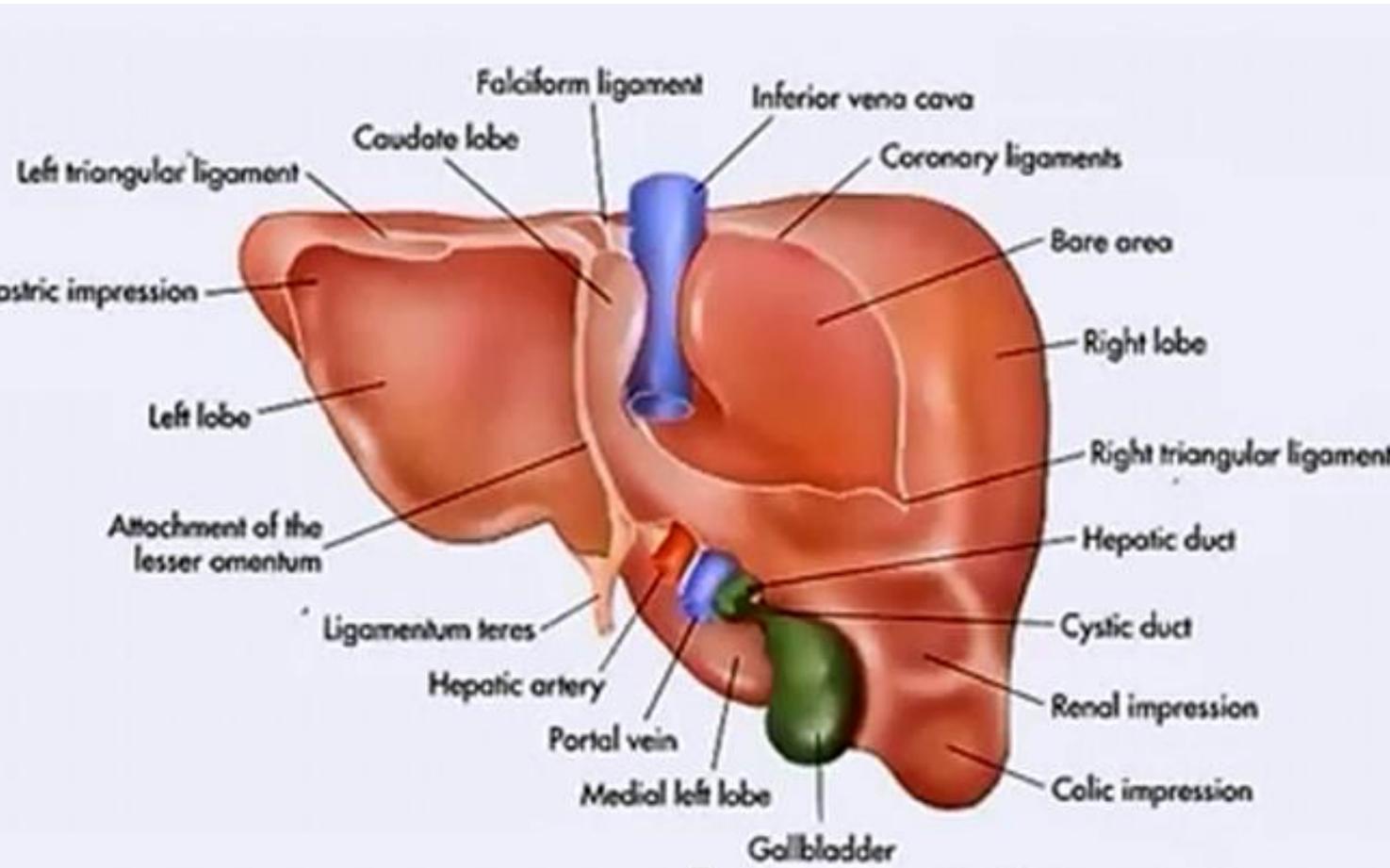


Bare area of the liver

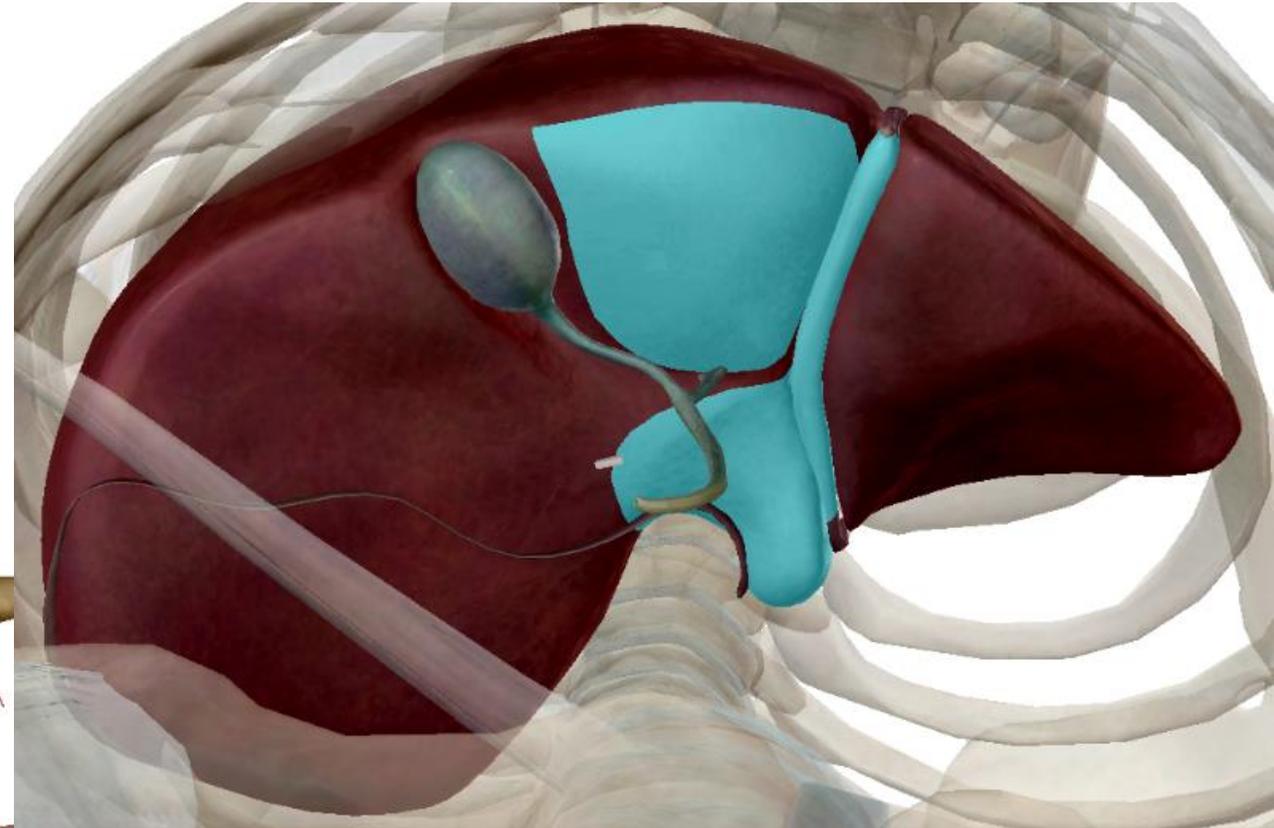
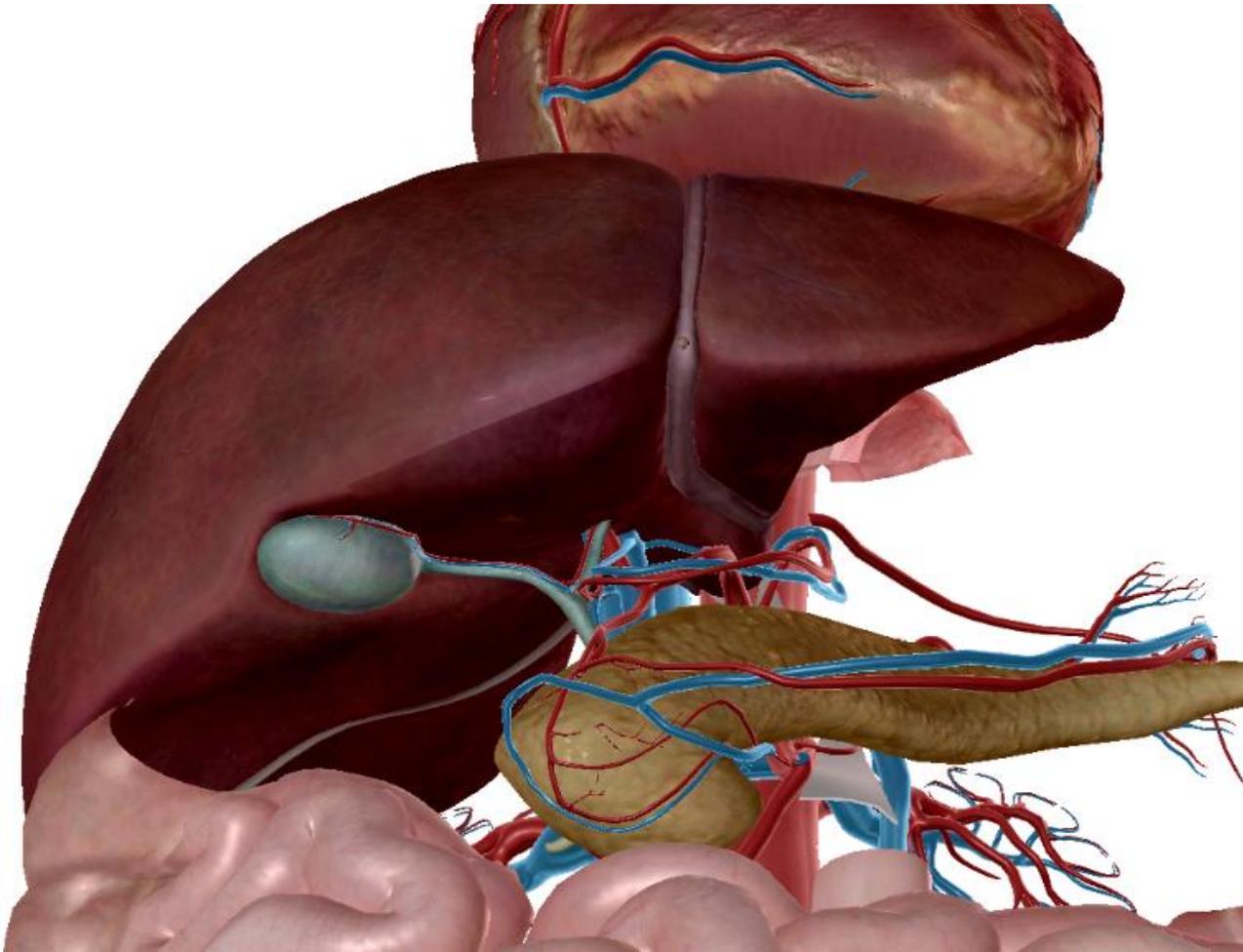


Coronary ligament

La maggior parte del fegato è rivestita dal peritoneo, ma un'area, detta BARE AREA, viene a contatto diretto col diaframma, senza interposizione di membrana peritoneale.



Il legamento falciforme va dall'ombelico al diaframma in un piano parasagittale e contiene il legamento rotondo (ligamentum teres)



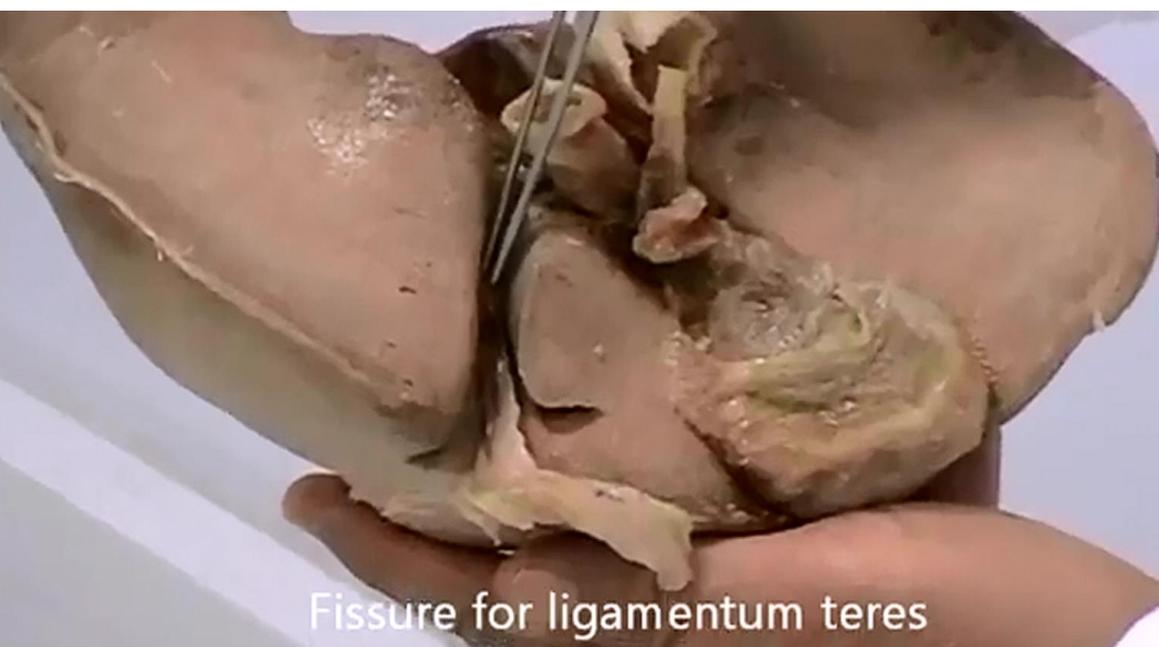
LIGAMENTUM TERES

La vena ombelicale raccoglie il sangue arterioso dalla placenta e lo porta al feto: dopo la nascita si oblitera formando con la parte ventrale il legamento rotondo (*ligamentum teres hepatis*), con la parte dorsale il legamento venoso di Aranzio (*ligamentum venosum*)



Il residuo fetale, obliterato, della vena ombelicale, decorre nel solco del ligamentum Teres

In corso di ipertensione portale questo residuo di vena può ricanalizzarsi



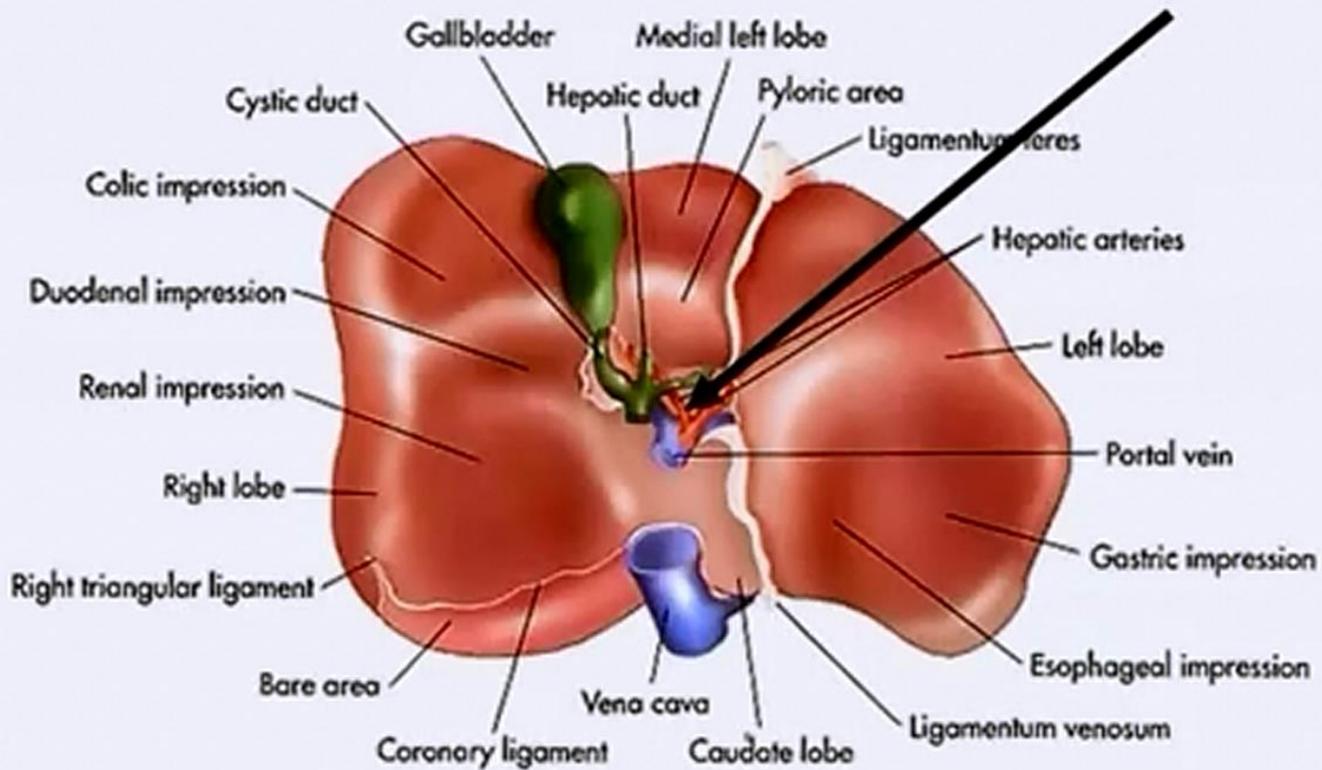
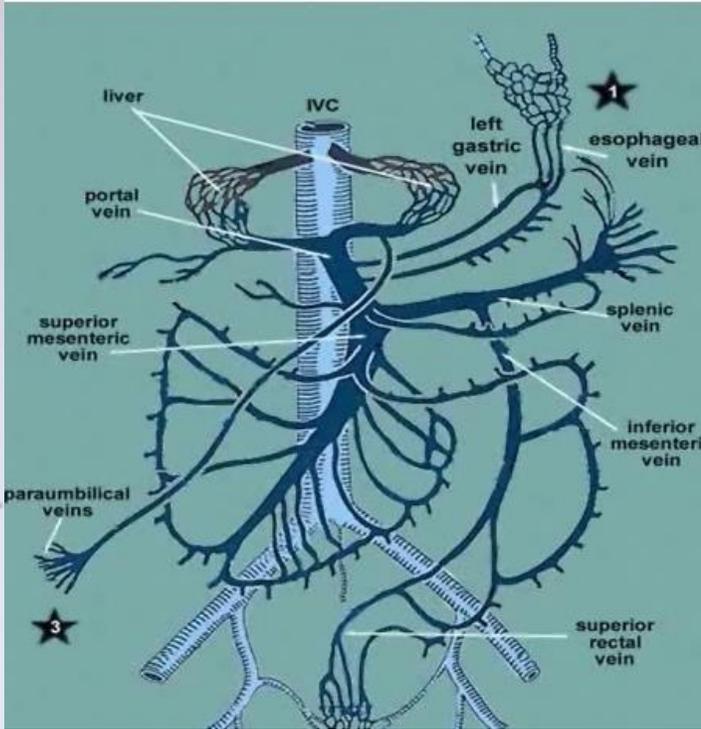
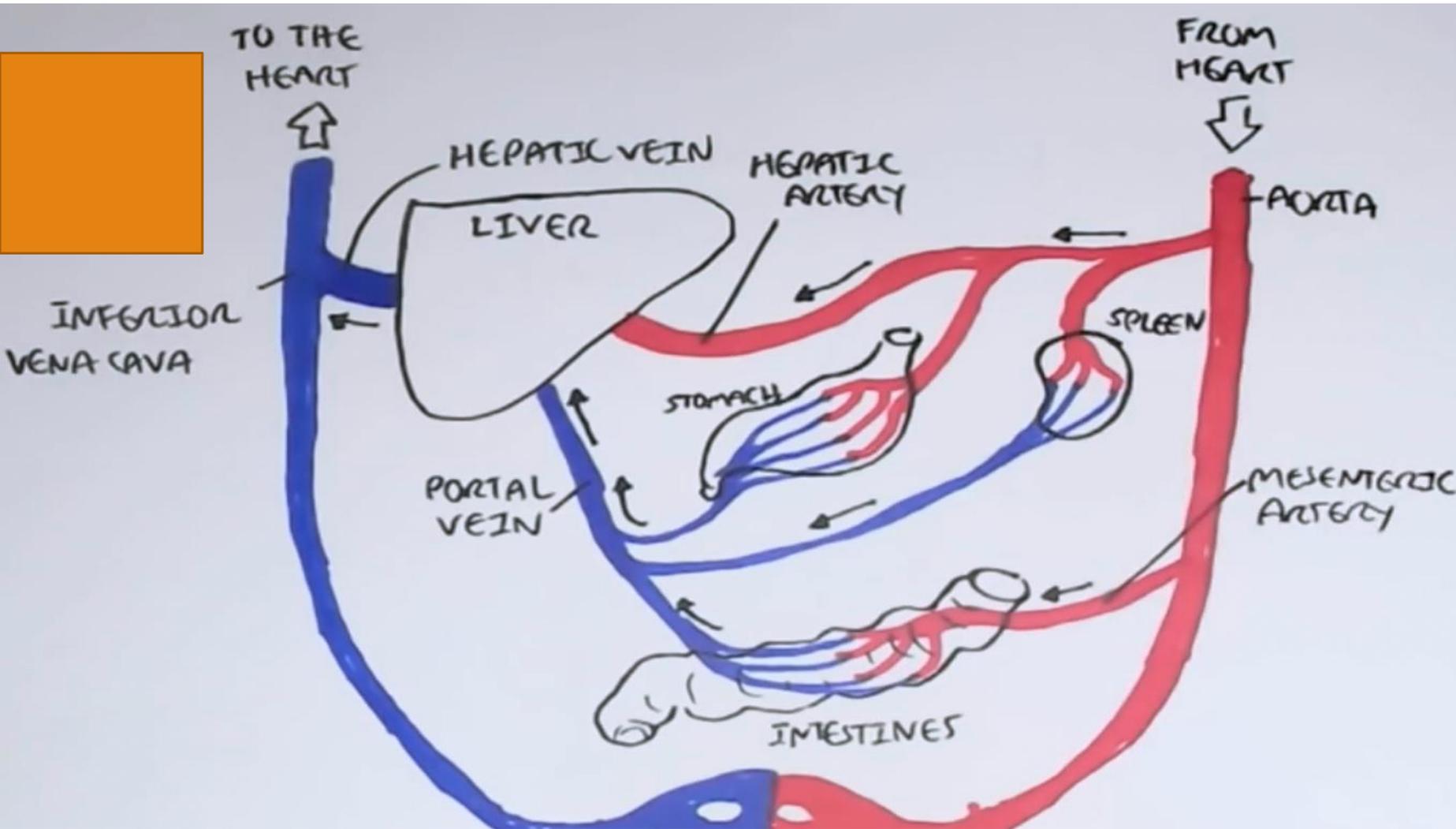


Figure 6-4 Inferior view of the visceral surface of the liver.

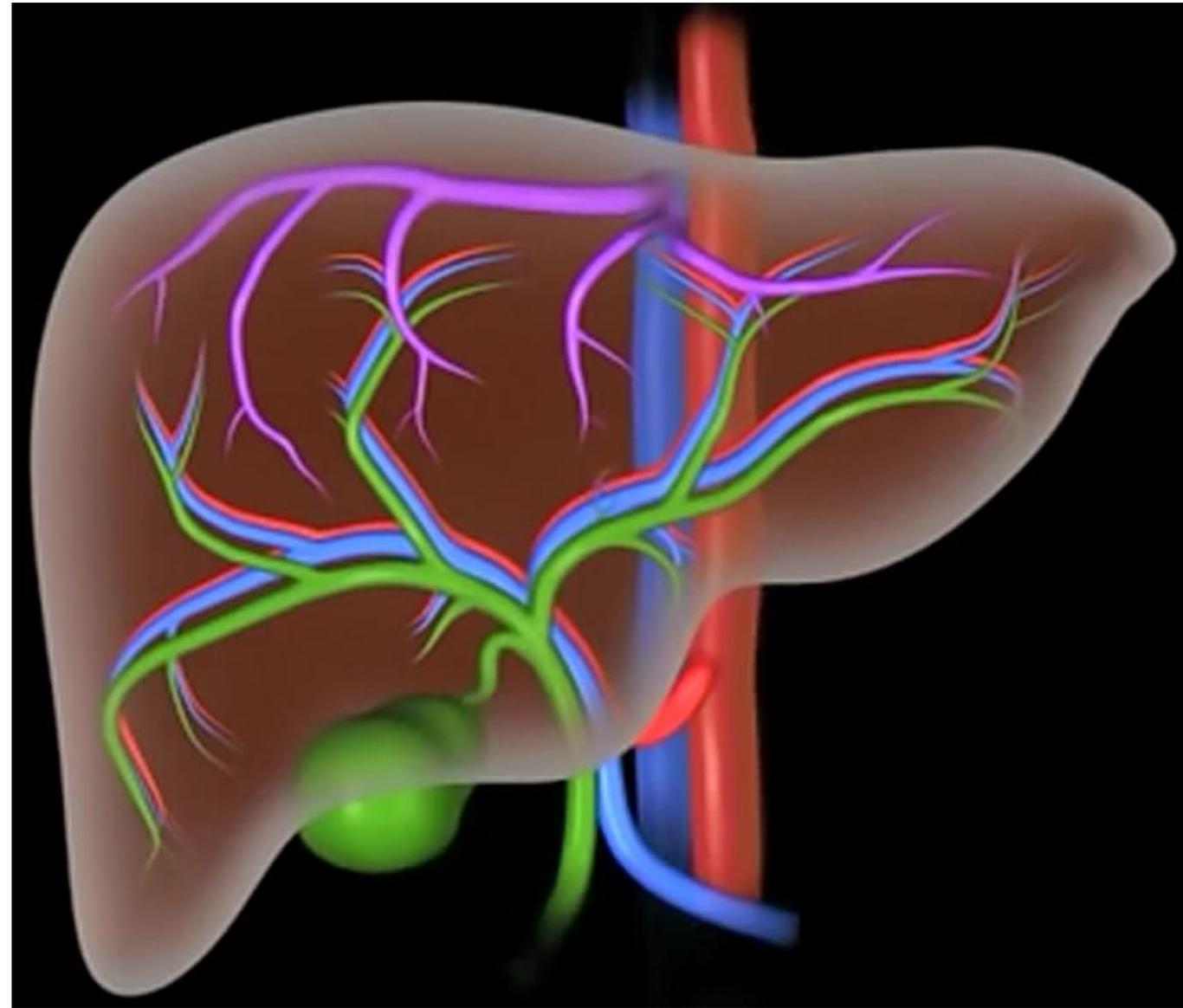
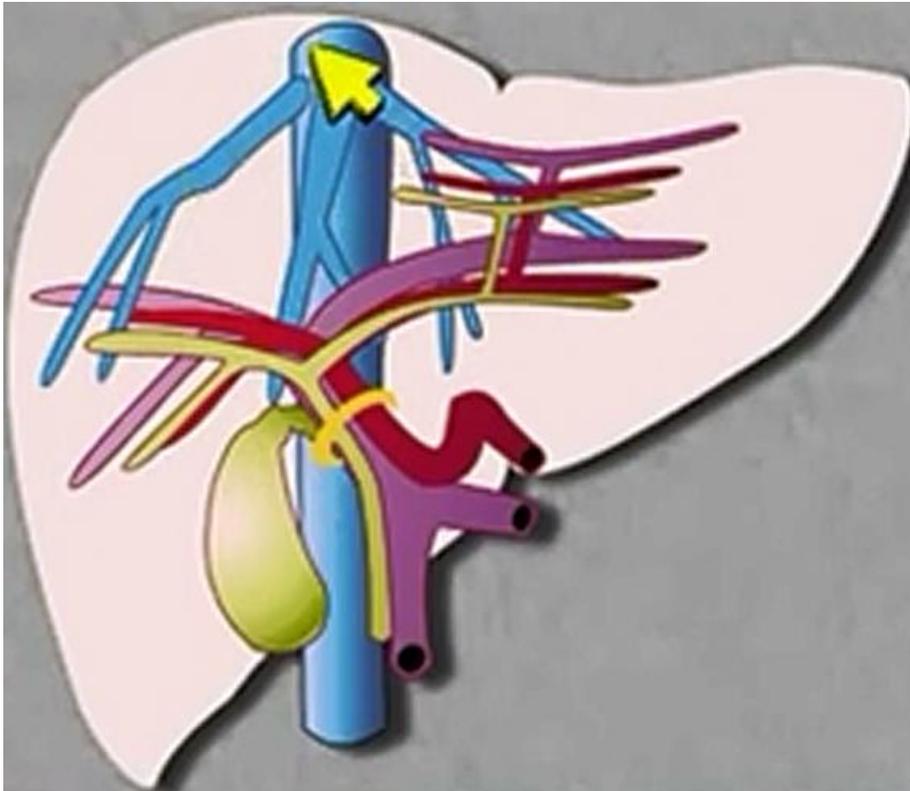
La superficie inferiore e posteriore del fegato è improntata da tre fosse principali:

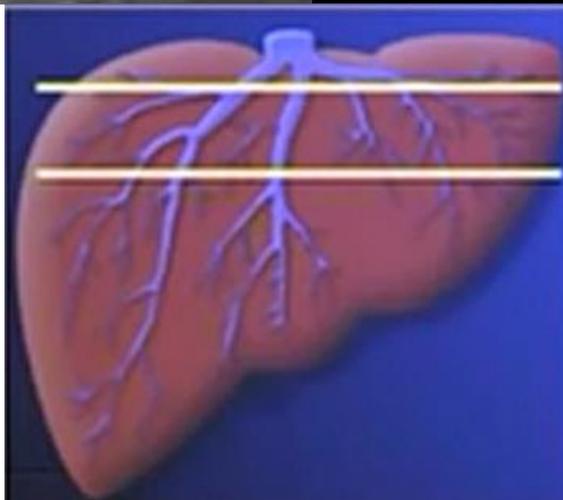
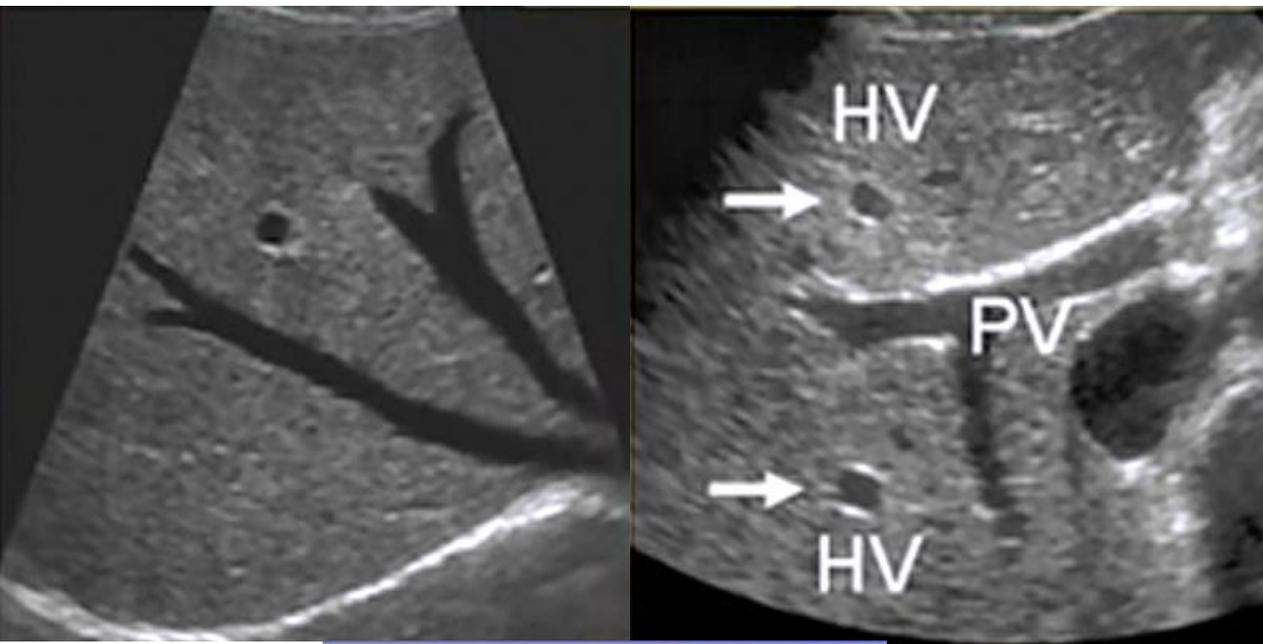
- L'ilo epatico (porta hepatis)
- La fossa della colecisti
- La fossa della vena cava inferiore





LA DESCRIZIONE DEI SEGMENTI EPATICI E'
BASATA SULLE DIRAMAZIONI EPATICHE E
PORTALI





VENE SOVRAEPATICHE

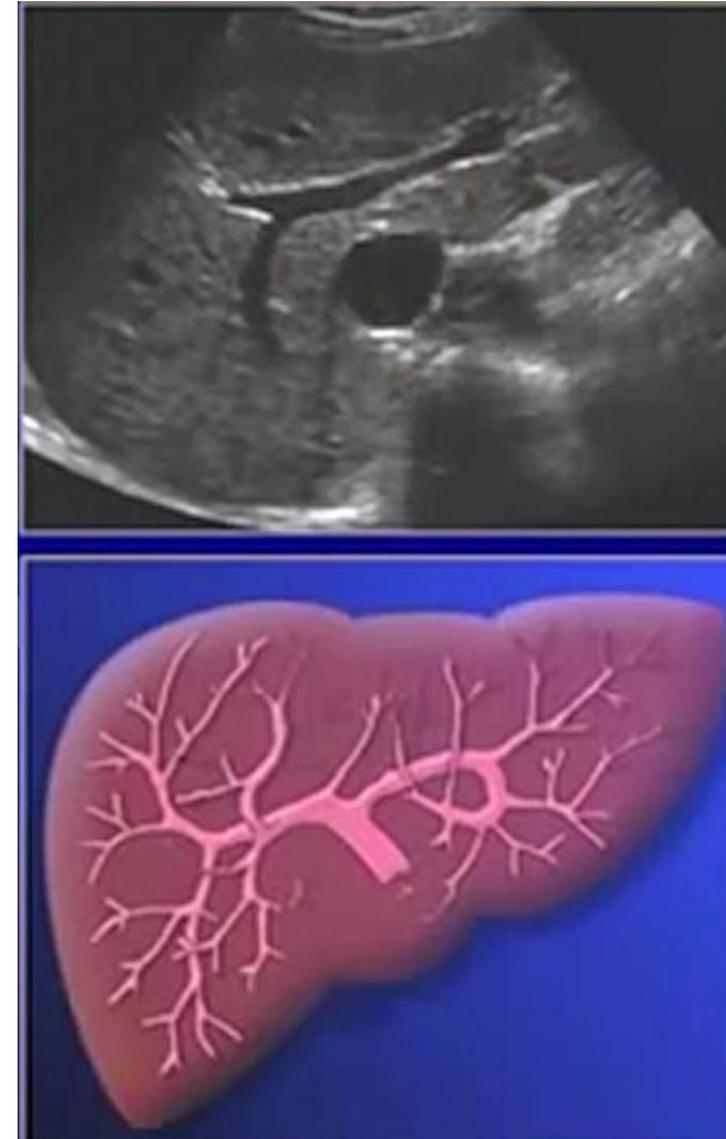
CONTORNO DI SOLITO NON VISUALIZZABILE
ORIENTAMENTO MAGGIORMENTE VERTICALE RISPETTO AI RAMI PORTALI
CONFIGURAZIONE «AD OMBRELLO»
SLARGAMENTO PROGRESSIVO IN DIREZIONE DELLA IVC
FLUSSO CENTRIPETO DAL FEGATO
USATO COME REPERE ANATOMICO PER LA DIVISIONE IN SEGMENTI DEL FEGATO

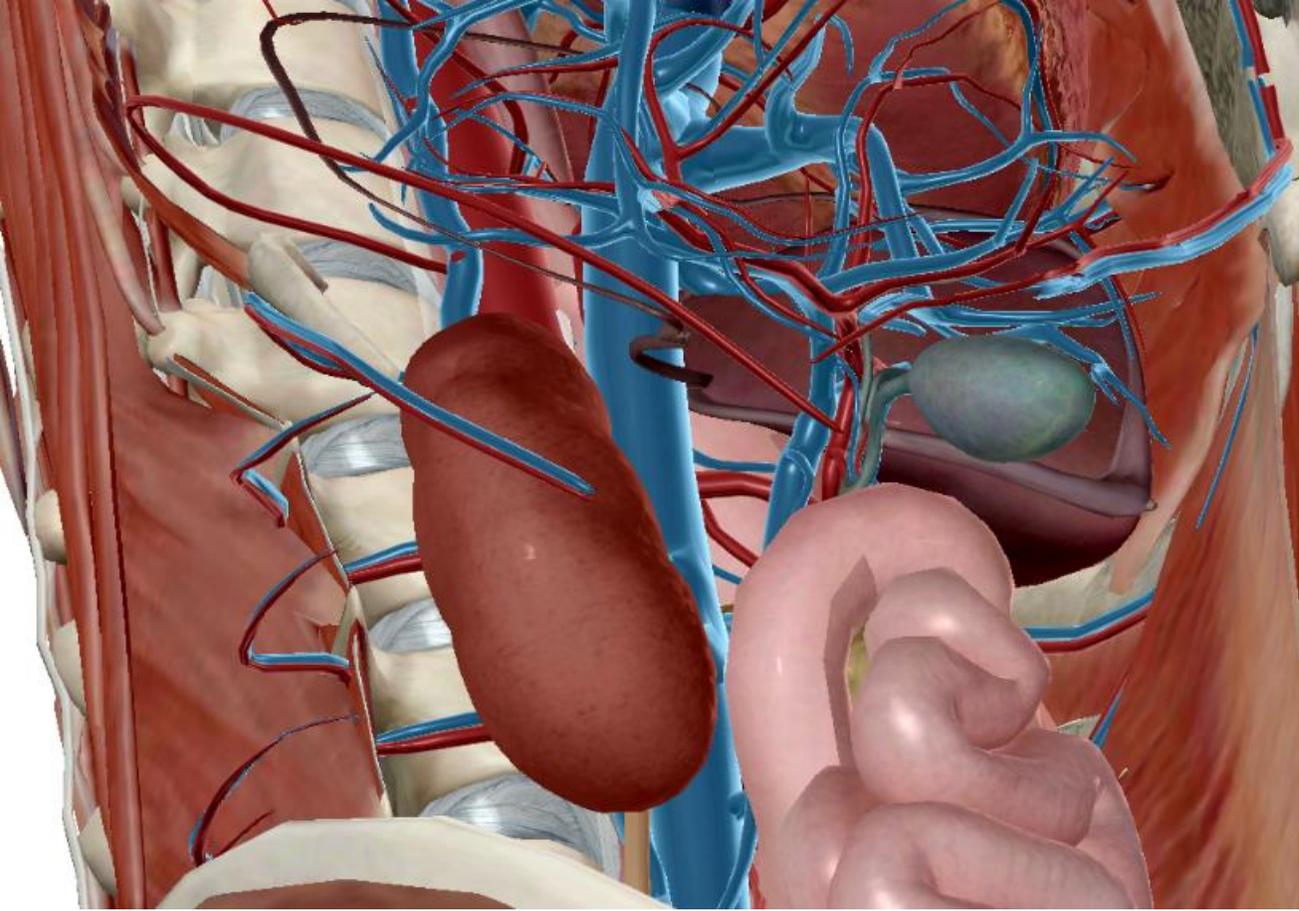
VENA PORTA

Pareti iperecogene, a differenza delle vene sovraepatiche per la presenza di tessuto connettivo

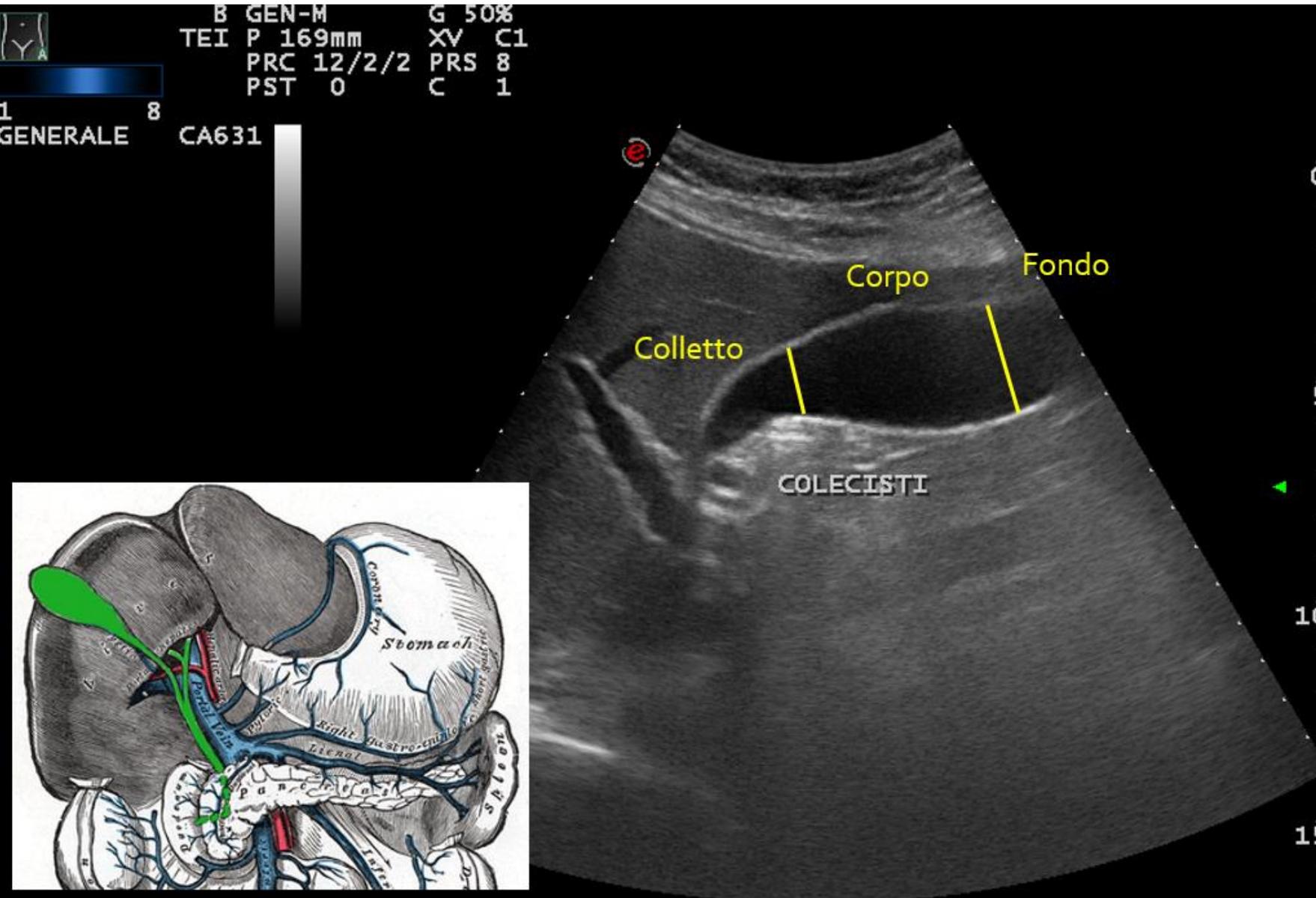
Il tronco portale principale penetra nel fegato attraverso l'ilo epatico, e si divide in due rami, destro e sinistro,, nella parte centrale del fegato

L'asse prevalente delle diramazioni portali è orizzontale





COLECISTI E VIE BILIARI



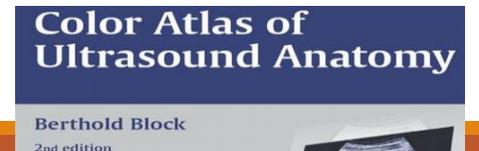
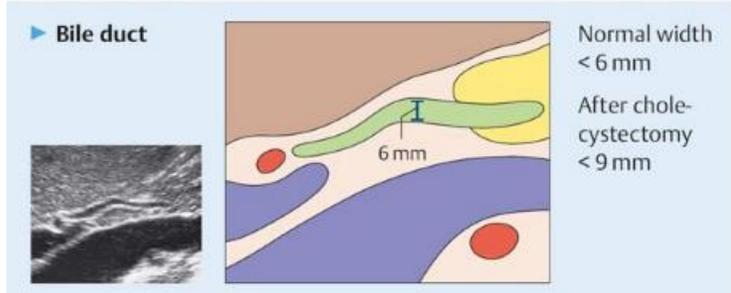
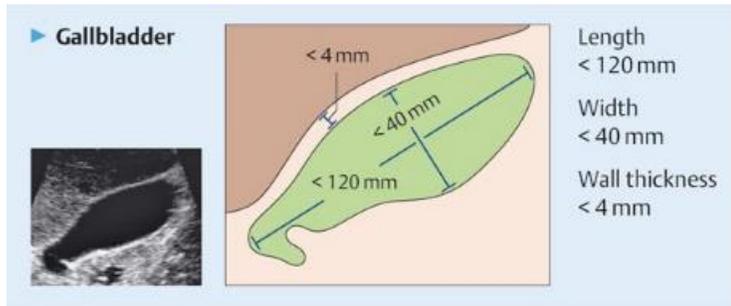
LE DIMENSIONI MASSIME DI UNA COLECISTI SONO:

DIAMETRO TRASVERSO < 4 CM

DIAMETRO LONGITUDINALE < 10 CM

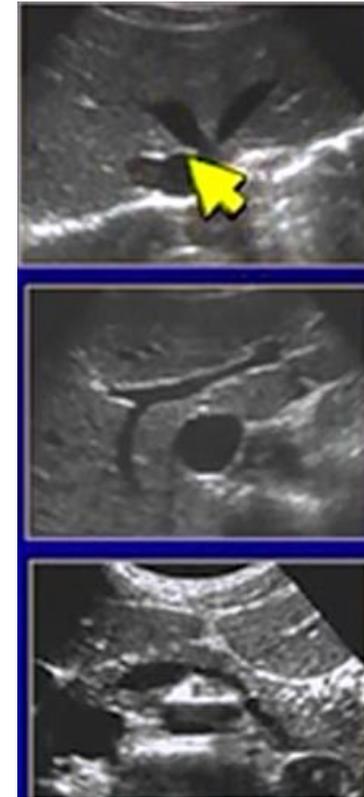
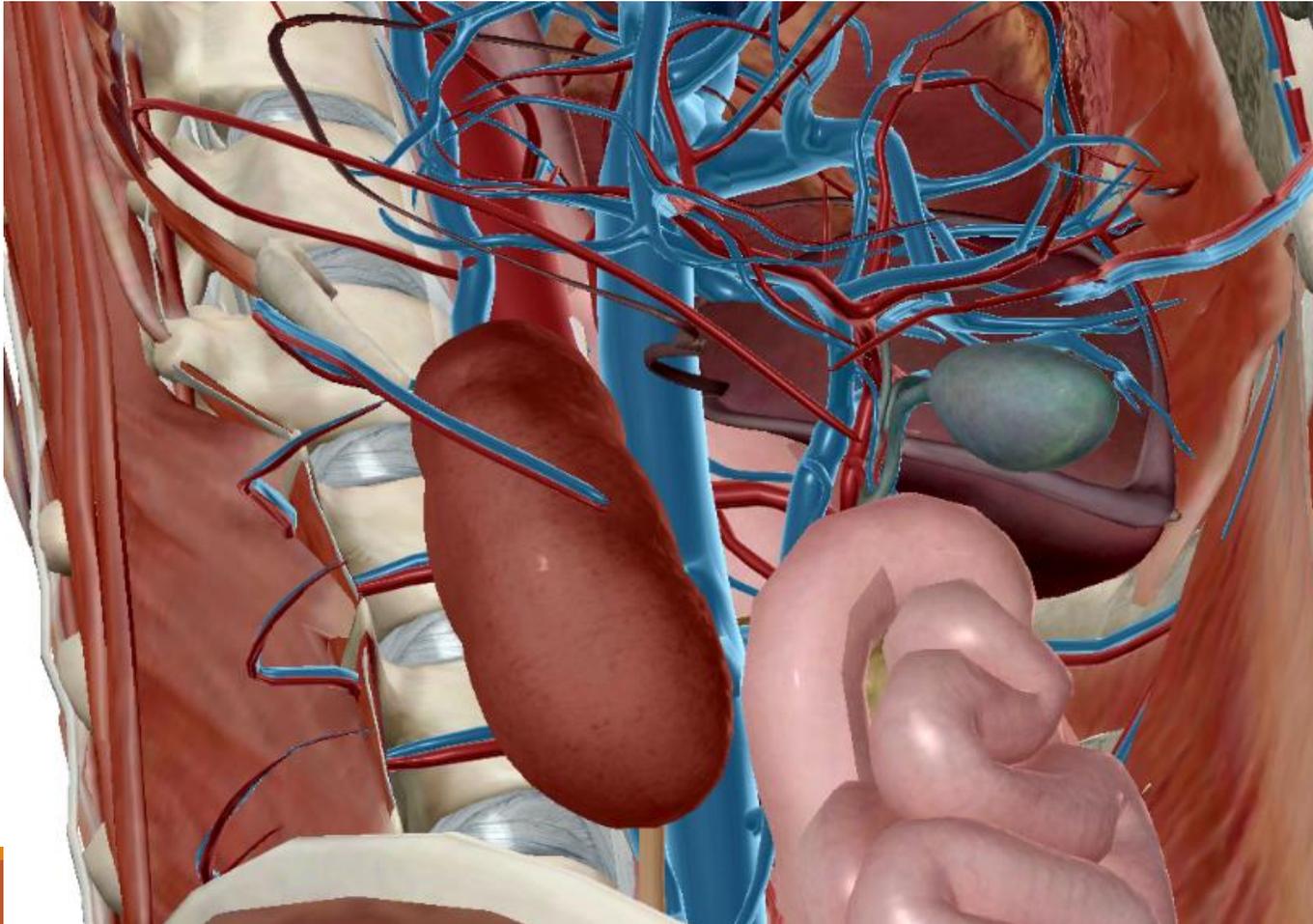
SPESSORE PARETE < 3 MM.

COLEDOCO < 6 MM.



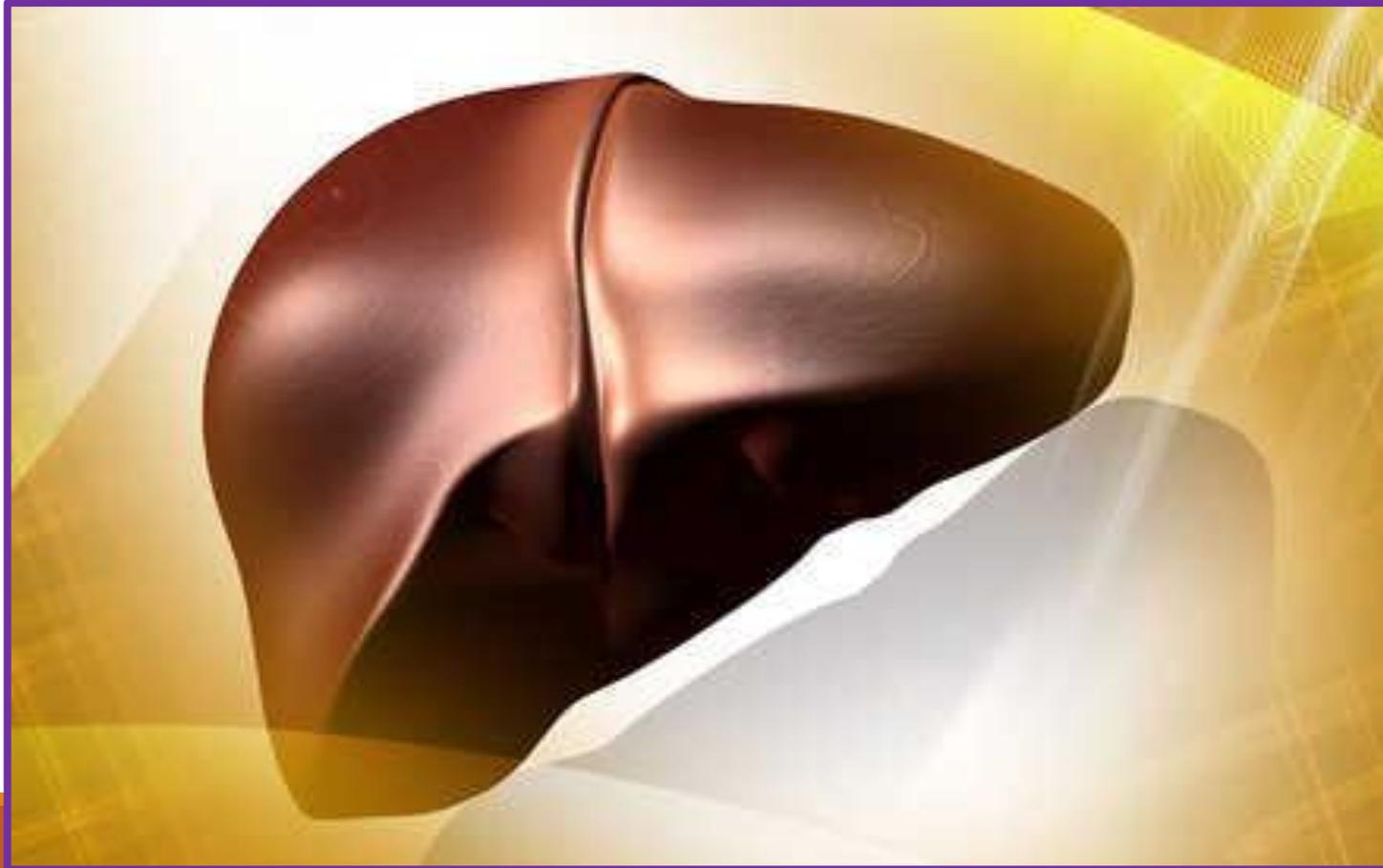
Scansioni oblique sottocostali-trasversali

- Superiore: vene sovraepatiche che confluiscono nella IVC (ad ombrello)
- Medio: diramazione orizzontale (ramo destro e sinistro) della vena porta
- No vene. Legamento falciforme, ligamentum teres, colecisti



SUDDIVISIONE FUNZIONALE O CHIRURGICA

Il fegato è diviso in **2 lobi** e
8 segmenti :



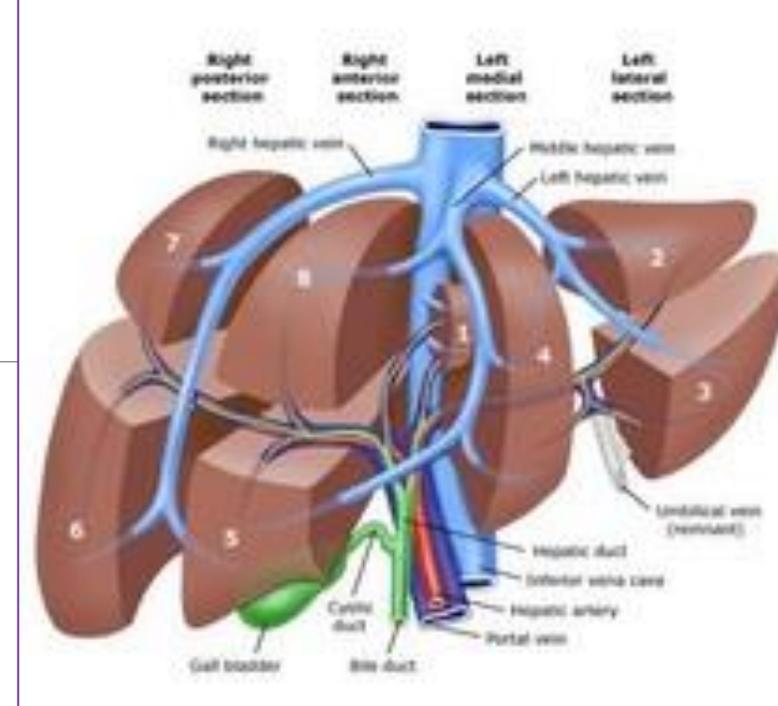
SEGMENTI EPATICI

IL LOBO CAUDATO (S1) E' SEPARATO DAL SECONDO DAL LIGAMENTUM VENOSUM

S2 ED S3 SONO COMPRESI TRA LIGAMENTUM VENOSO E LEGAMENTO FALCIFORME. S2 (POST-LAT) E' SEPARATO DA S1 DAL LIGAMENTUM VENOSUM E DA S3 DALLA VENA SOVRAEPATICA SINISTRA

S3 (ANTER.) E' SEPARATO DA S4 DAL LEGAMENTO FALCIFORME

S4 (LOBO QUADRATO, ANTER.) E' SEPARATO DA S5 ED S8 DALLA COLECISTI E DALLA VENA SOVRAEPATICA MEDIA



S5 ED S8 SONO SEPARATI DA S6 ED S7 DALLA VENA SOVRAEPATICA DESTRA . S5 ED S8 SONO DIVISI DAL RAMO DESTRO DELLA VENA PORTA.

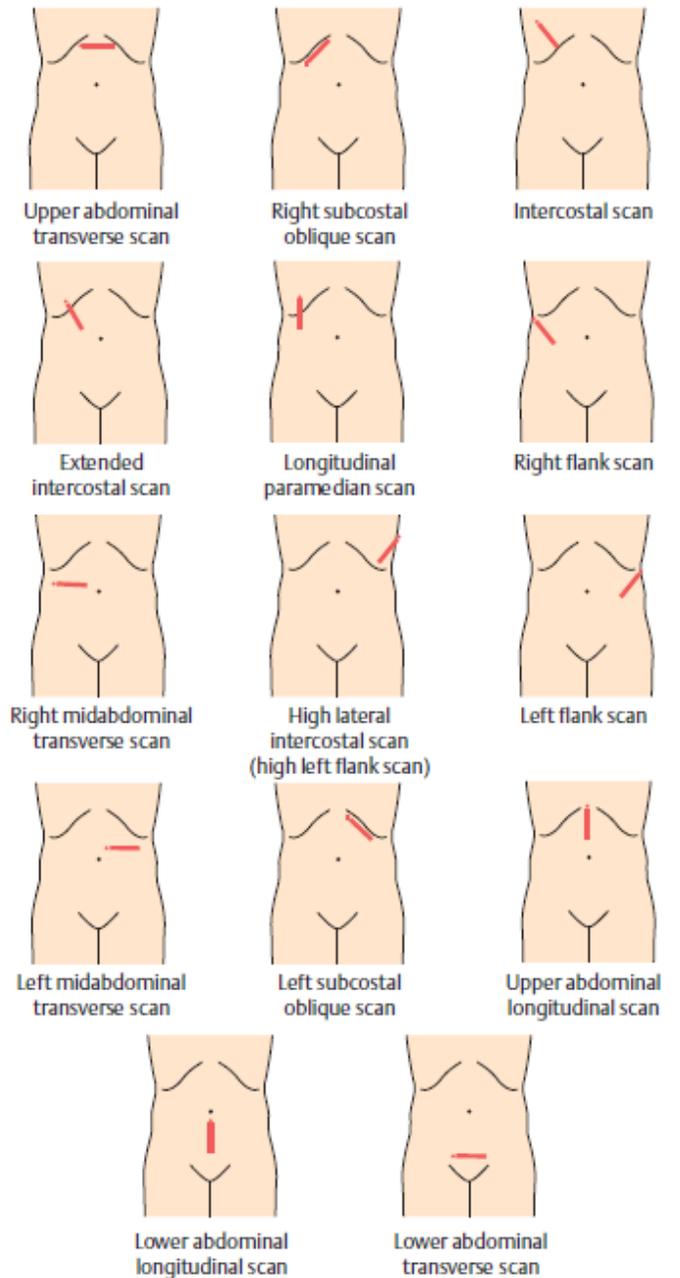
S6 ED S7 ENTRANO IN CONTATTO CON IL RENE DESTRO ED IL DIAFRAMMA

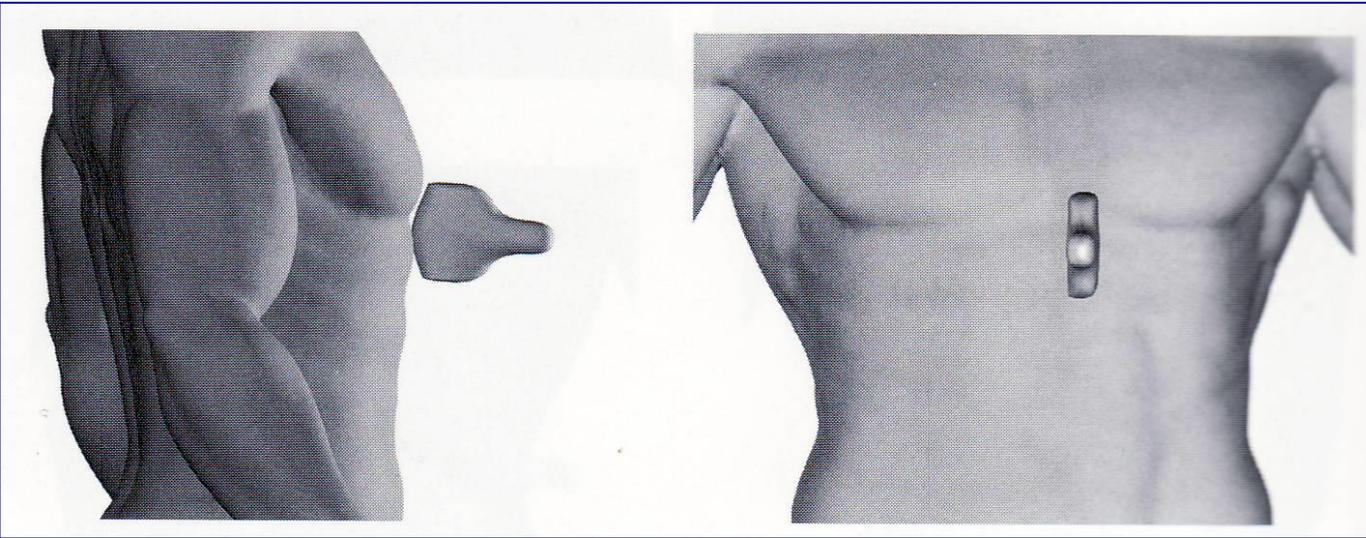
Le scansioni comunemente più

utilizzate sono:

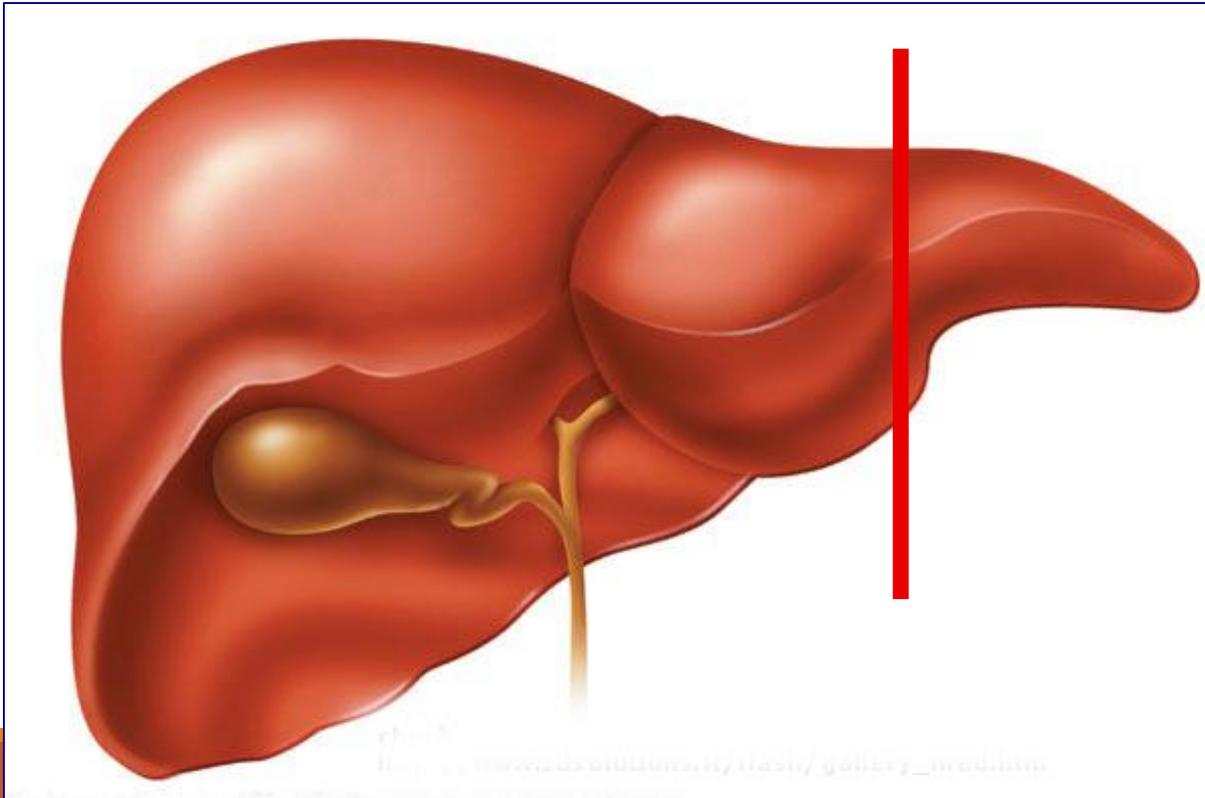
- le longitudinali
- le trasversali
- le oblique sottocostali ascendenti
- intercostali

Vengono utilizzate tutte le scansioni con le varie inclinazioni atte alla migliore visualizzazione della struttura in esame





Scansione
longitudinale
paramediana sx

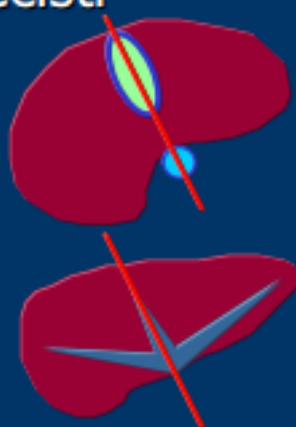


Segmentazione epatica

- Descrizione di Couinaud
- Scissura principale: linea tra colecisti e VCI, piano della VSE media

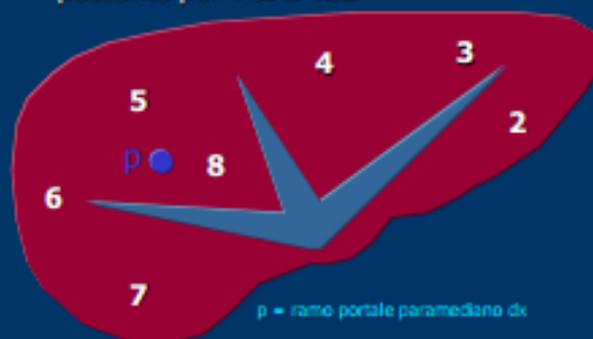


- Lobo caudato: segmento I
- Lobo sn: segmenti: II, III, IV
- Lobo dx: segmenti V, VI, VII, VIII



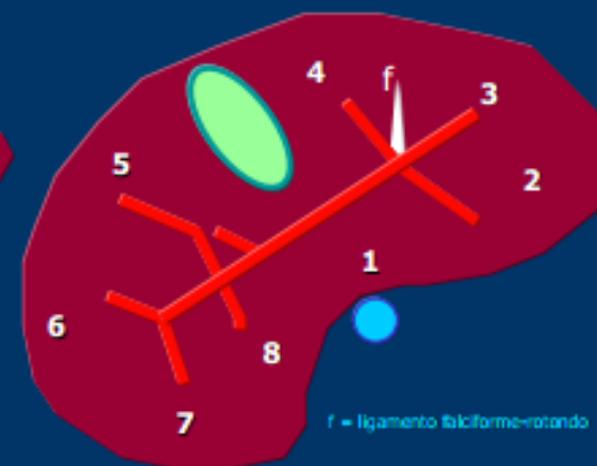
Scansioni US oblique sottocostali ascendenti

- piano alto
- passante per VCI e VSE



p = ramo portale paramediano dx

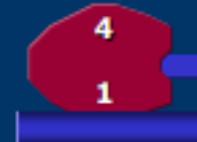
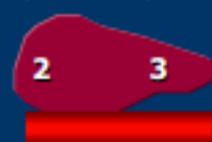
- piano basso
- passante per colecisti e VCI



f = ligamento falciforme-rotondo

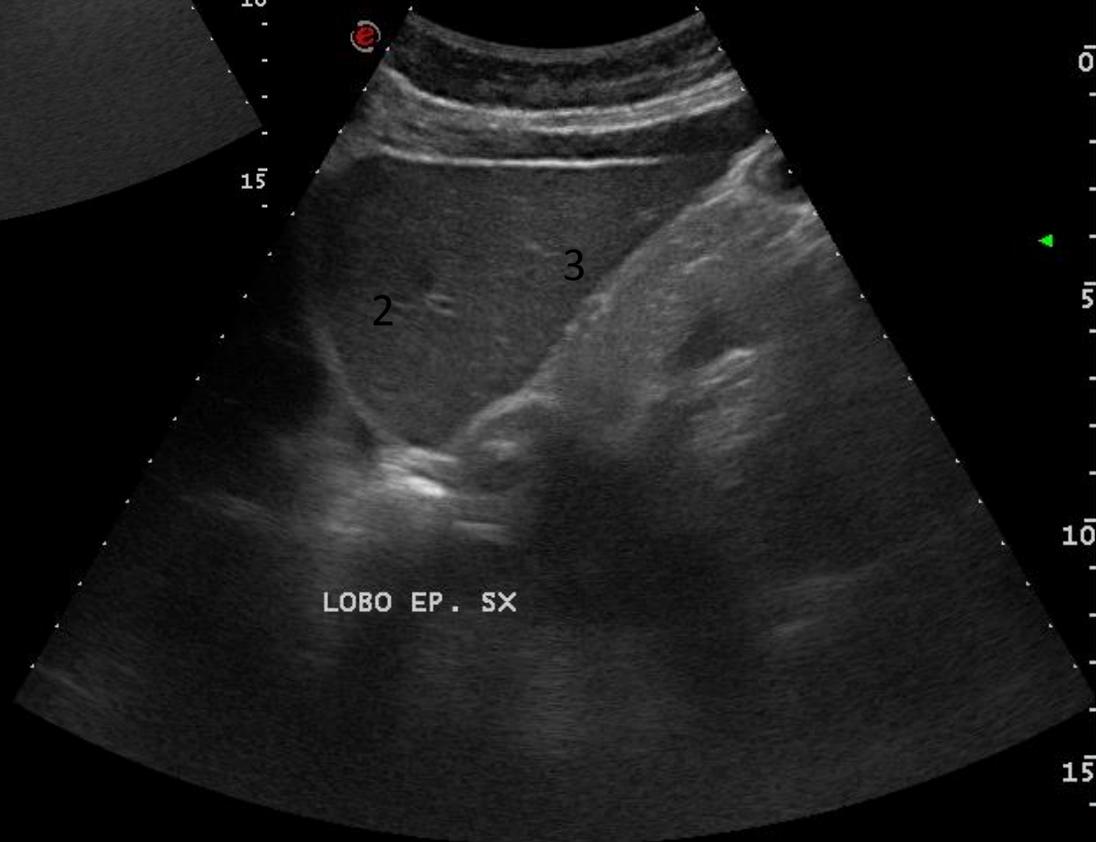
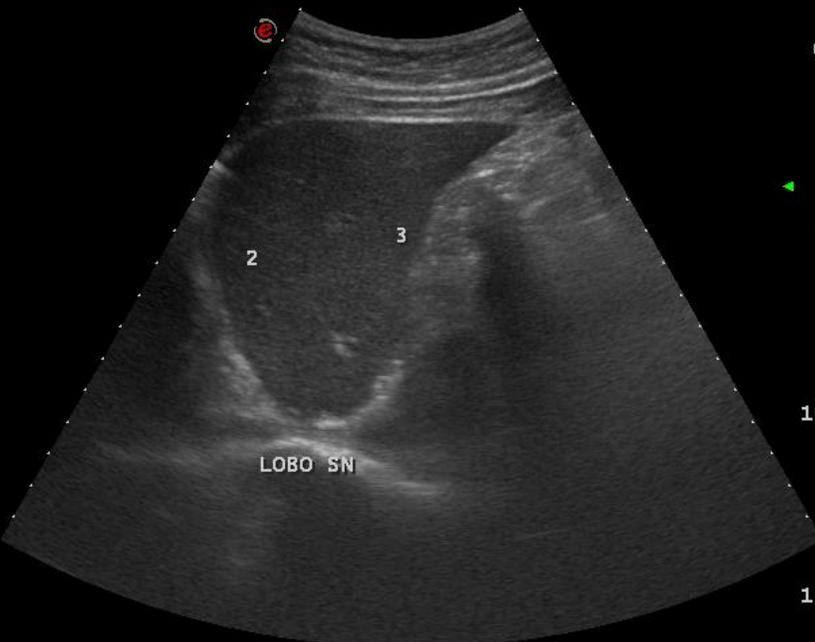
Scansioni US longitudinali

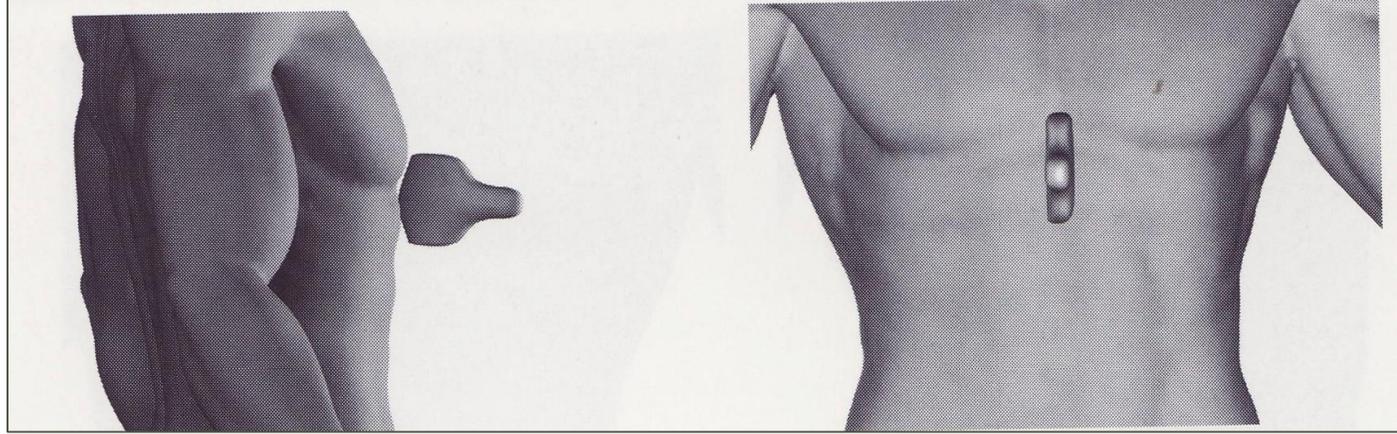
- passante per Aorta
- passante per VCI e VP
- passante per Rene dx
- laterale dx



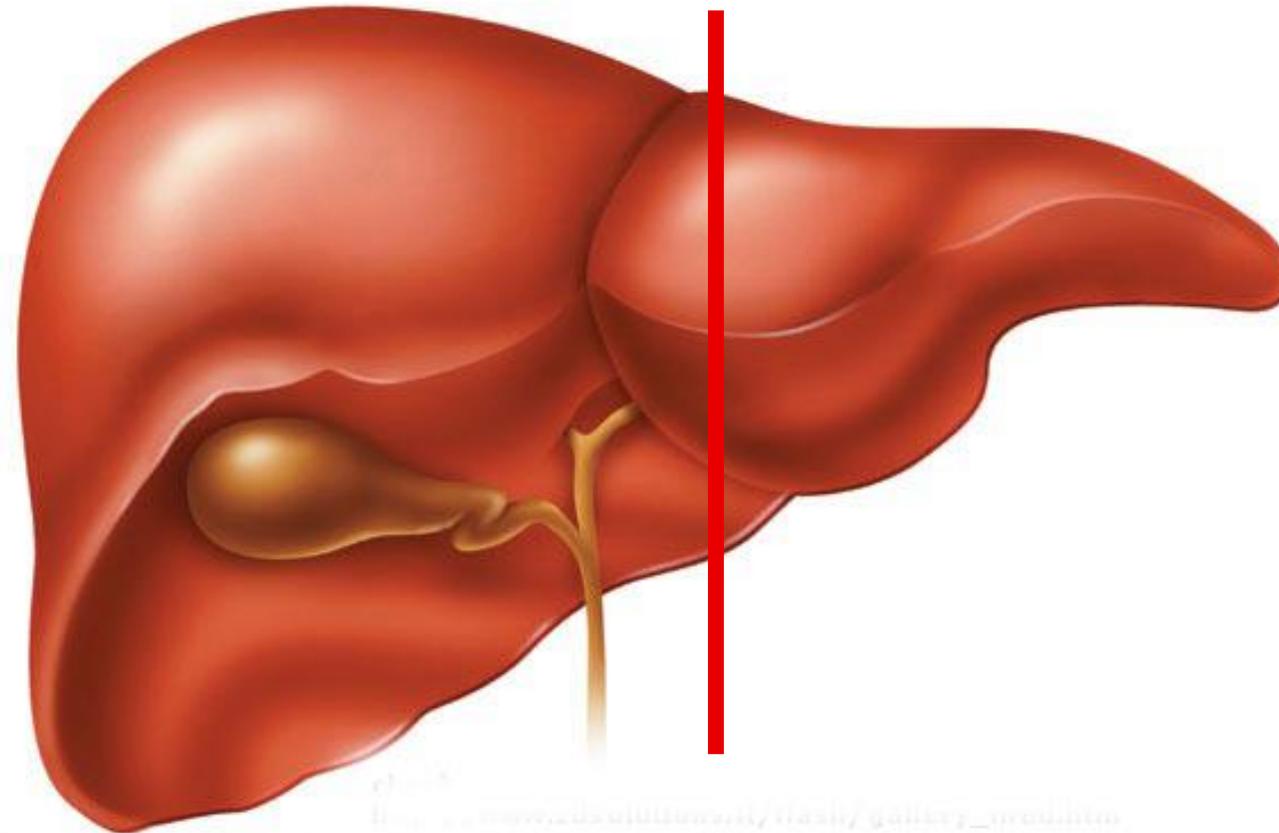
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TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 GENERALE 8 CA631



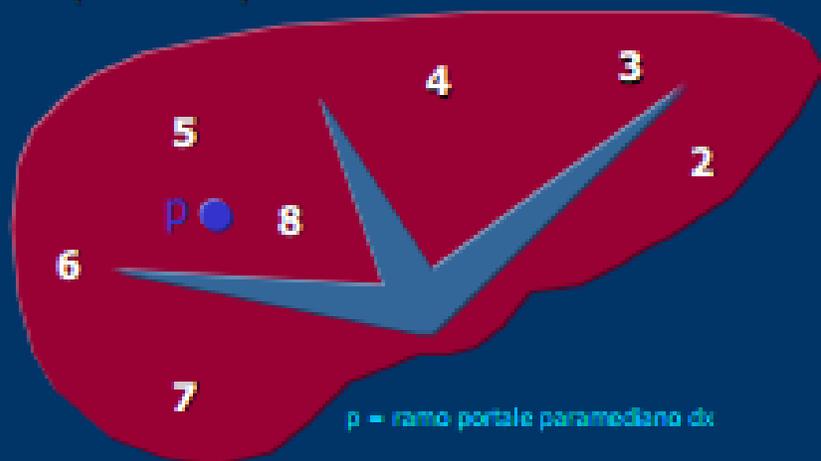


Scansione
longitudinale
mediana

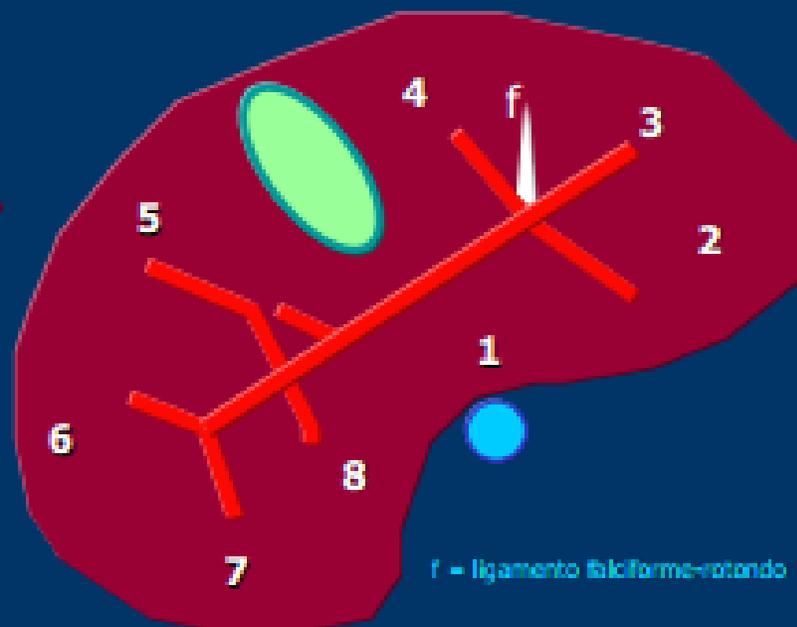


Scansioni US oblique sottocostali ascendenti

- piano alto
- passante per VCI e VSE



- piano basso
- passante per colecisti e VCI



Marcello Romano – Scuola Ecografia SIUMB – Catania

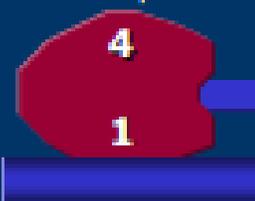
www.medinterna.net

Scansioni US longitudinali

- passante per Aorta



- passante per VCI e VP



- passante per Rene dx



- laterale dx



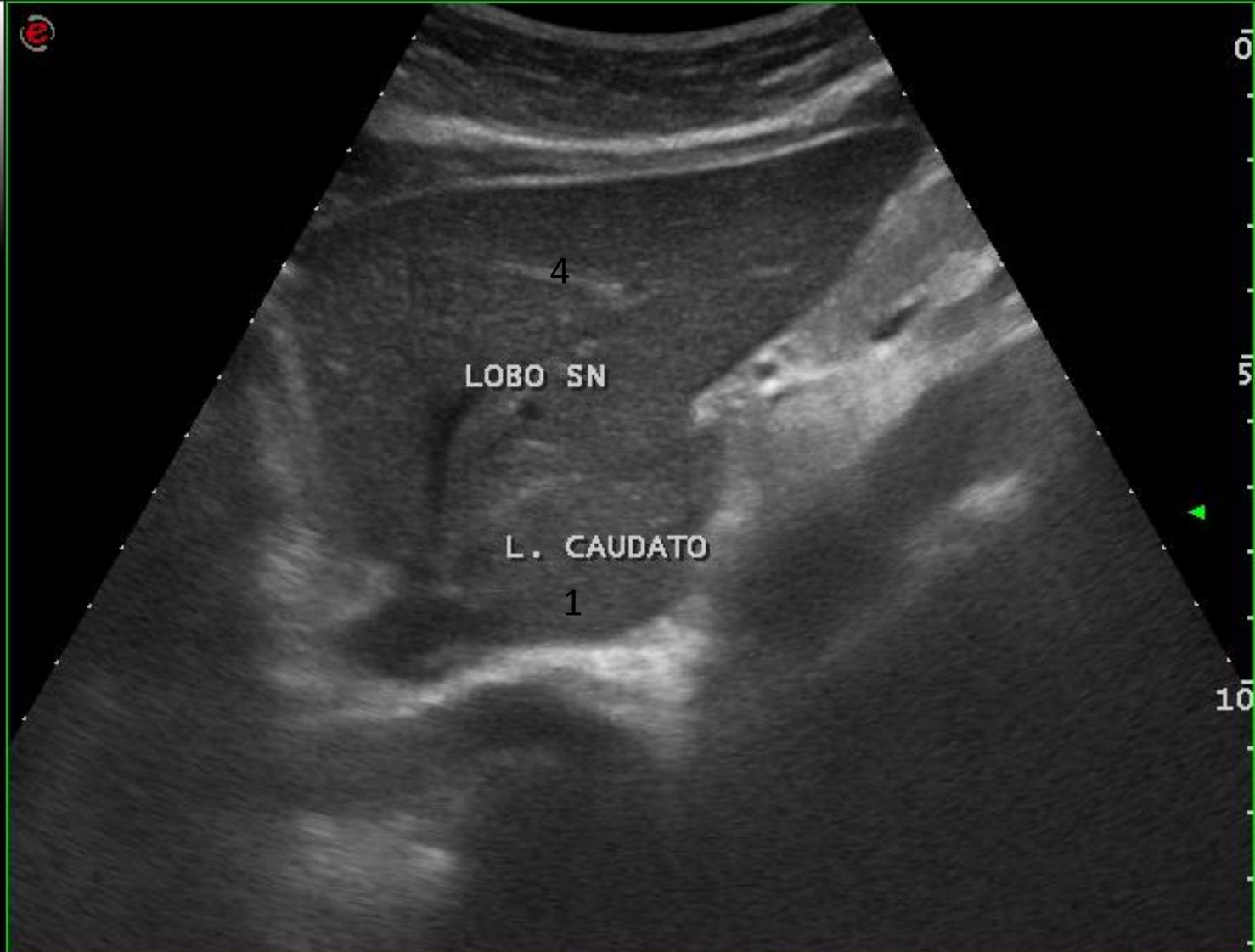
M-----



B GEN-M G 50%
TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 8
GENERALE

CA631



L-----



B GEN-M G 50%
TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 8
GENERALE

CA631



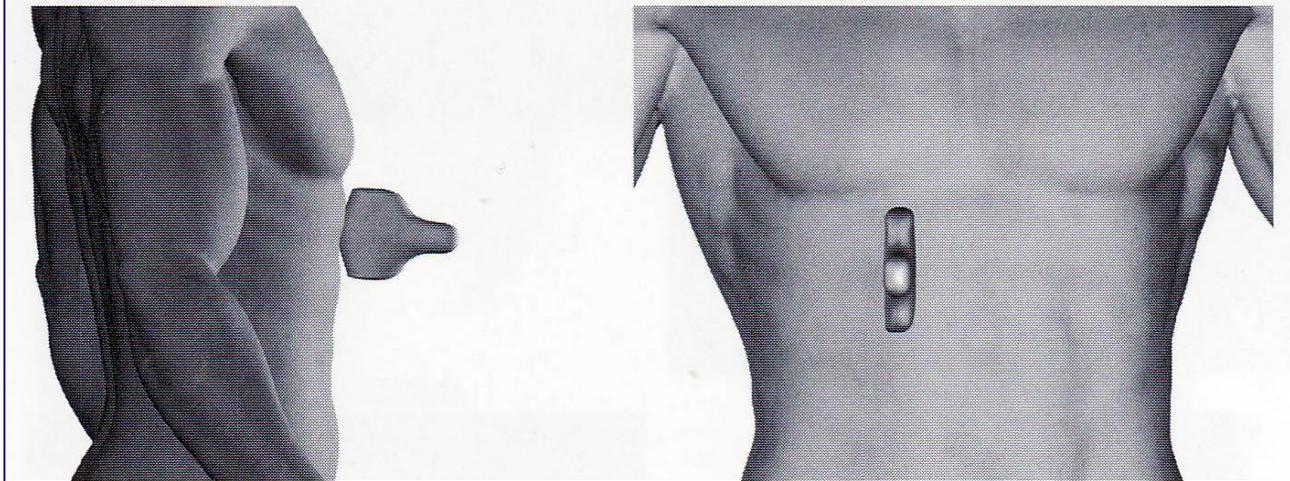
LOBO SN

4

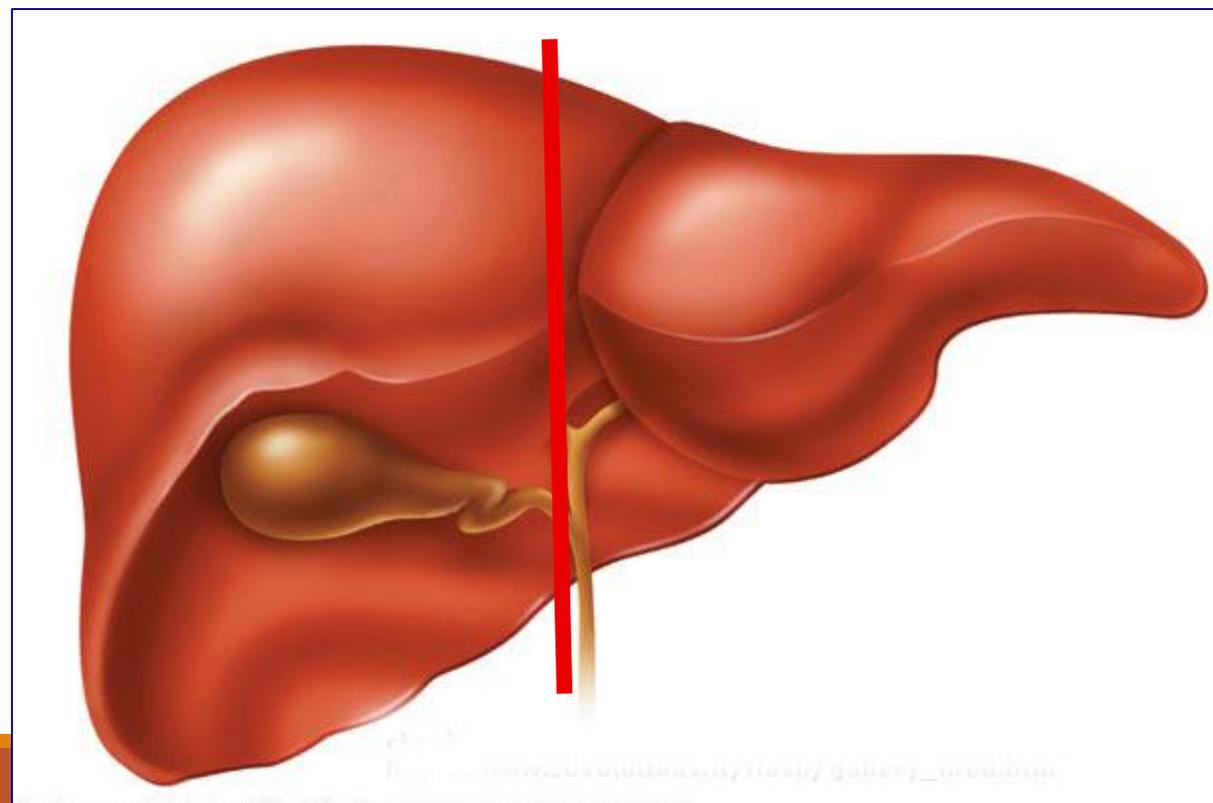
L. CAUDATO

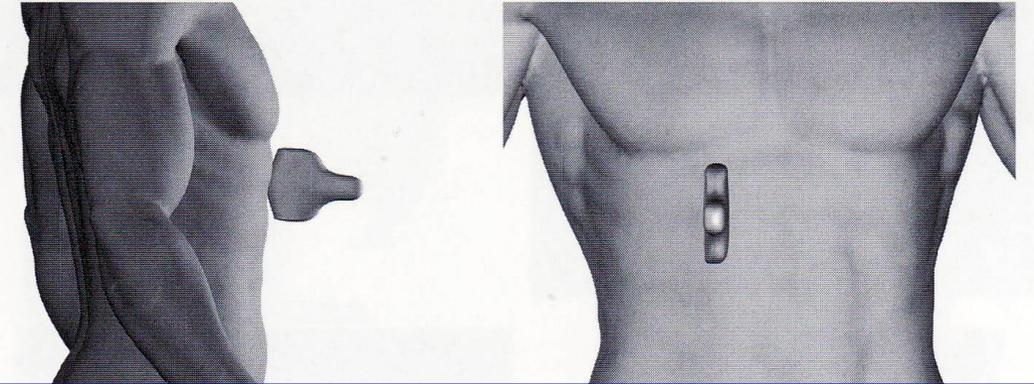
1

0
5
10
15



Scansione
longitudinale
paramediana dx

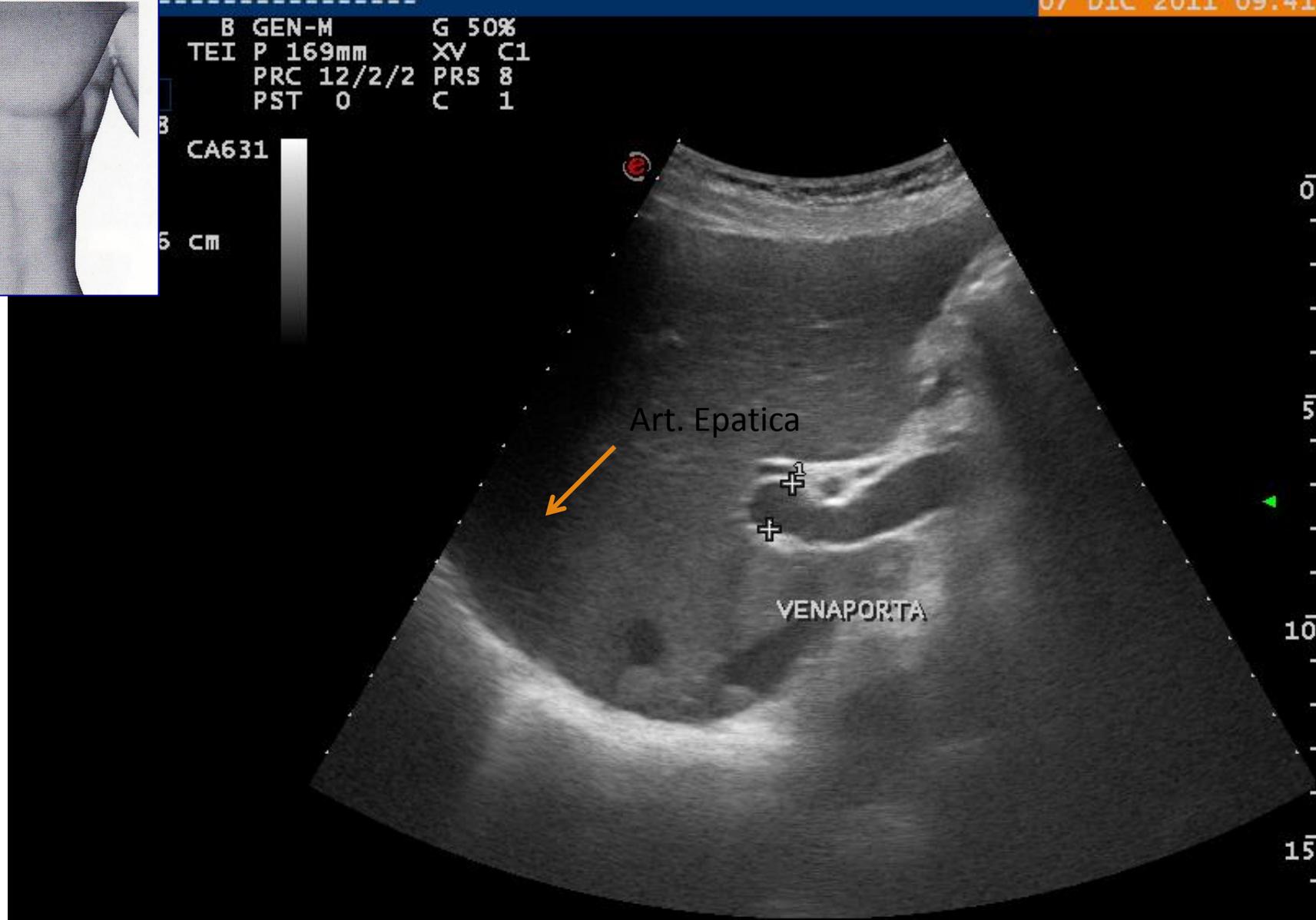
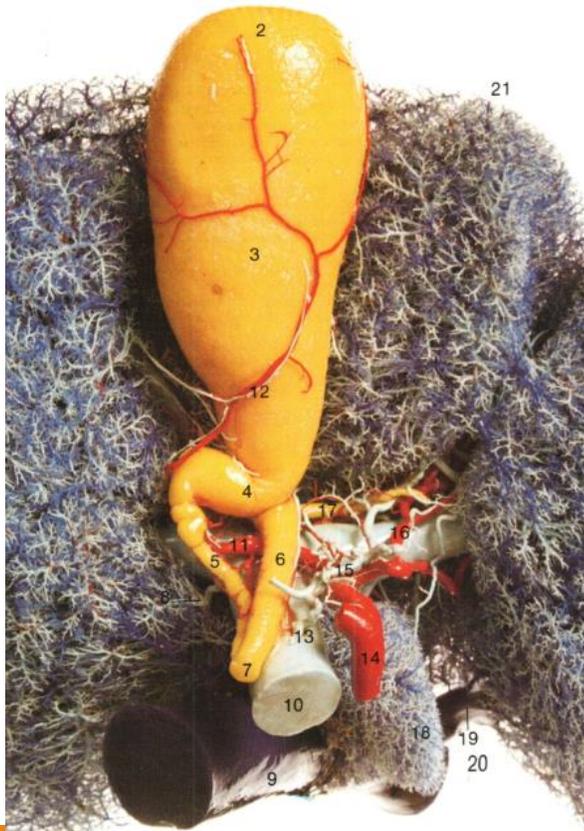




B GEN-M G 50%
TEI P 169mm XV C1
PRC 12/2/2 PRS 8
PST 0 C 1

CA631

5 cm



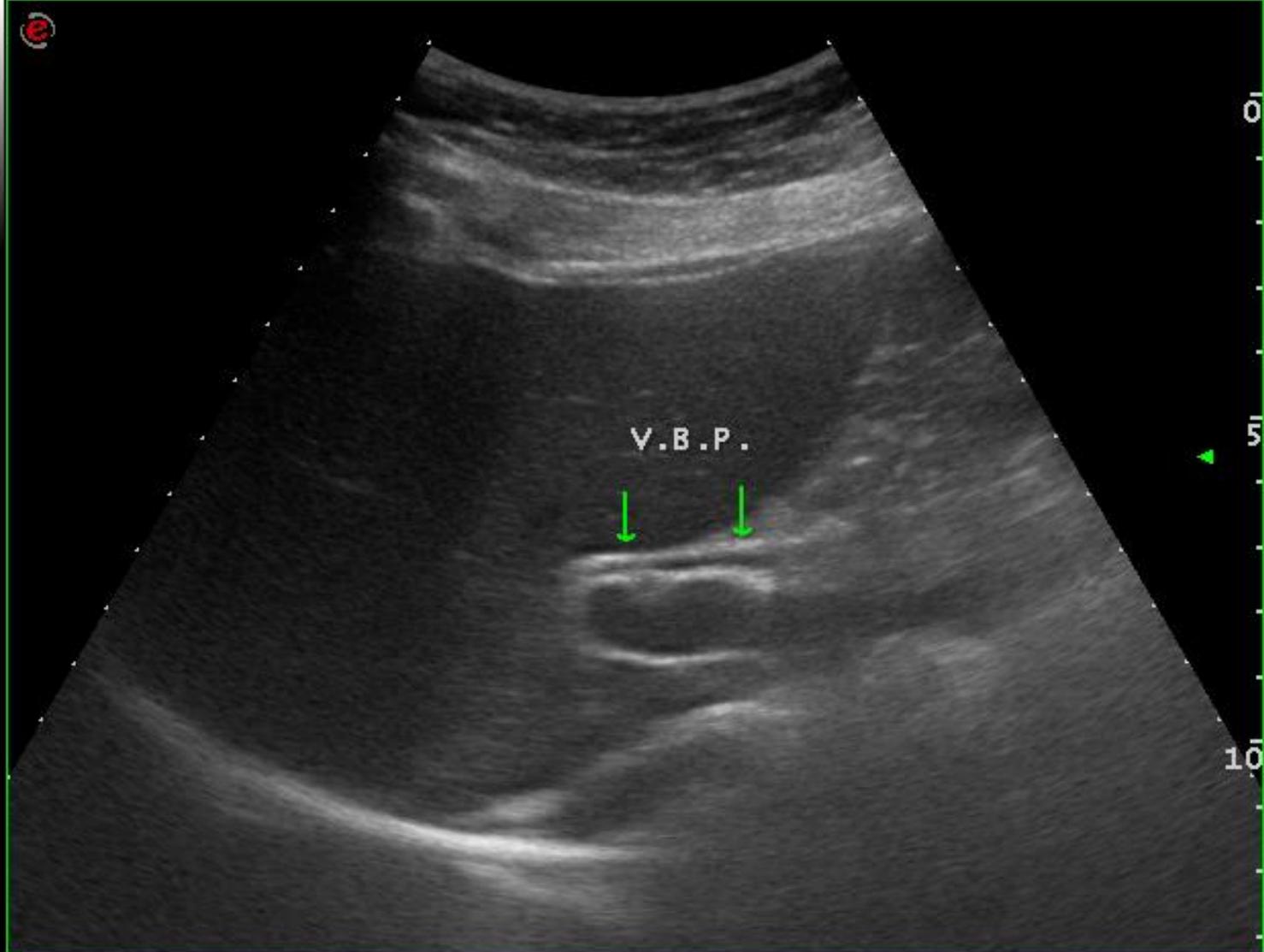
G-----



B	GEN-M	G	50%
TEI	P 169mm	XV	C1
PRC	12/2/1	PRS	2
PST	0	C	1

1 8
GENERALE

CA631



G-----



B GEN-M G 50%
TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 8

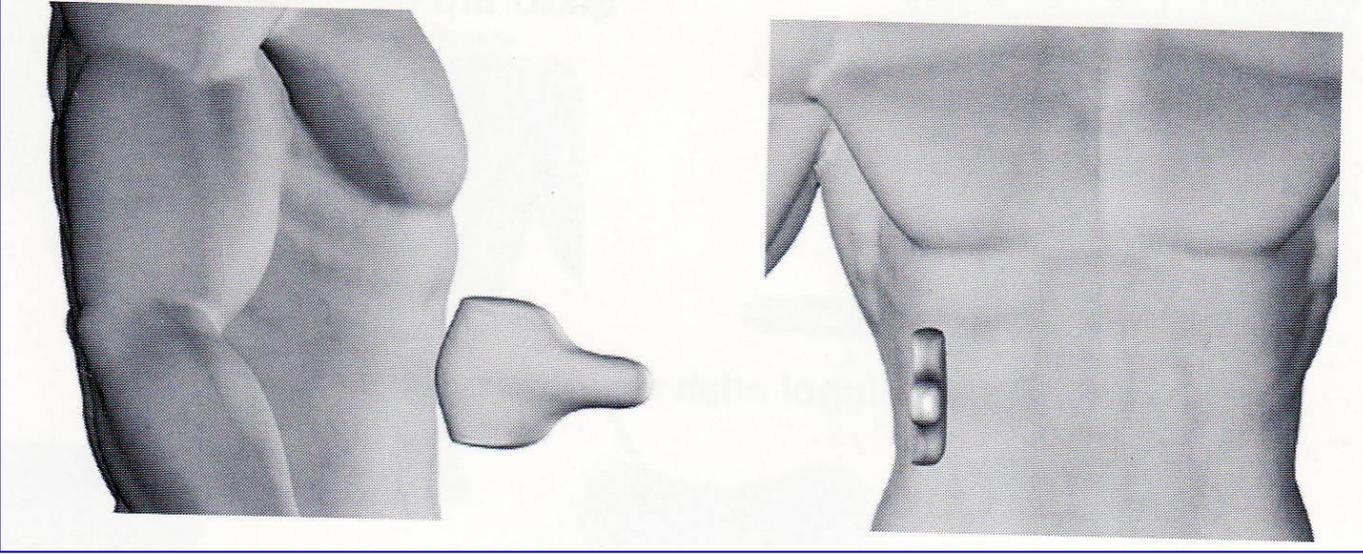
GENERALE

CA631

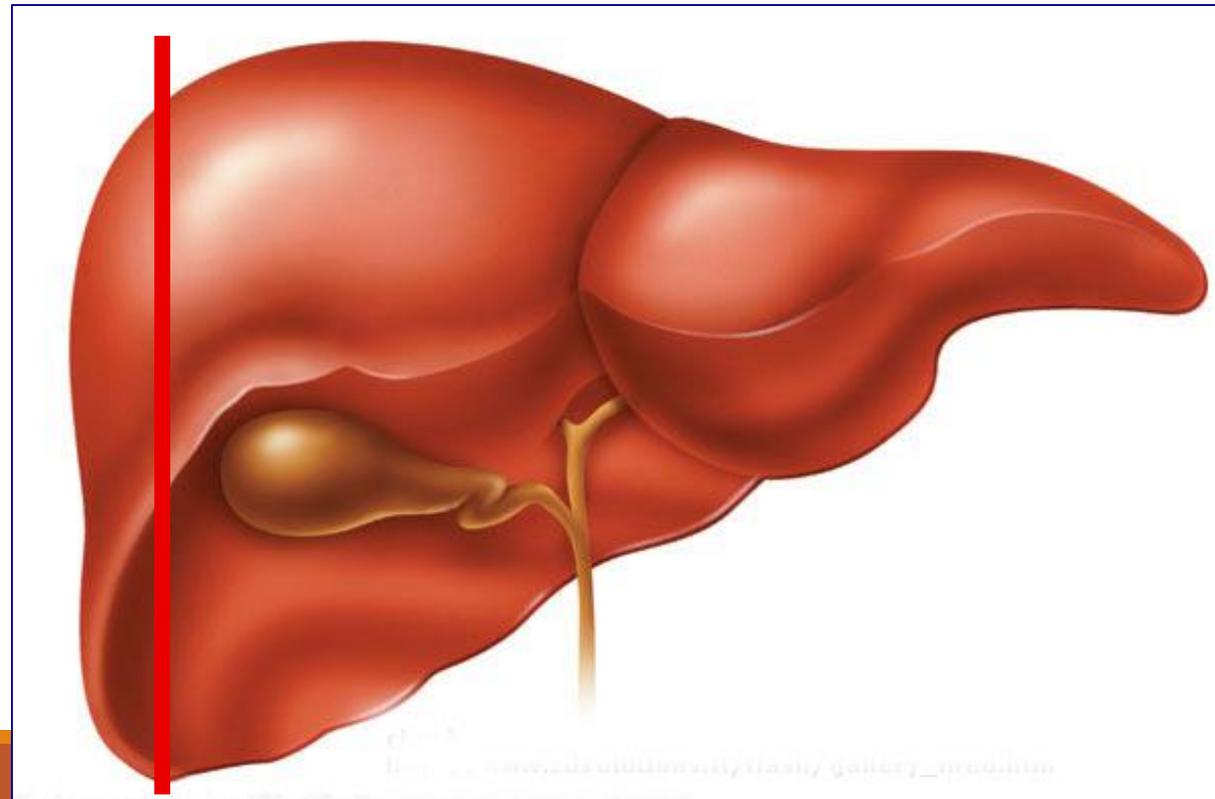
D1 1.08 cm



0
5
10
15

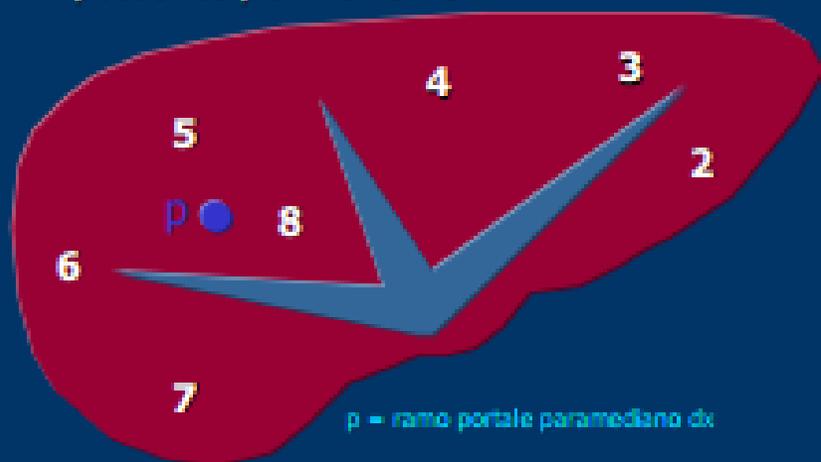


Scansione
longitudinale
laterale dx

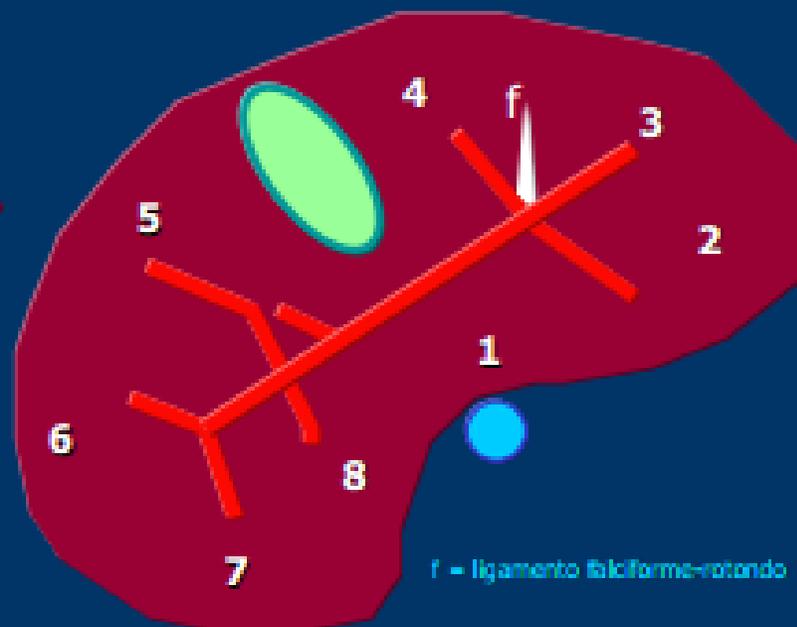


Scansioni US oblique sottocostali ascendenti

- piano alto
- passante per VCI e VSE



- piano basso
- passante per colecisti e VCI



Marcello Romano – Scuola Ecografia SIUMB – Catania

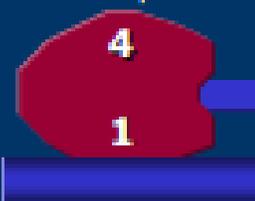
www.medinterna.net

Scansioni US longitudinali

- passante per Aorta



- passante per VCI e VP



- passante per Rene dx



- laterale dx

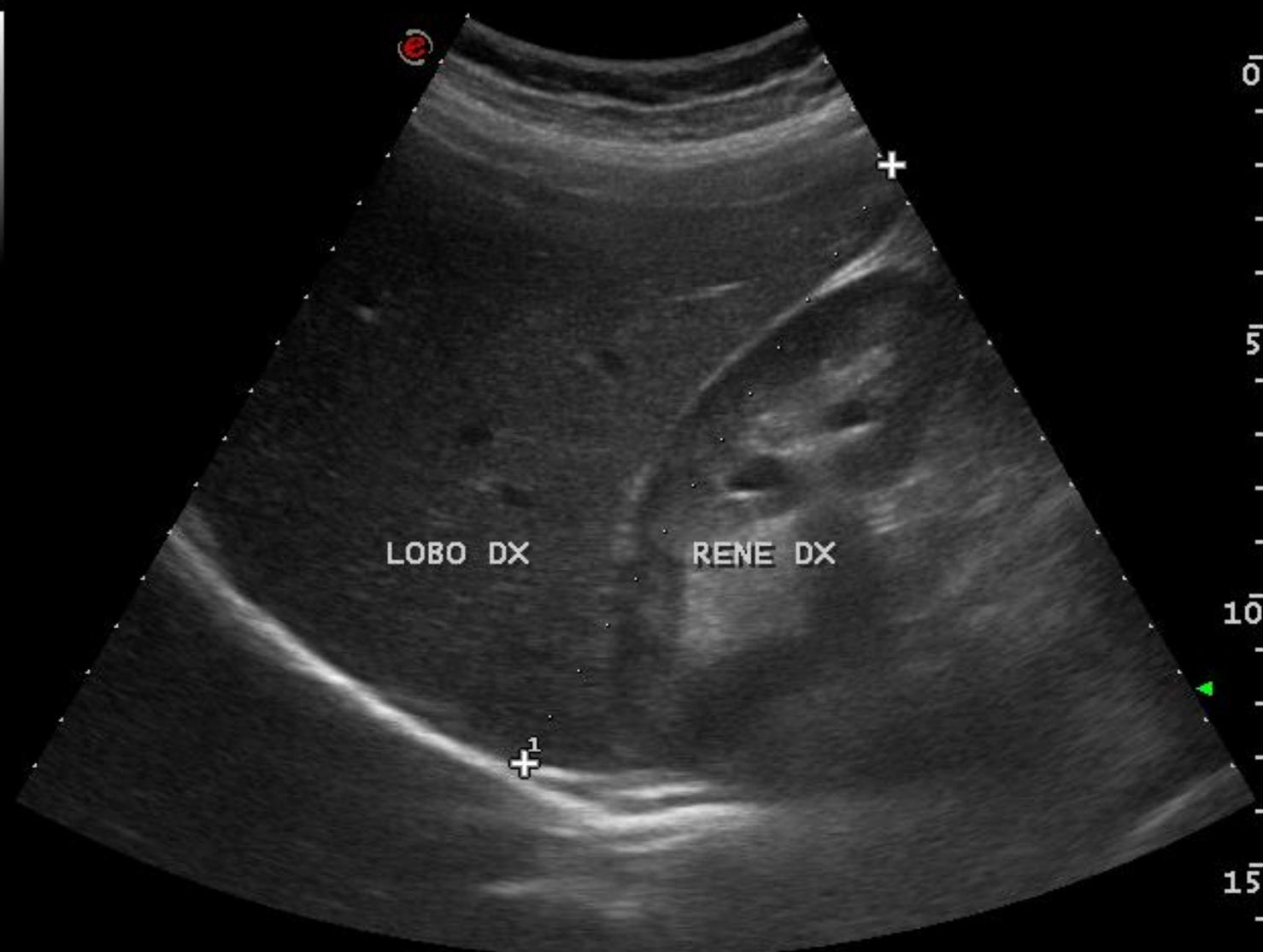




B GEN-M G 50%
TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 8
GENERALE CA631

D1 12.93 cm



LOBO DX

RENE DX

B GEN-M G 50%
 TEI P 169mm XV C1
 PRC 12/2/1 PRS 2
 PST 0 C 1

1 8
GENERALE CA631

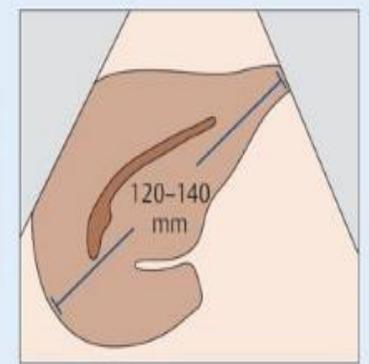
D1 12.24 cm



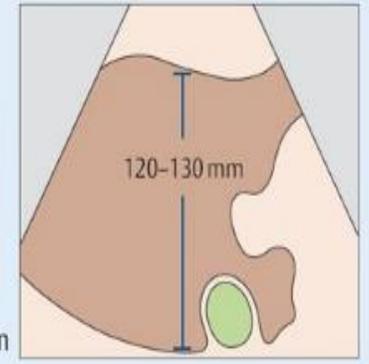
► Liver



In longitudinal section



In transverse section

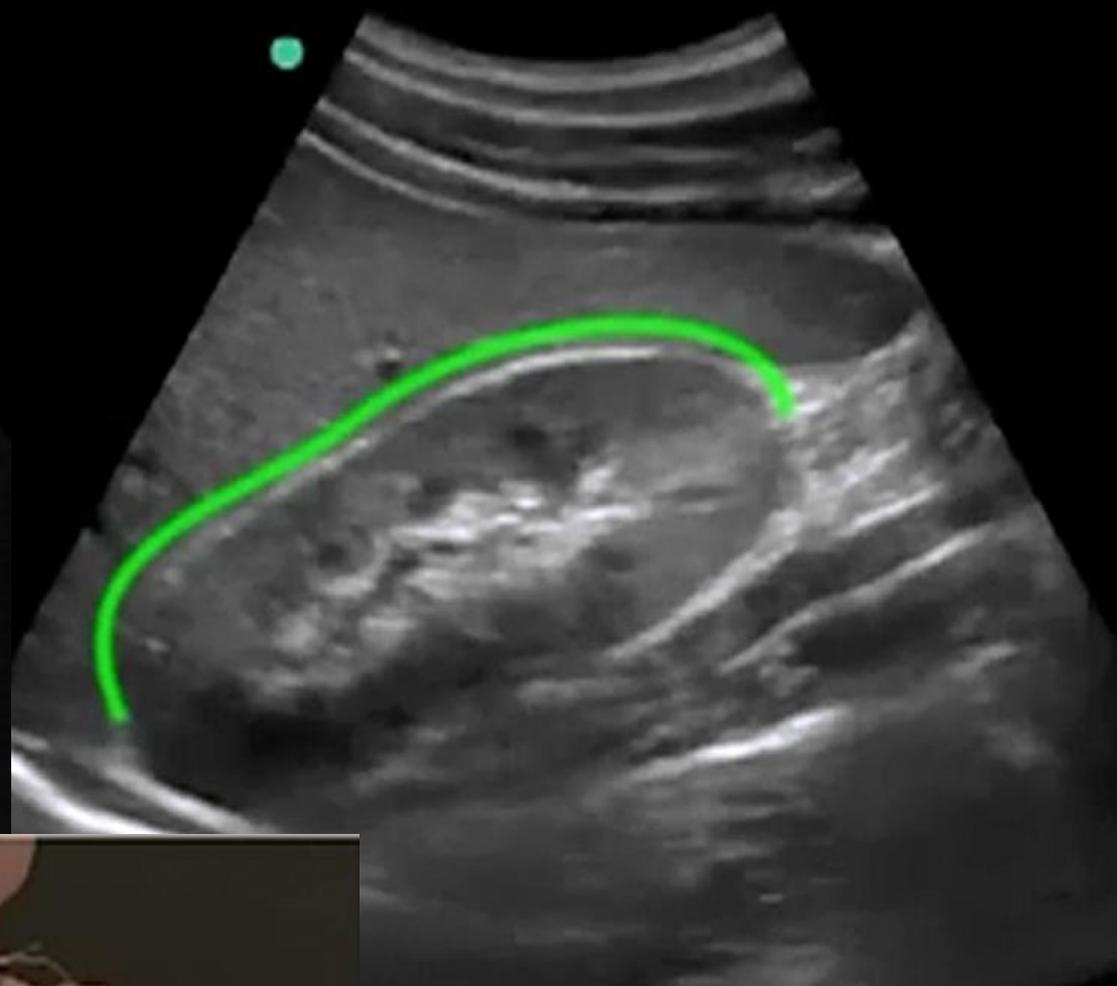
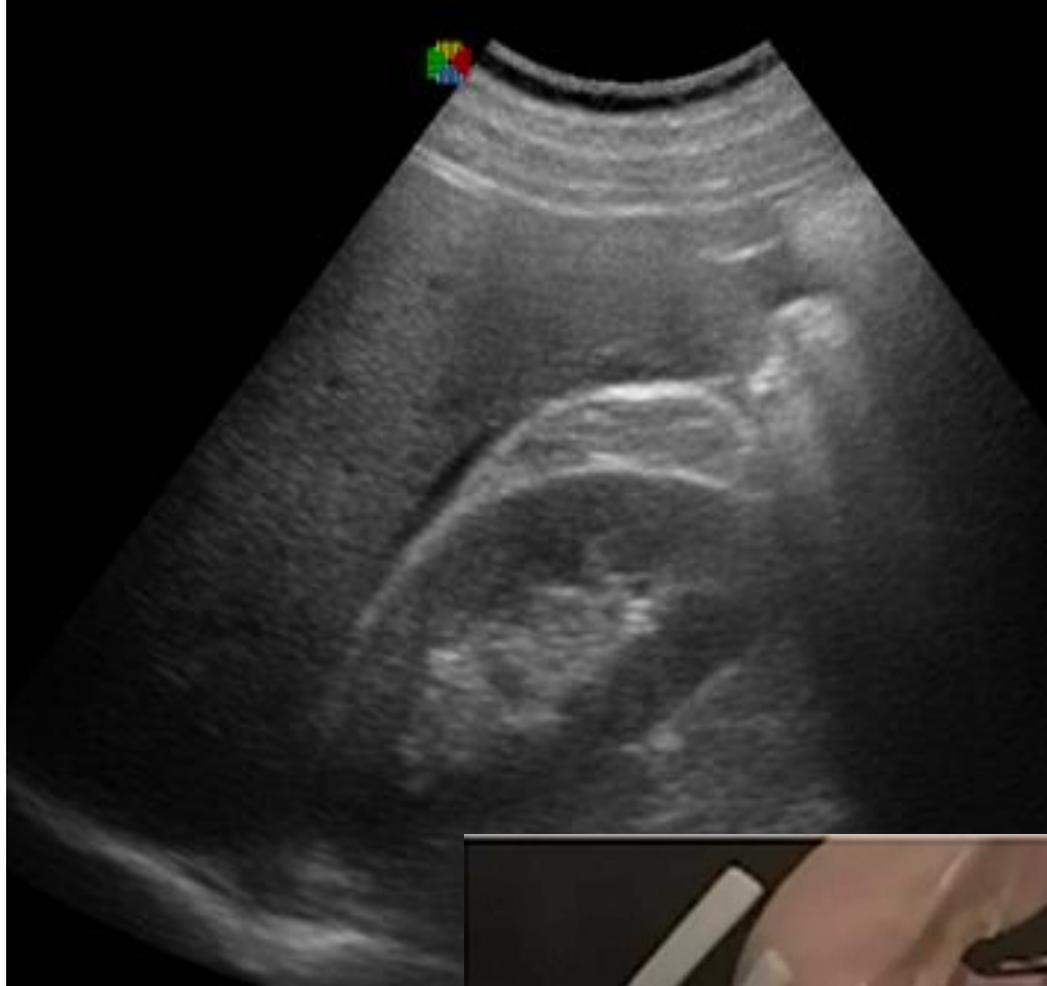


Craniocaudal
 < 140 mm
 Antero-posterior
 < 120 mm
 Angle of inferior border
 Left < 30°
 Right < 45°

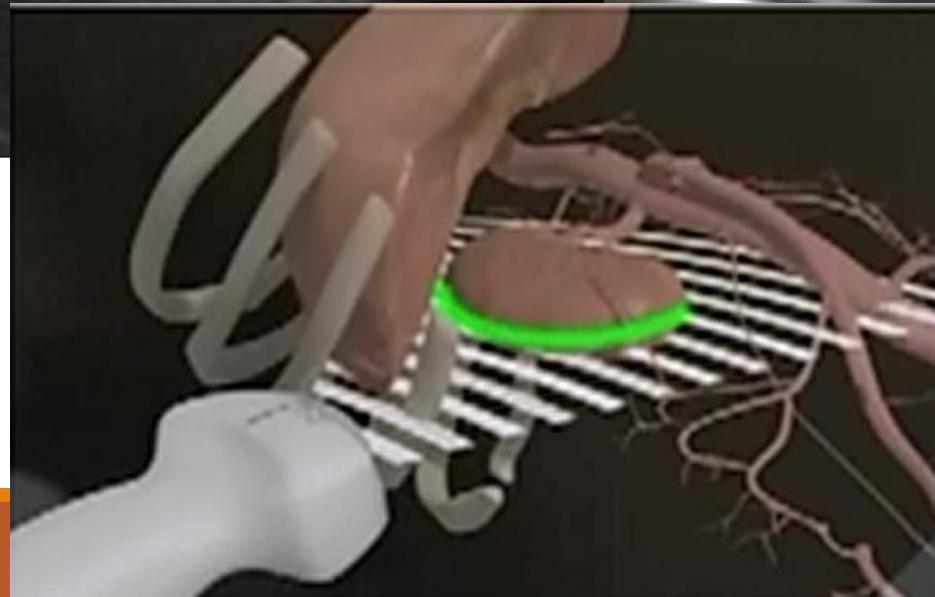
10

15

Lo spazio subepatico, sotto il lobo destro del fegato, presenta lo spazio, virtuale in condizioni normali, di MORRISON, posto tra la parte posteriore del lobo destro epatico ed ed il rene destro

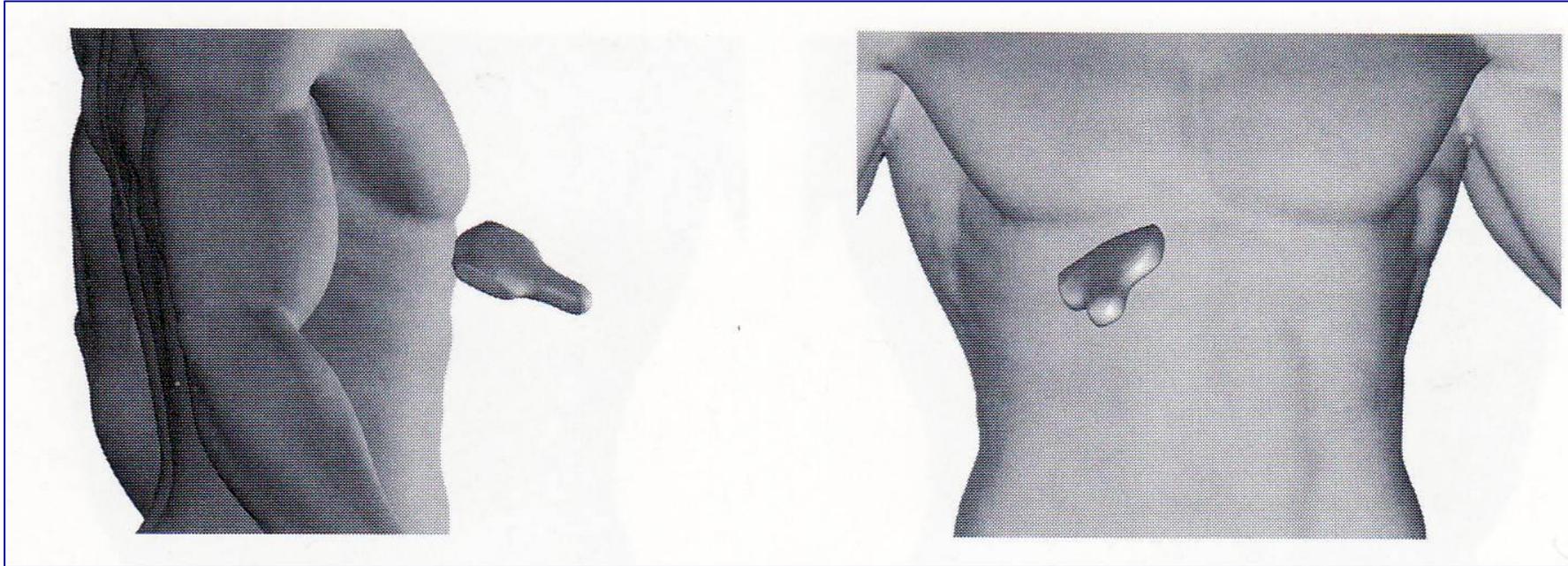


TESTA



PIEDI

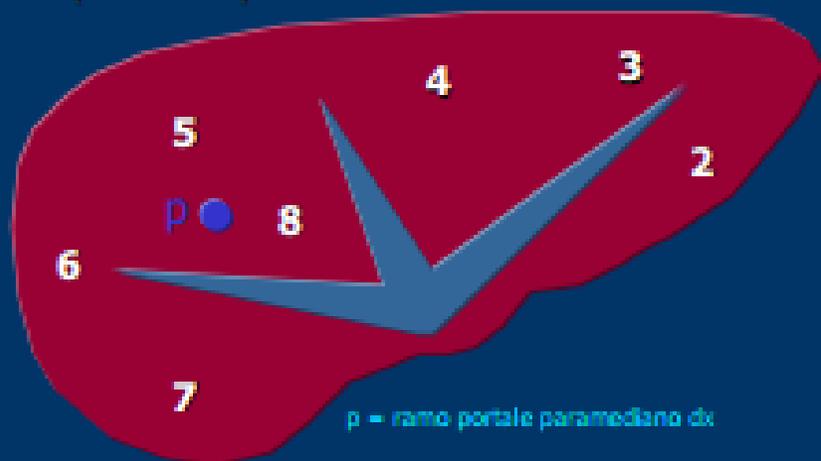
Scansione sottocostale obliqua ascendente



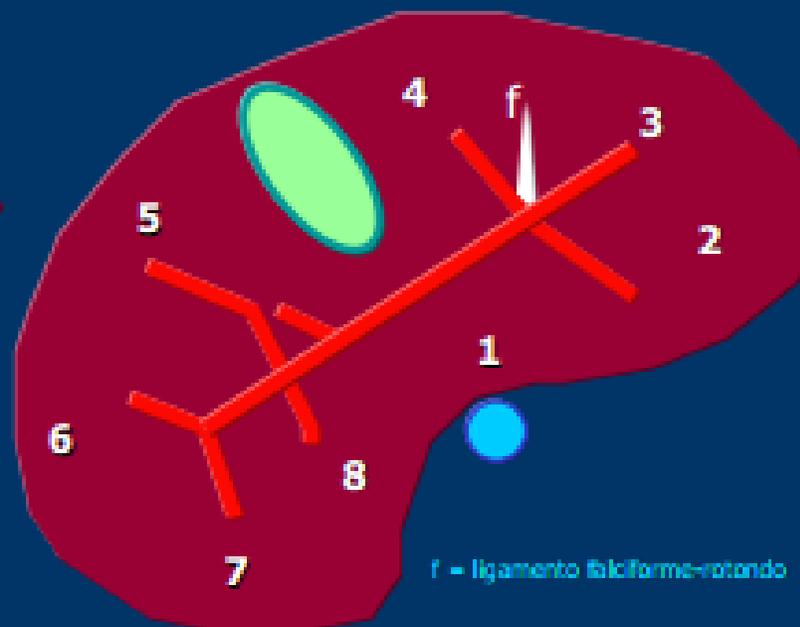
In relazione al grado di inclinazione visualizzeremo:

Scansioni US oblique sottocostali ascendenti

- piano alto
- passante per VCI e VSE



- piano basso
- passante per colecisti e VCI



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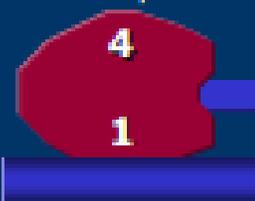
www.medinterna.net

Scansioni US longitudinali

- passante per Aorta



- passante per VCI e VP



- passante per Rene dx



- laterale dx



D-----



B	GEN-M	G	---
TEI	P 169mm	XV	C1
	PRC 12/2/2	PRS	8
	PST 0	C	1

1 8

GENERALE

CA631



VENE SOVRAEPATICHE

0
5
10
15

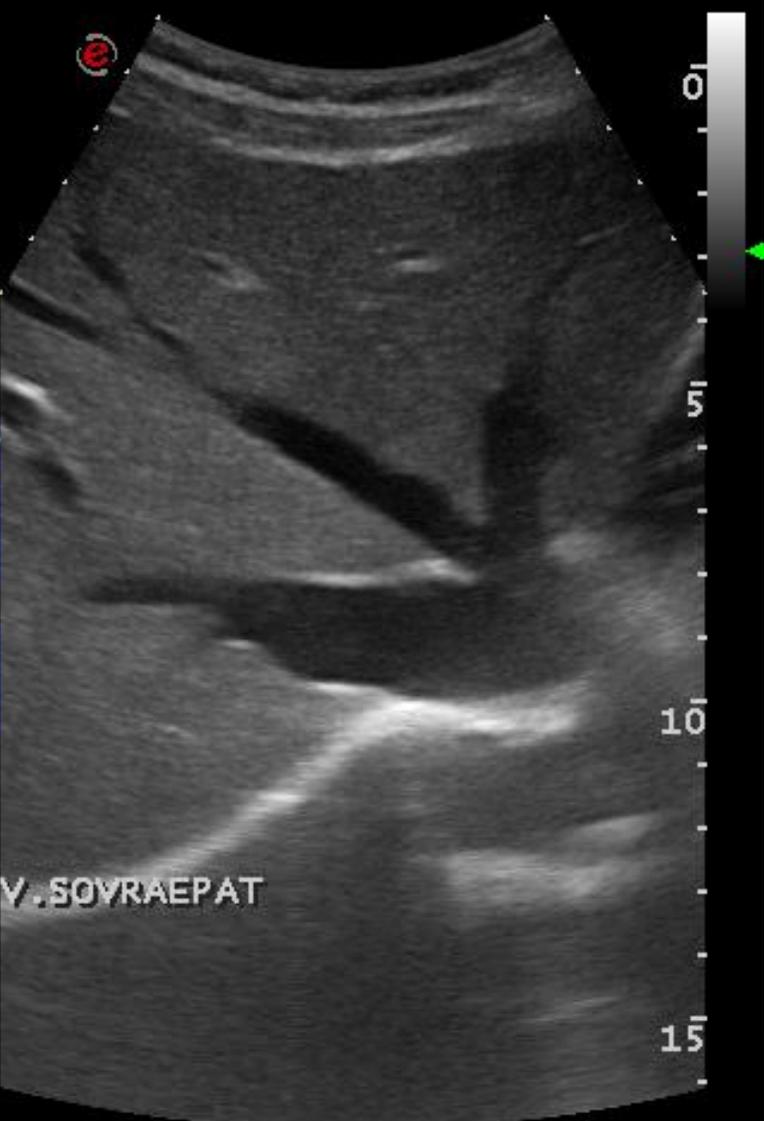
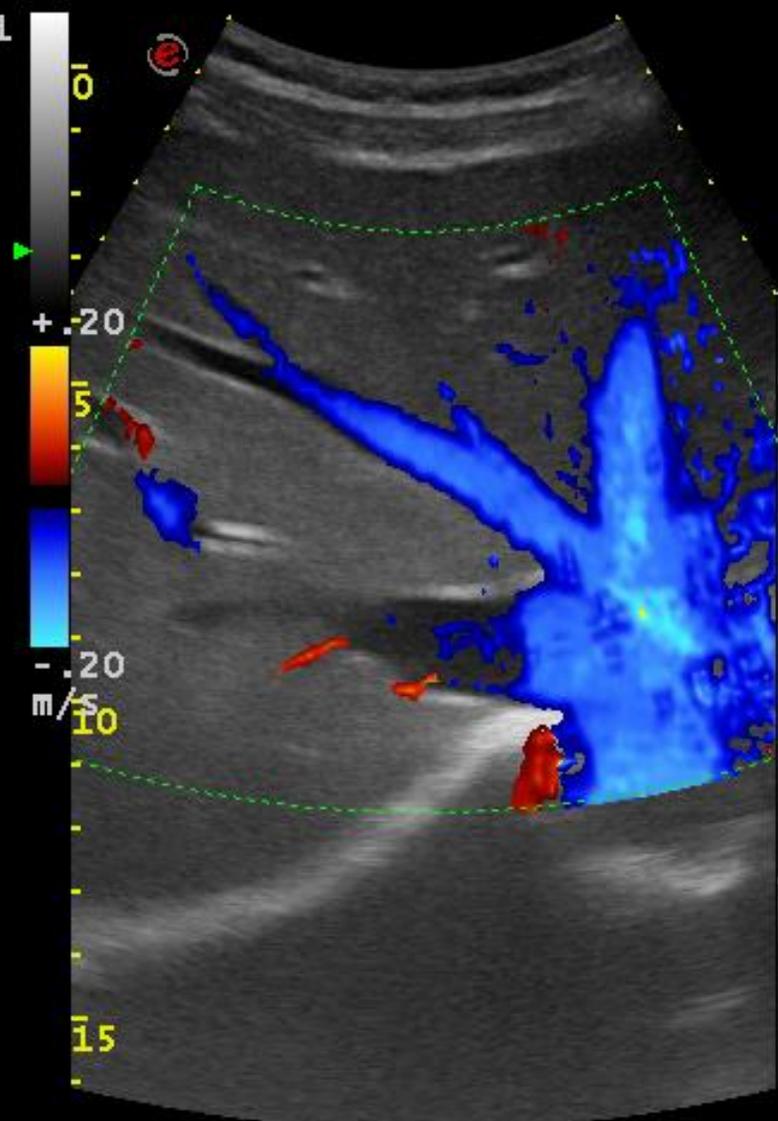
C-----



B	GEN-M	G	---	CFM	F	2.4	MHZ	G	---
TEI	P 169mm	XV	C1		PRF	1.3	KHZ		
	PRC 12/2/1	PRS	2		PRC	M/ 2		PRS	6
	PST 0	C	1		FP	3			

1
GENERALE

8
CA631



S-----



B GEN-M G ---
TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 8
GENERALE

CA631



Segmentazione epatic
v= vene sovraepatic

Arch.:F.Fichera
Decub.:Lat.sx
Scans.:Obliqua sottocost ascend.

C-----



B GEN-M G 50%
TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 8
GENERALE

CA631



P= BIFORCAZ. PORTALE

G-----



B GEN-M G 50%
TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 8
GENERALE

CA631



P= BIFORCAZ. PORTALE

B-----



B GEN-M G 50%
TEI P 169mm XV C1
PRC 12/2/1 PRS 2
PST 0 C 1

1 8
GENERALE

CA631

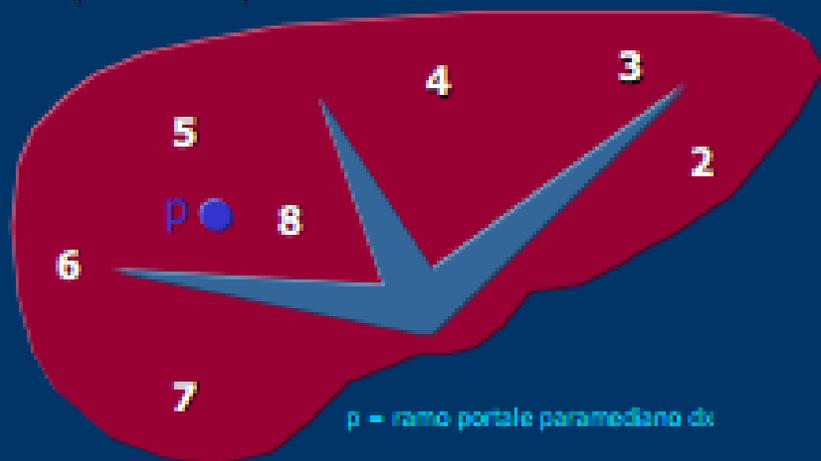


LOBO DX

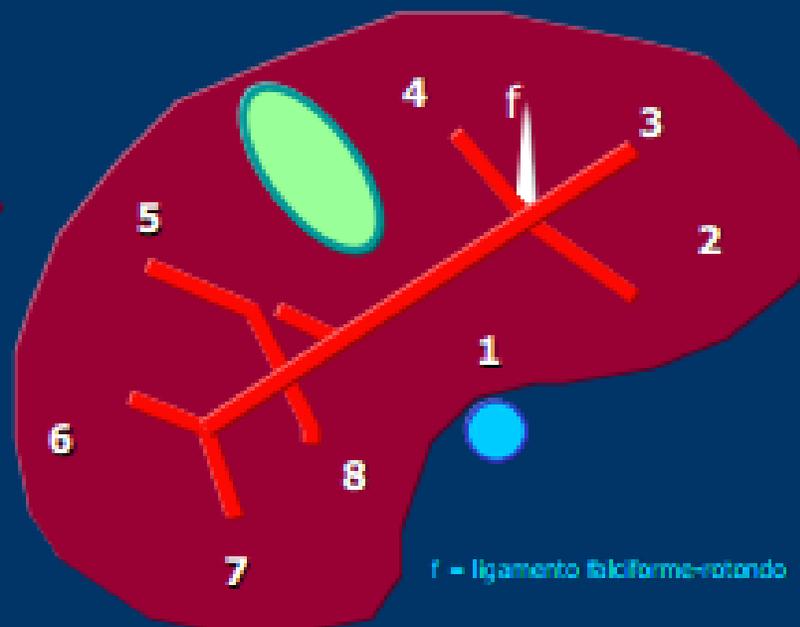
0
5
10
15

Scansioni US oblique sottocostali ascendenti

- piano alto
- passante per VCI e VSE



- piano basso
- passante per colecisti e VCI



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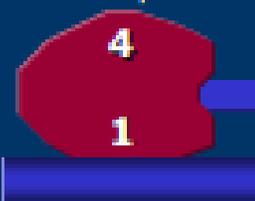
www.medinterna.net

Scansioni US longitudinali

- passante per Aorta



- passante per VCI e VP



- passante per Rene dx



- laterale dx



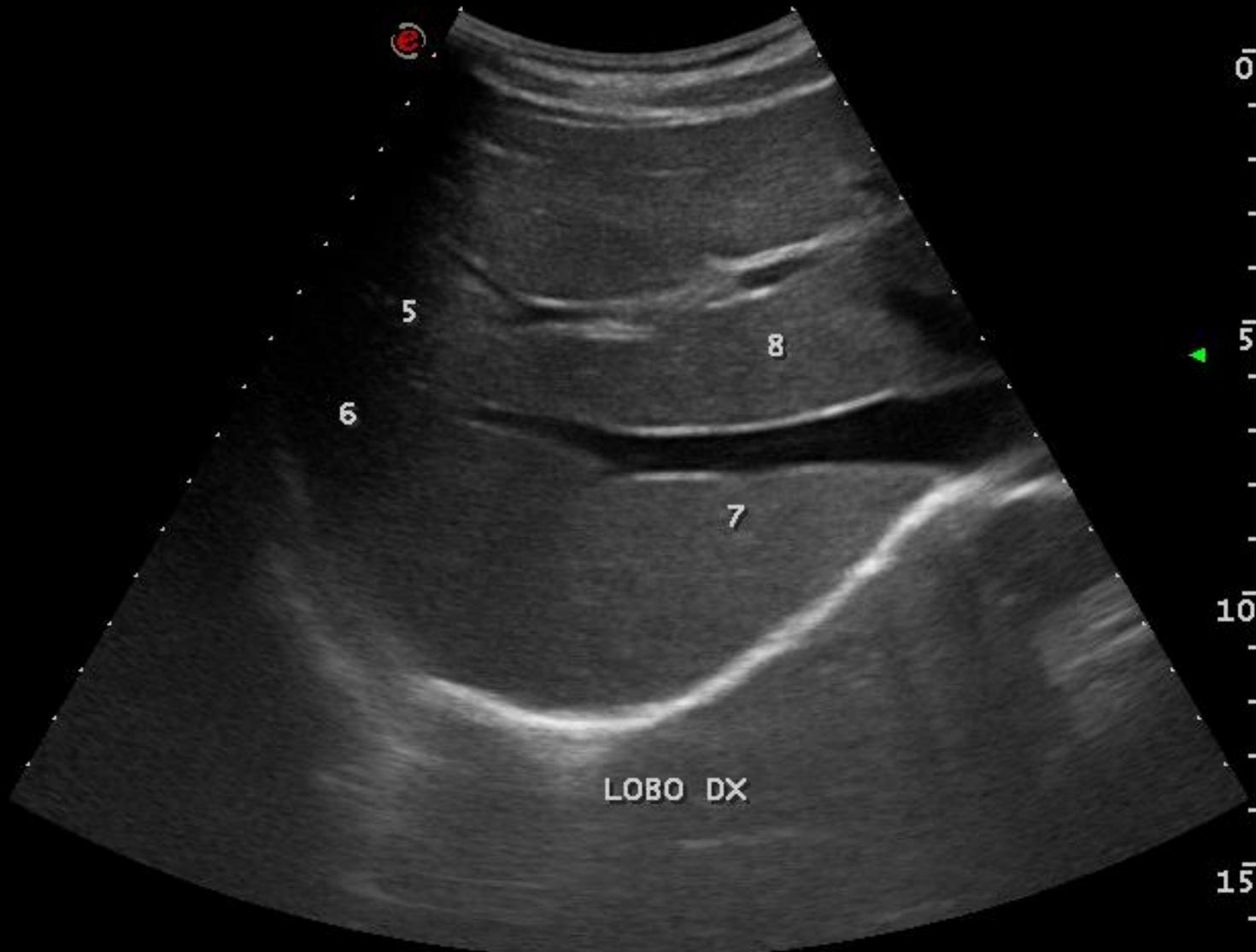
G-----



B	GEN-M	G	---
TEI	P 169mm	XV	C1
PRC	12/2/1	PRS	2
PST	0	C	1

1 8
GENERALE

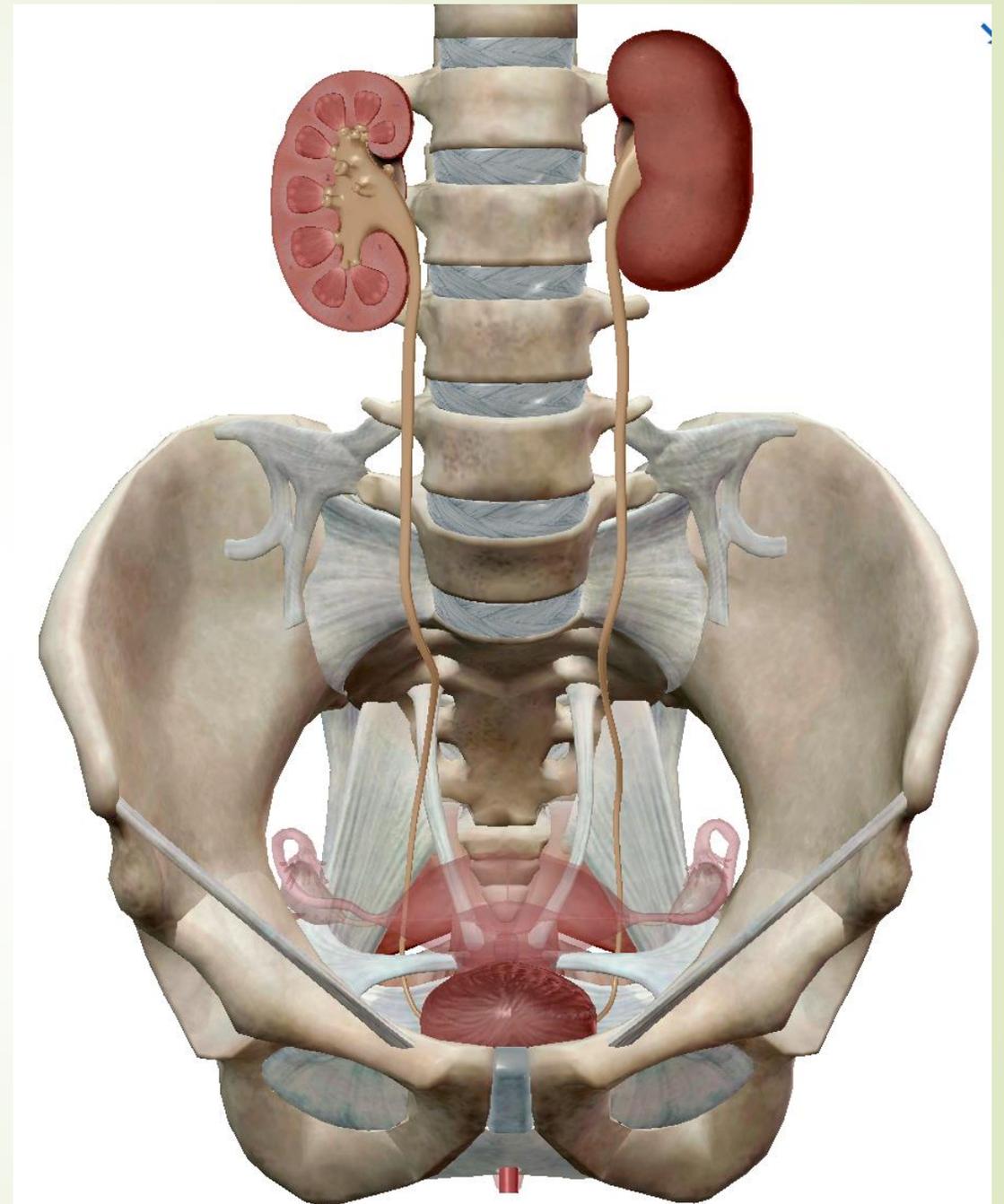
CA631



LOBO DX

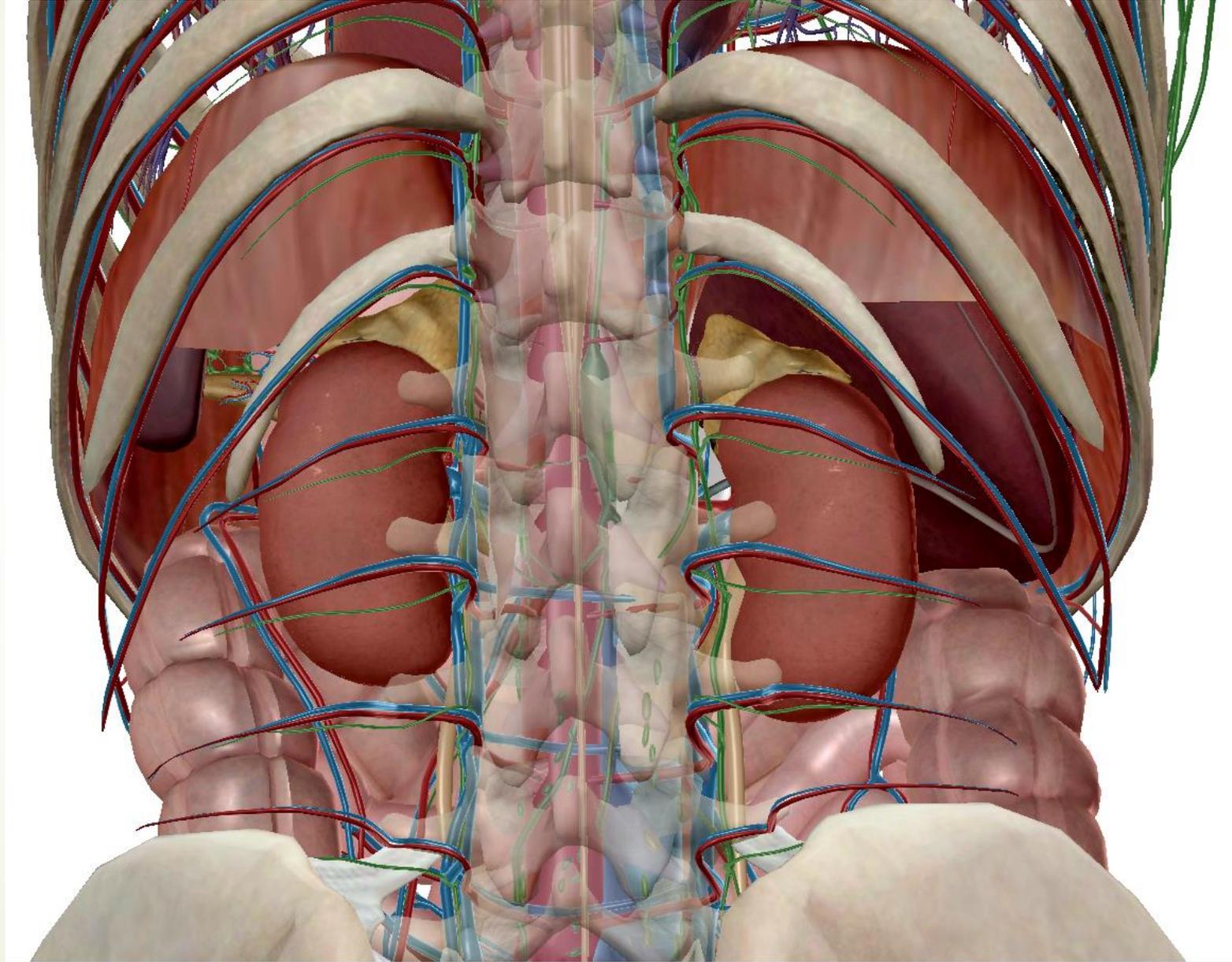
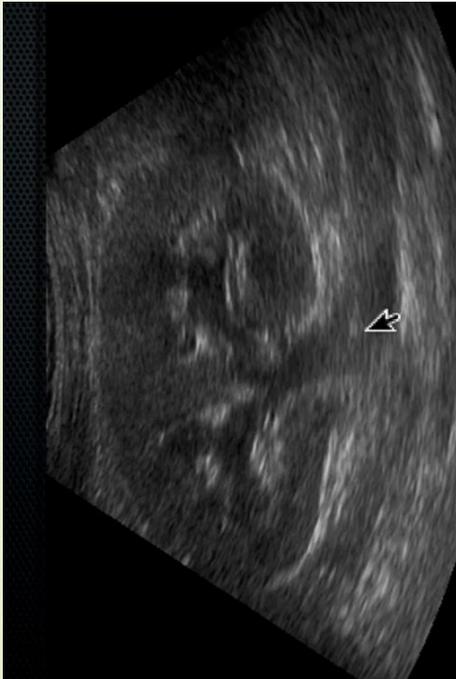


ANATOMIA ECOGRAFICA RENI



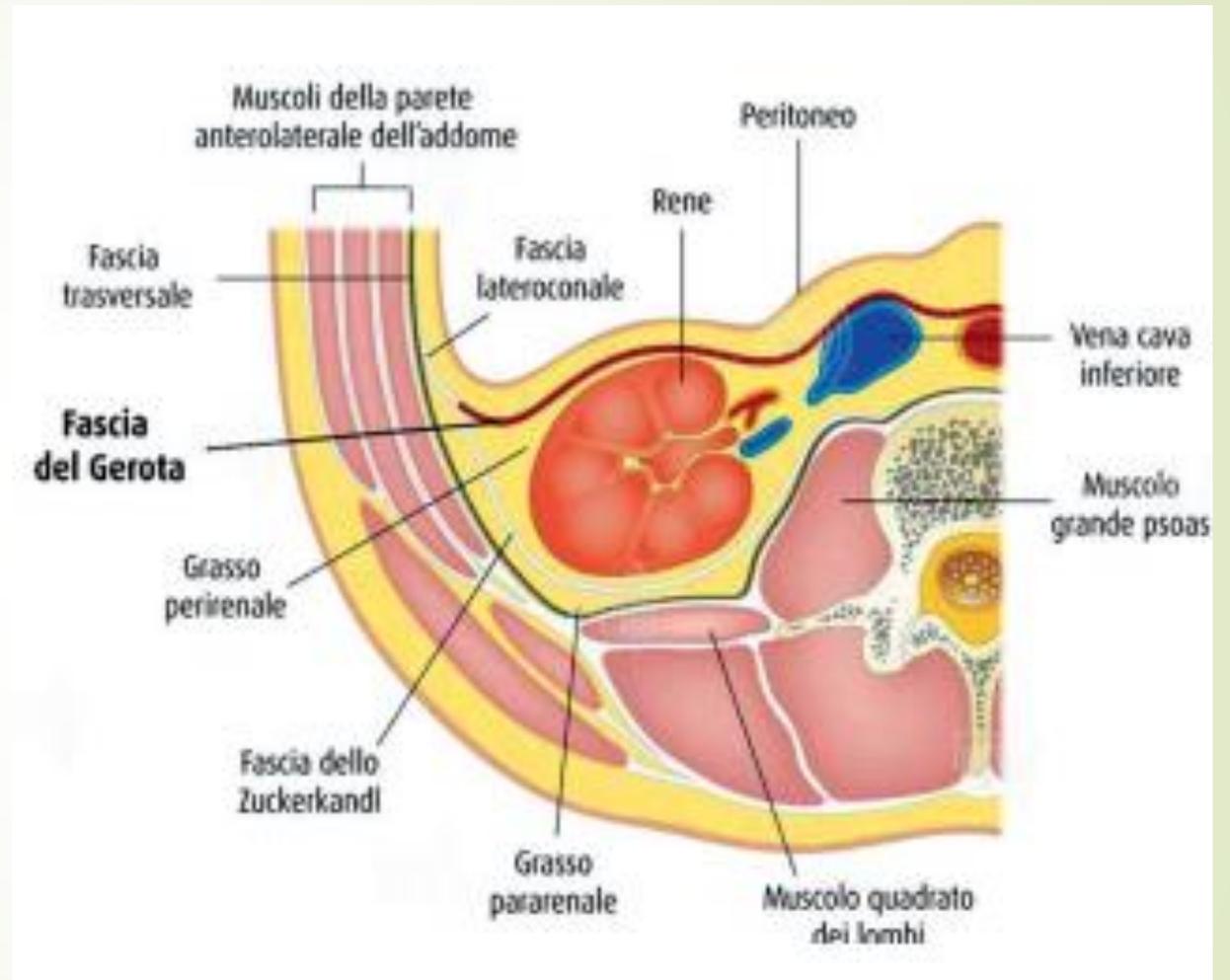
RAPPORTI

- ▶ E' un organo retroperitoneale, sito nella fossa lombare
- ▶ Collocato più posteriormente rispetto ai vasi del retroperitoneo mediano

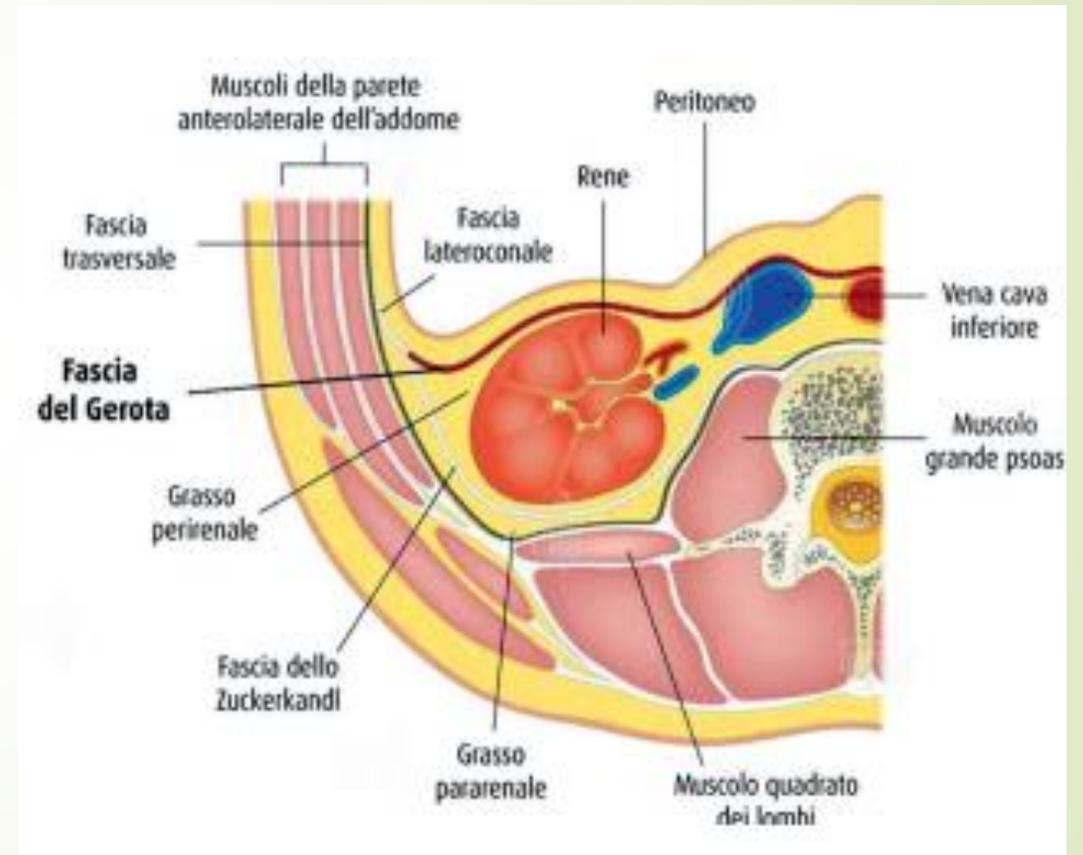


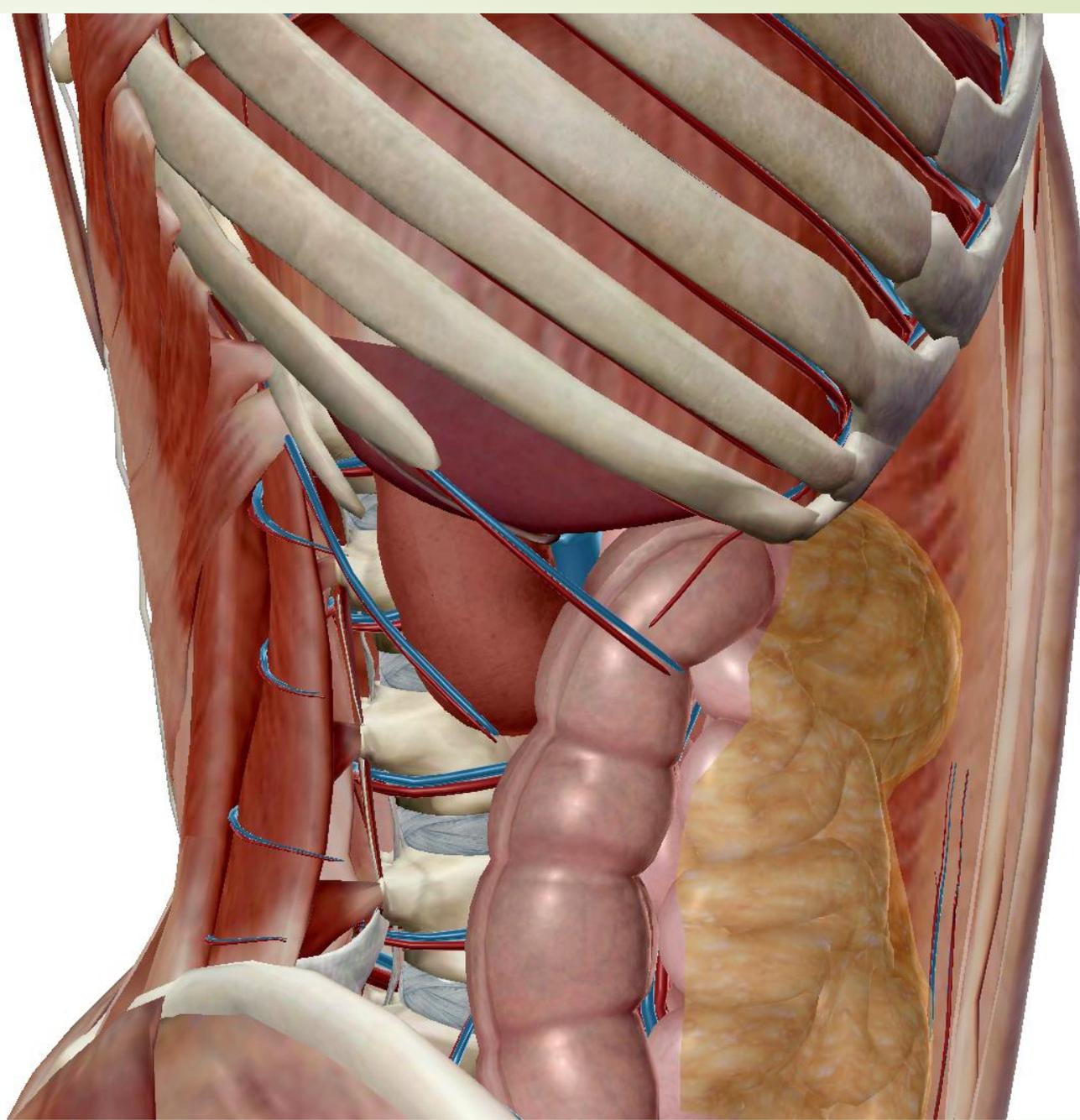
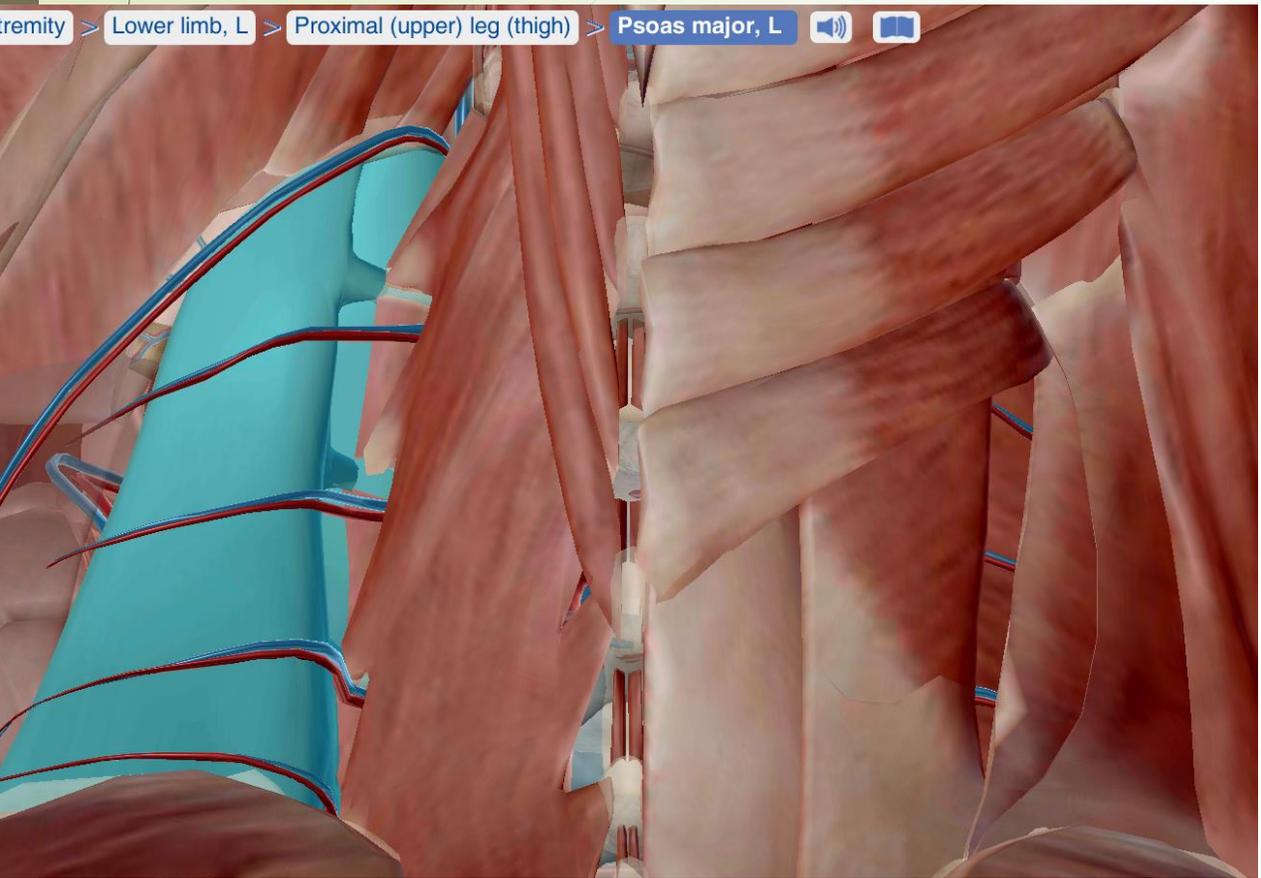
ANATOMIA ECOGRAFICA RENI

- ▶ E' CIRCONDATO DA UNA CAPSULA DI GRASSO BRUNO. LO SPAZIO PERIRENALE E' CHIUSO SUPERIORMENTE, INFERIORMENTE E MEDIALMENTE DALLA FASCIA PERIRENALE CON IL FOGLIETTO ANTERIORE DI GEROTA E POSTERIORE DI ZUCKERLAND



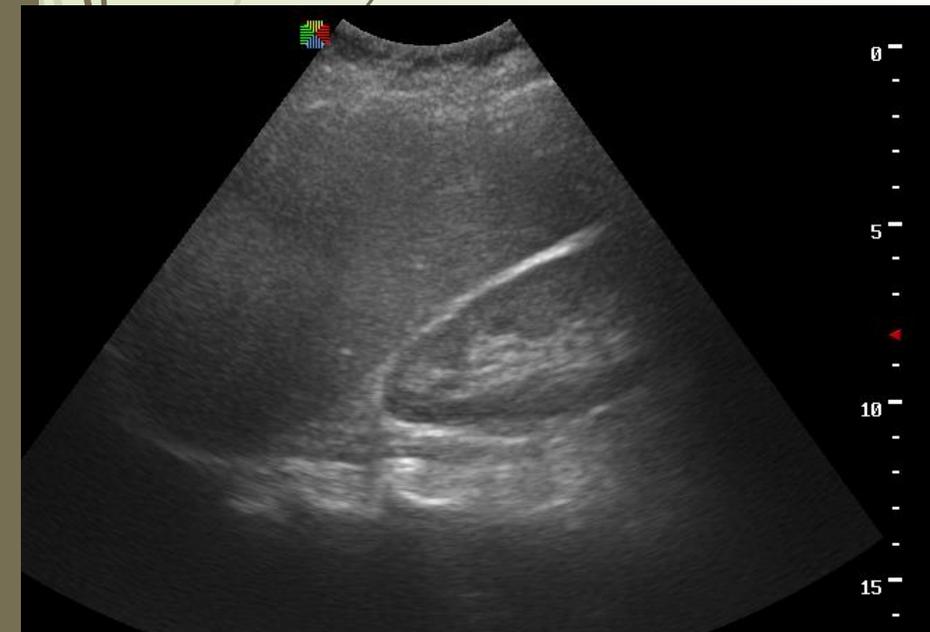
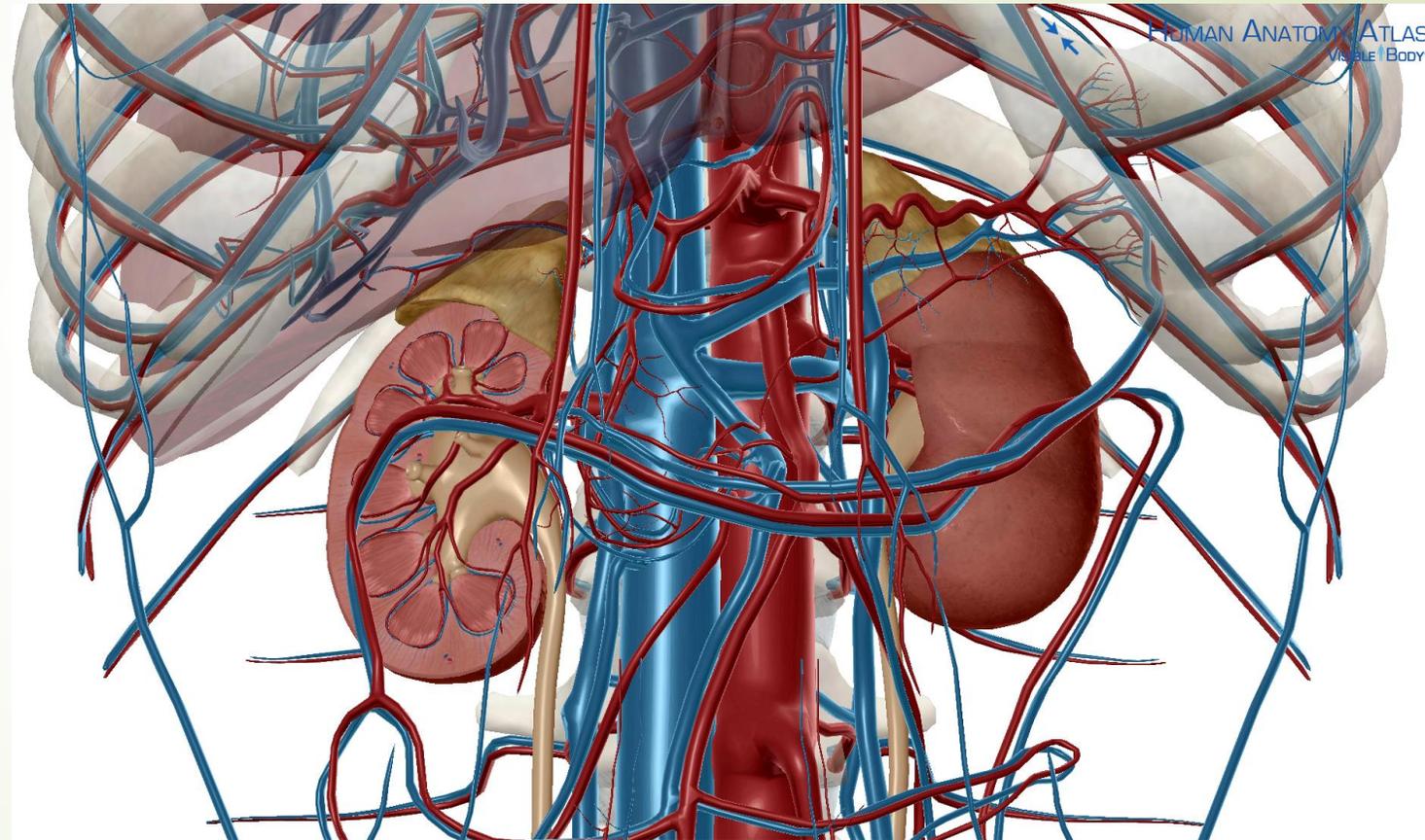
- La fascia perirenale è circondata da grasso bianco, negli spazi pararenali anteriore e posteriore, comunicanti con loggia pancreaticata e spazio retrocolico
- Spazi e fasce perirenale e prerenale sono mal riconoscibili con ecografia
- Posteriormente pilastro lombocostale diaframma (XI-XII costa a sin. e XII costa a dx.), quadrato dei lombi ed ileopsoas





RENE DESTRO

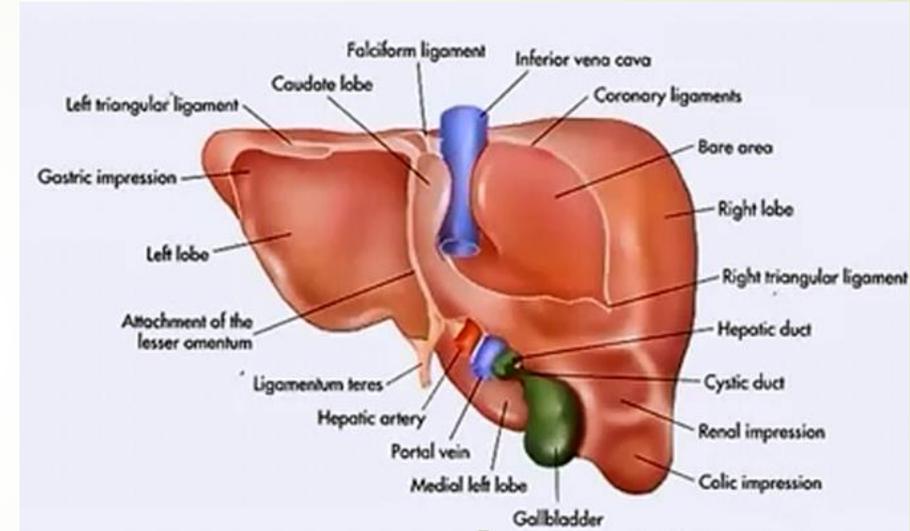
- Il rene dx. è più in basso di circa 2 cm. Sul polo renale superiore è adagiato il surrene, dietro il piano cavale a dx. e più anteriore, a sin.

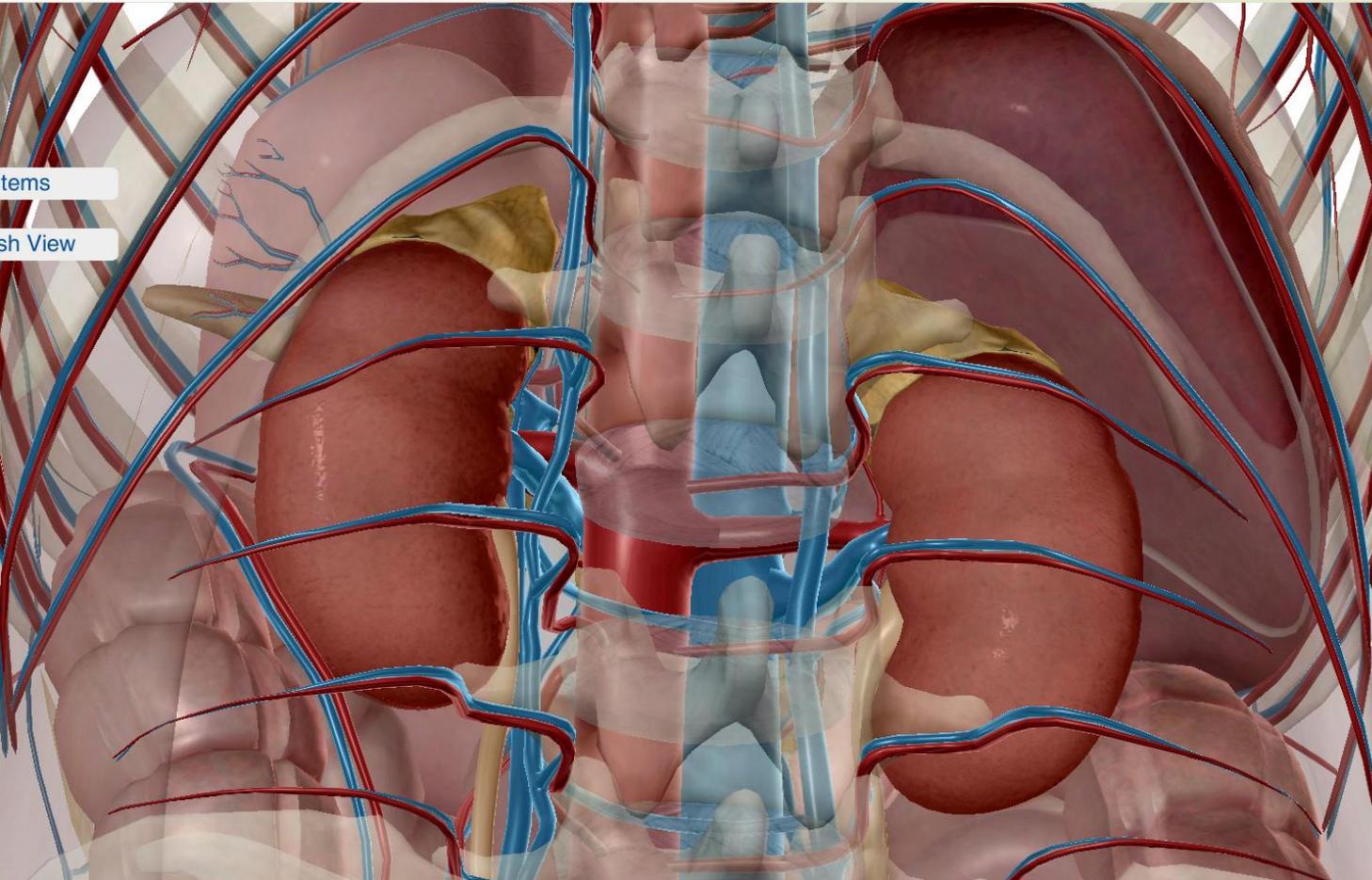
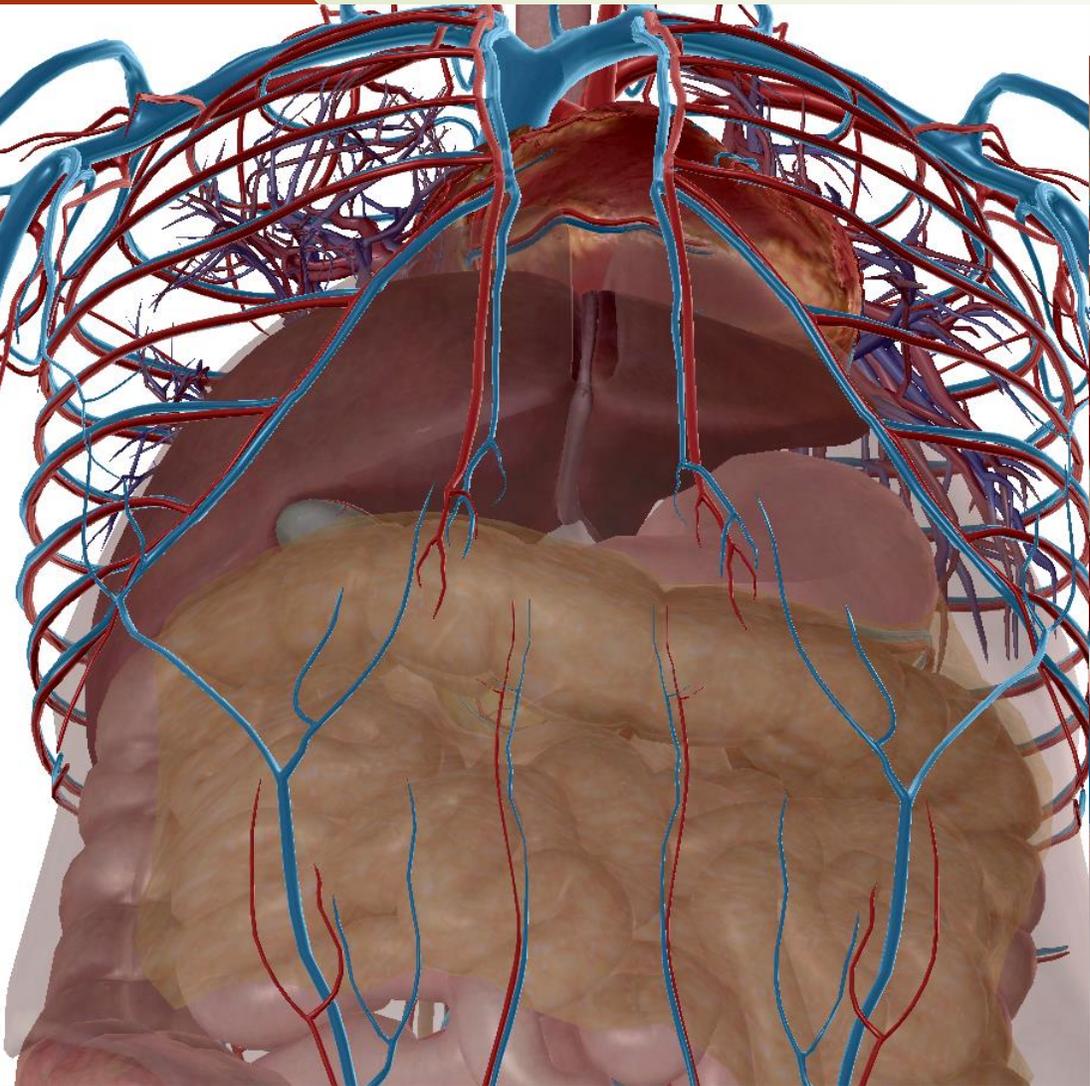


RENE DESTRO

Il polo superiore destro è in rapporto, anteriormente, con la bare area epatica ed il VII segmento e, a questo livello, il peritoneo parietale si riflette dalla loggia renale sul VII segmento delimitando la tasca di Morrison (sede di raccolta di liquido ascitico o emorragico).

- Anteriormente la parte centrale del rene ha rapporto con C duodenale e flessura epatica del colon ed anse del tenue e questo spiega l'ostacolo dell'aria nelle scansioni oblique e trasversali



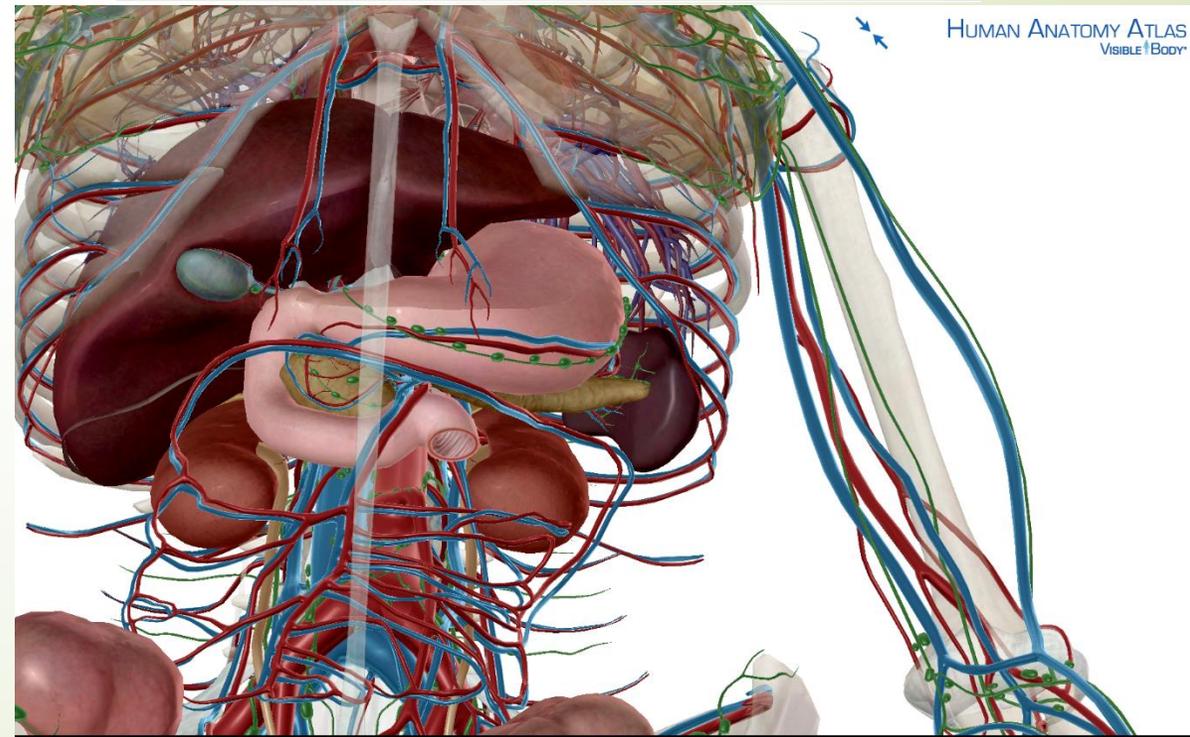
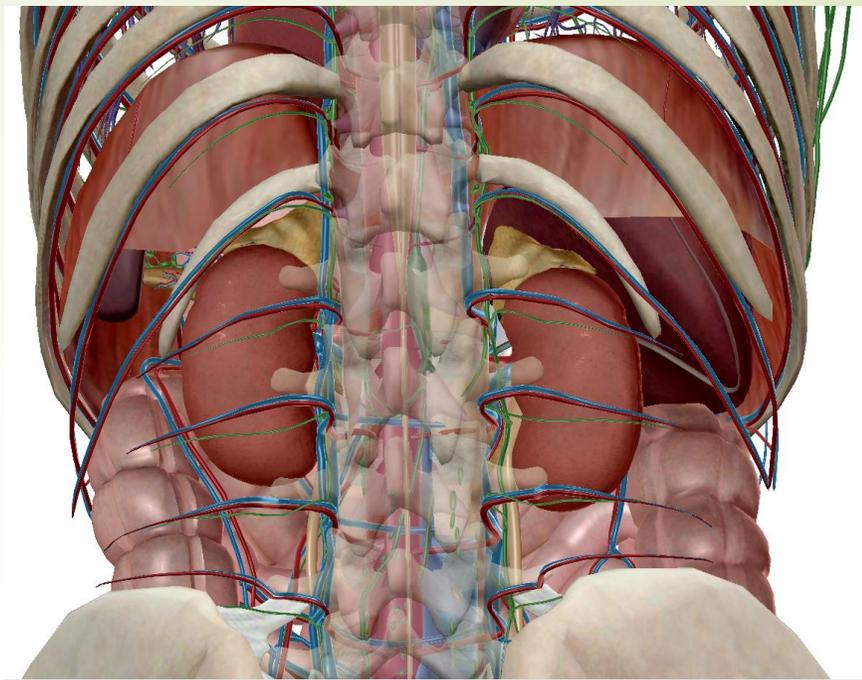


Items

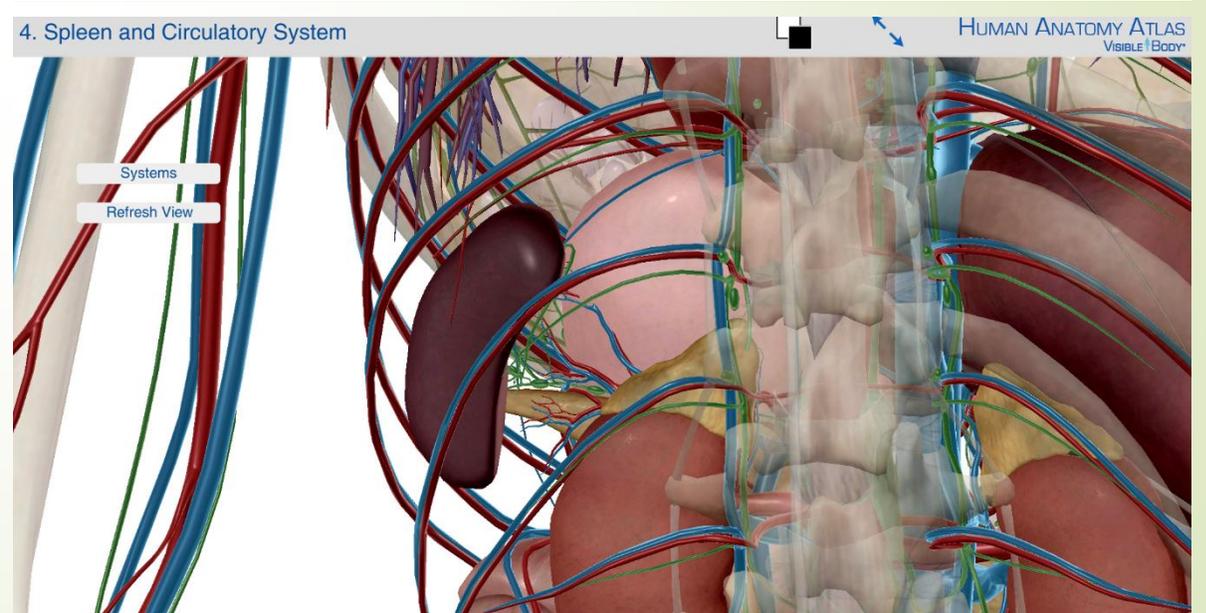
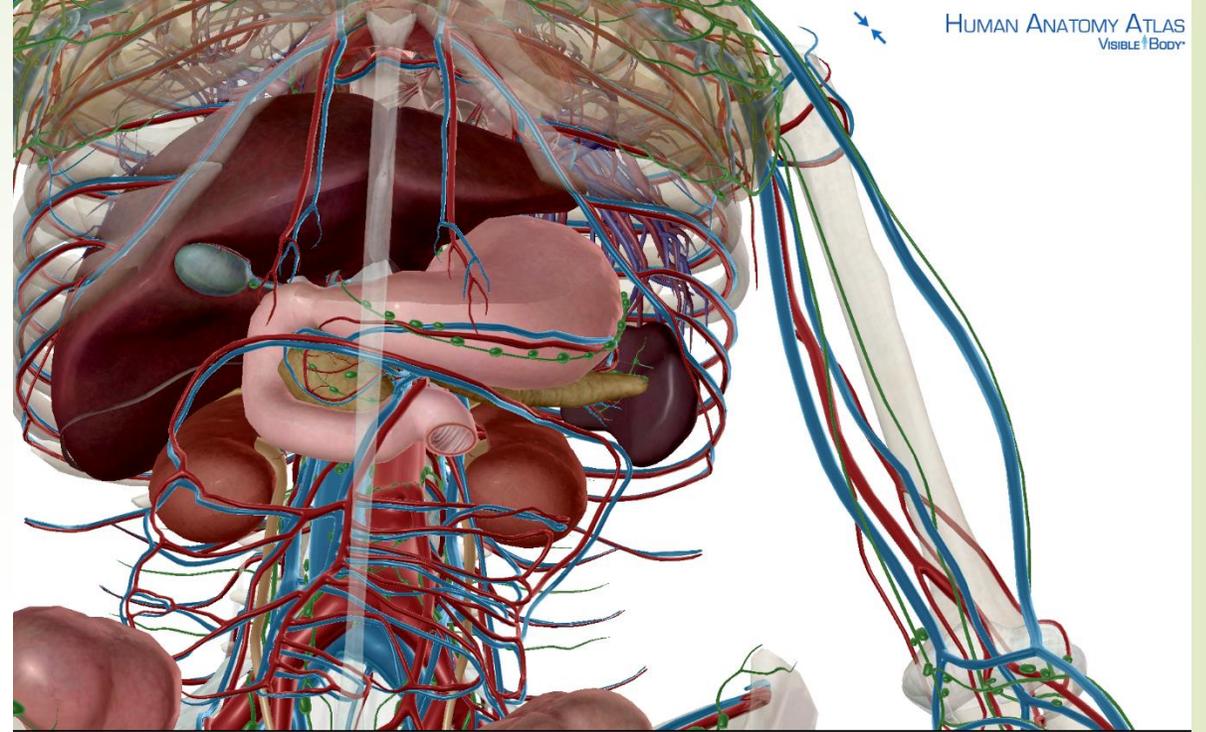
ish View

RENE SINISTRO

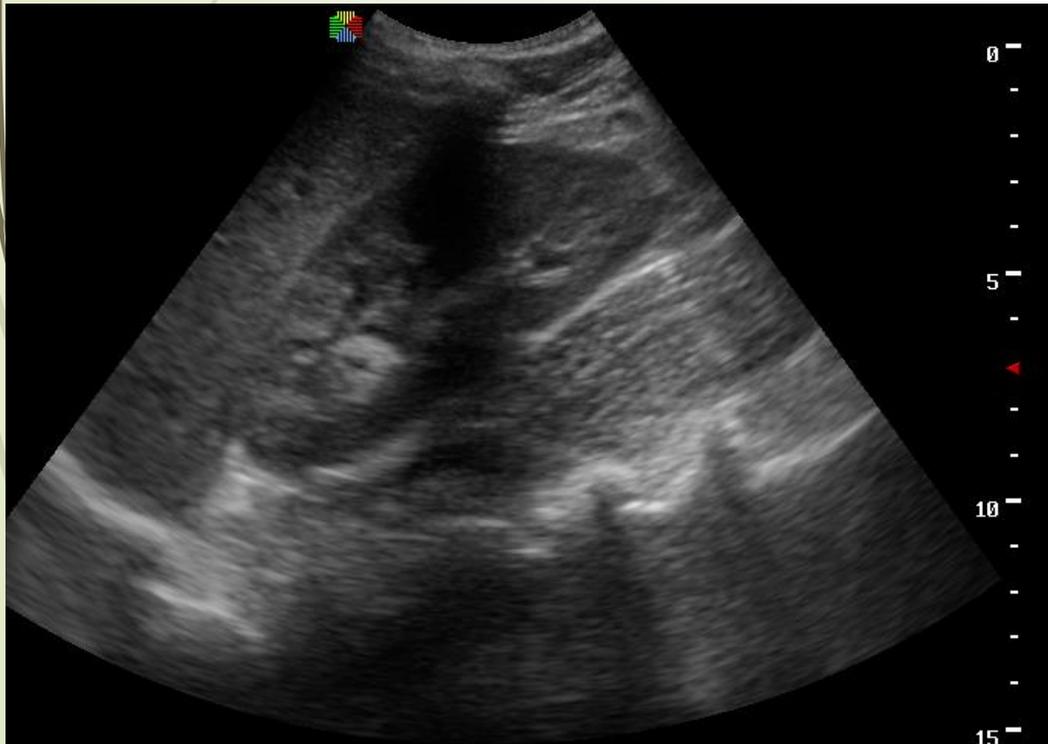
- Il rene sinistro è posizionato in un angolo compreso tra colonna vertebrale, muscolo psoas e milza, che si estende, lateralmente fin quasi a metà rene
- La parte inferiore del rene è coperta dalla flessura sinistra del colon. Lo stomaco si sovrappone invece al terzo superiore

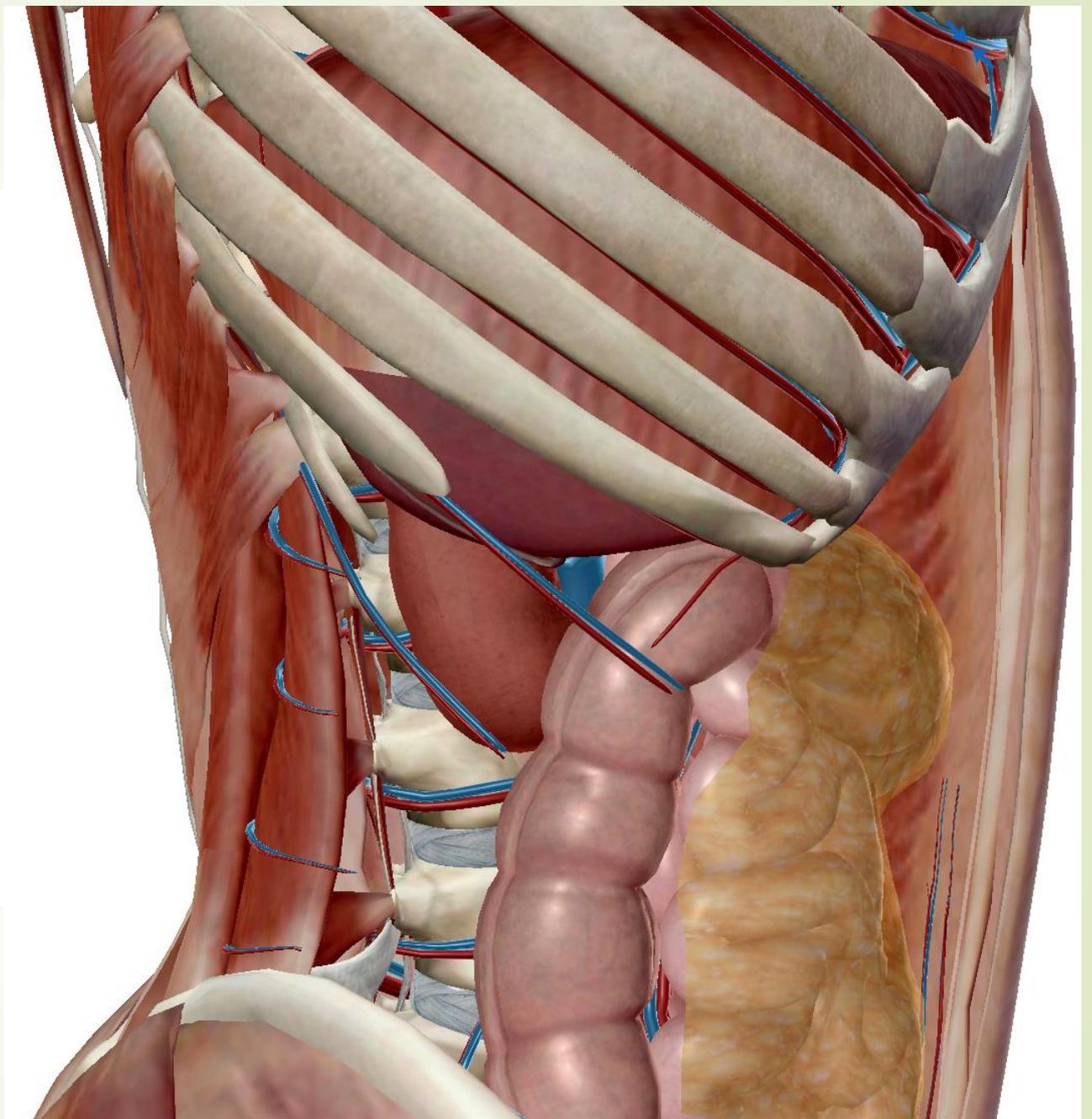
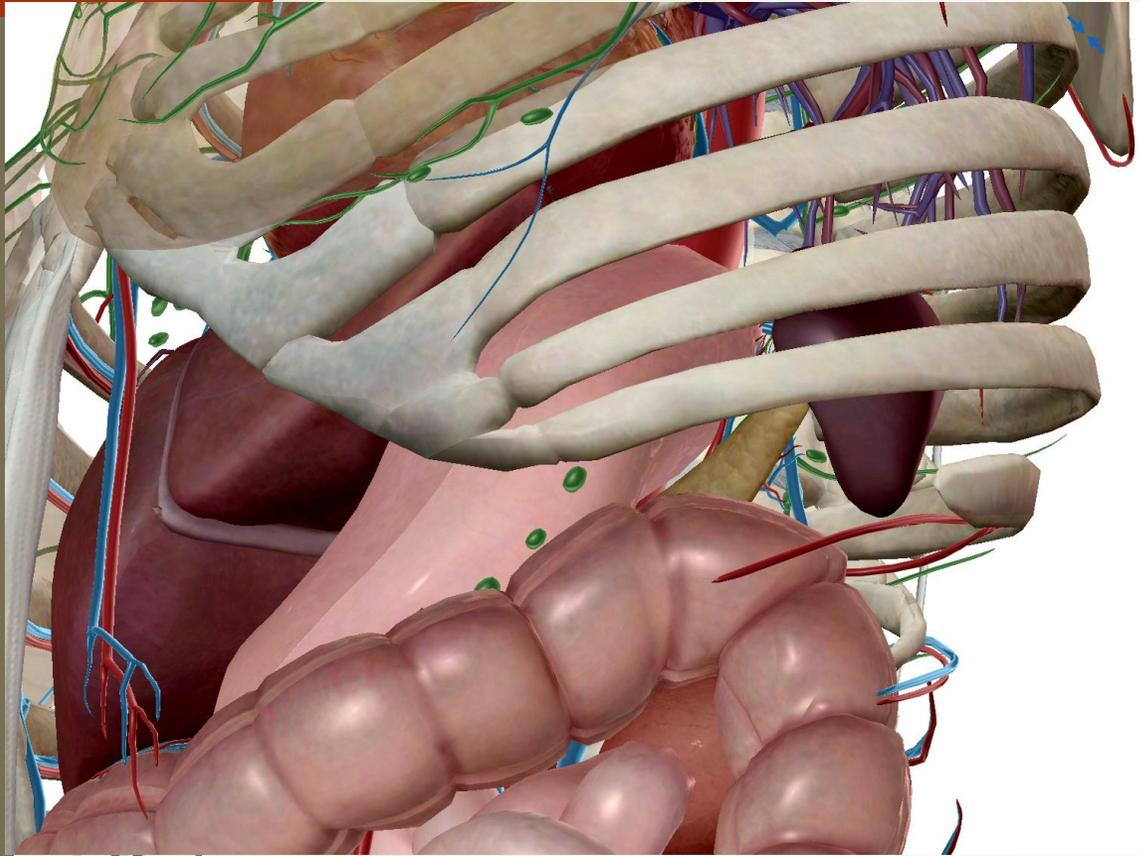


- Il polo superiore del rene sin. ha rapporto, con milza, surrene, stomaco, retrocavità degli epiploon. Polo inferiore con colon discendente e intestino tenue.



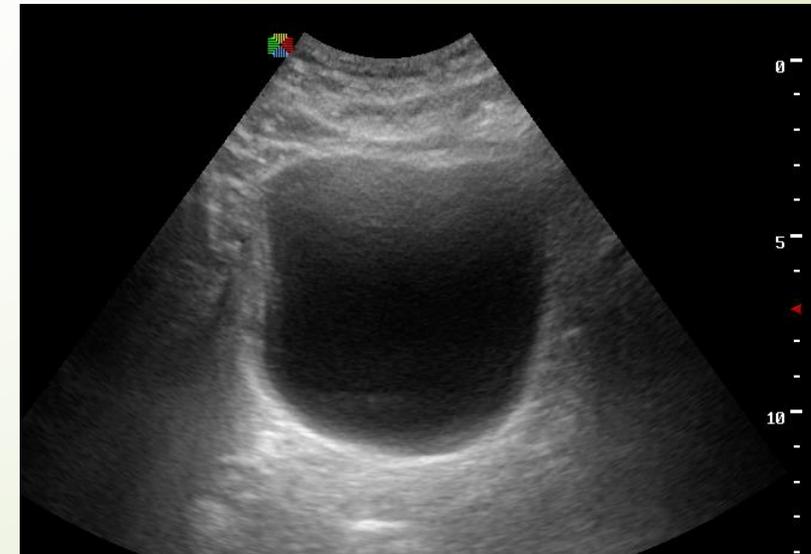
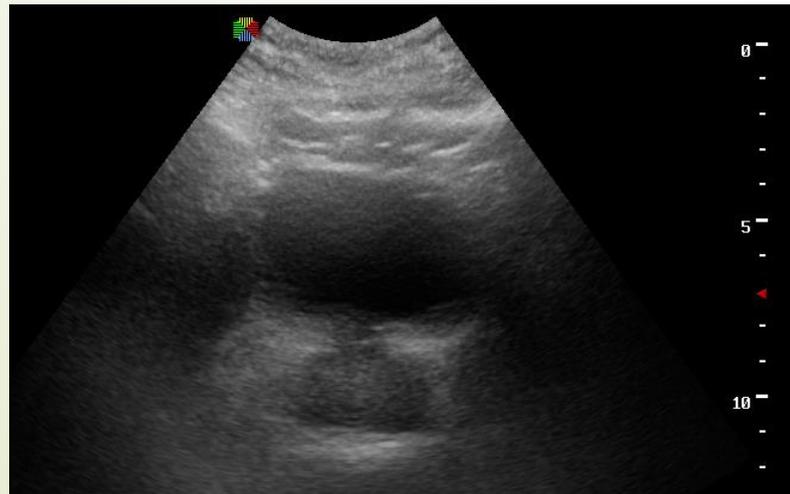
4. Spleen and Circulatory System



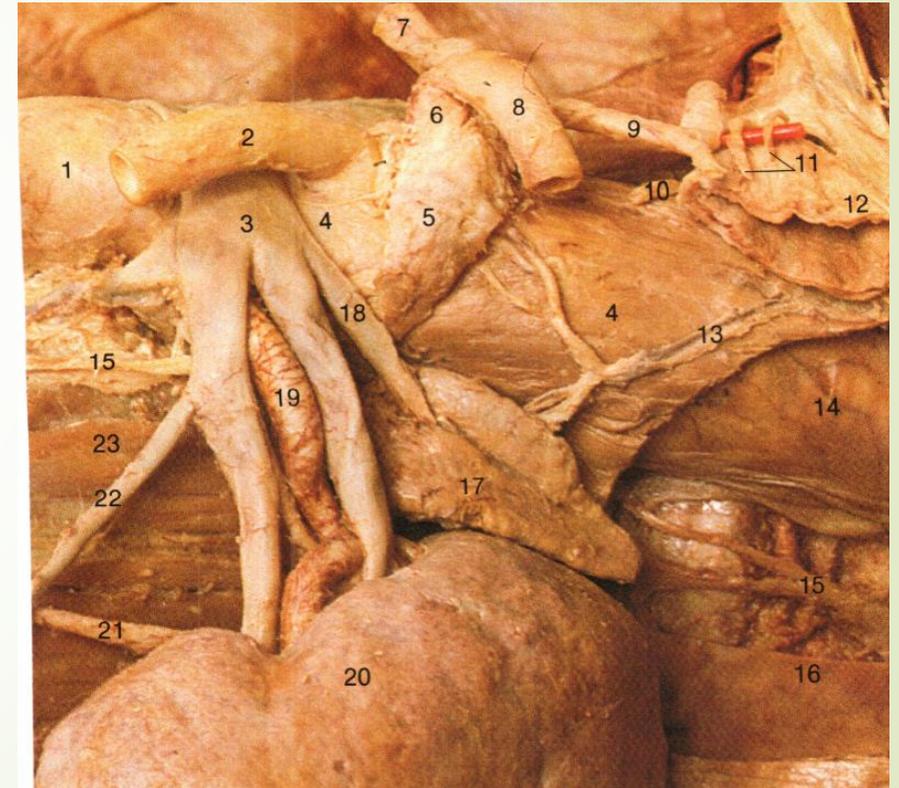
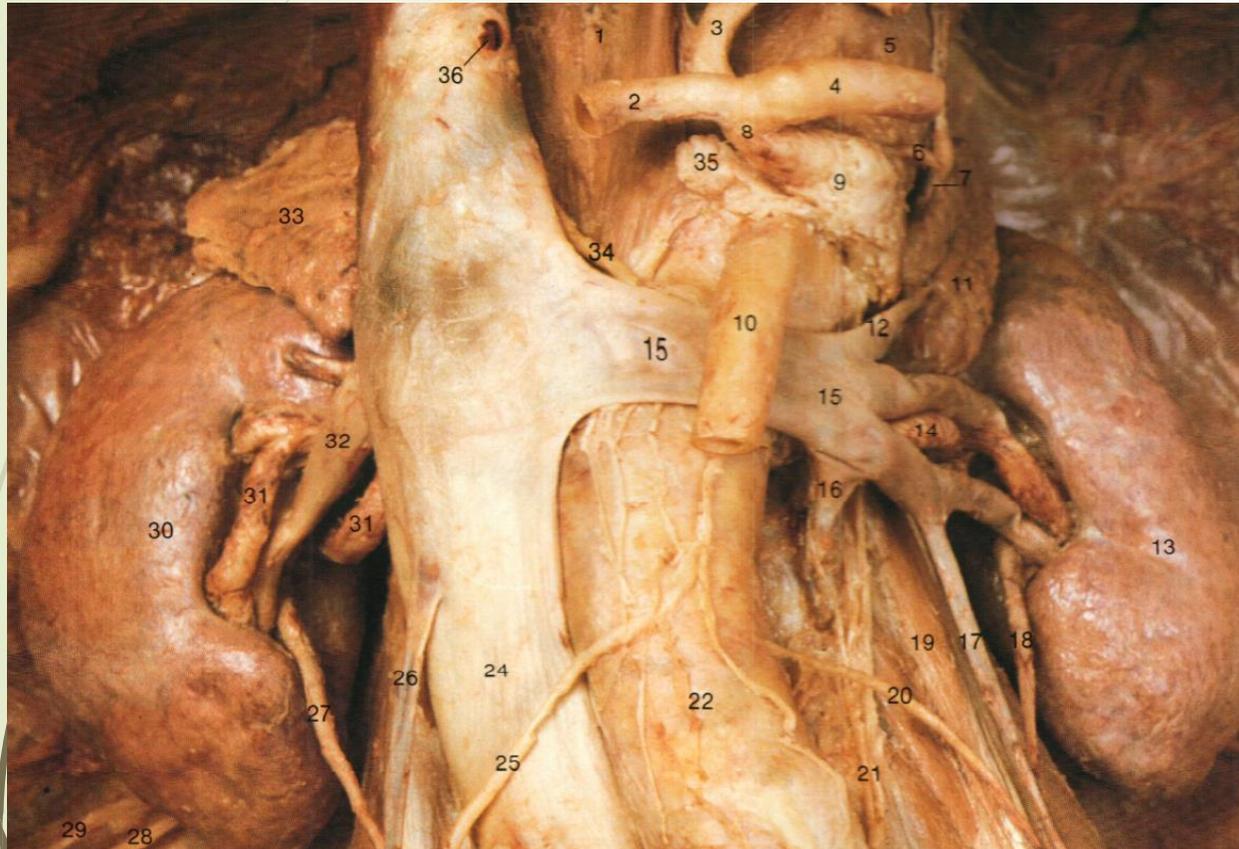


ANATOMIA RENE-SURRENI

- Un esame completo del rene e vie urinarie comprende SEMPRE:
 - Valutazione della vescica
 - Valutazione, nell'uomo, della prostata



SURRENI: ANATOMIA ECOGRAFICA



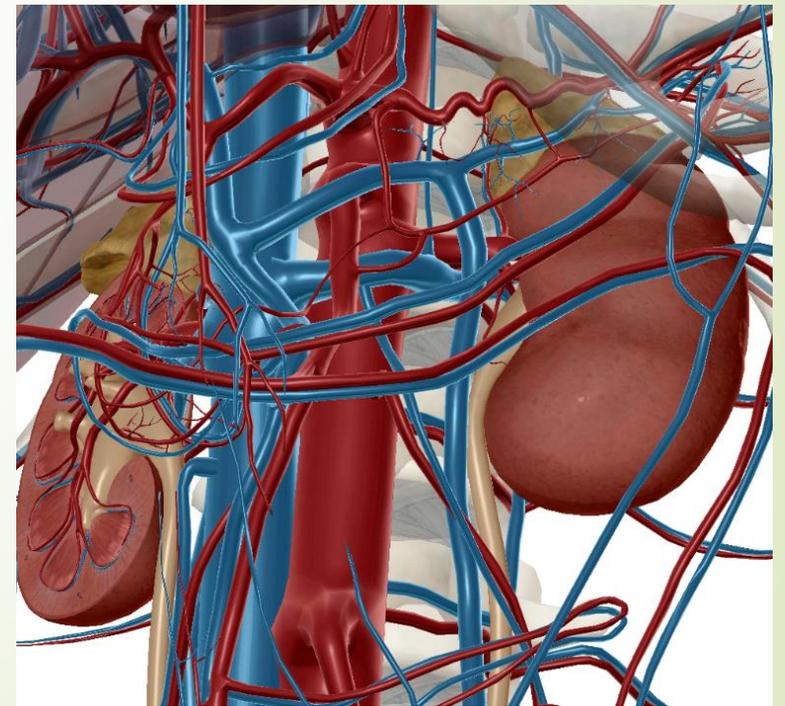
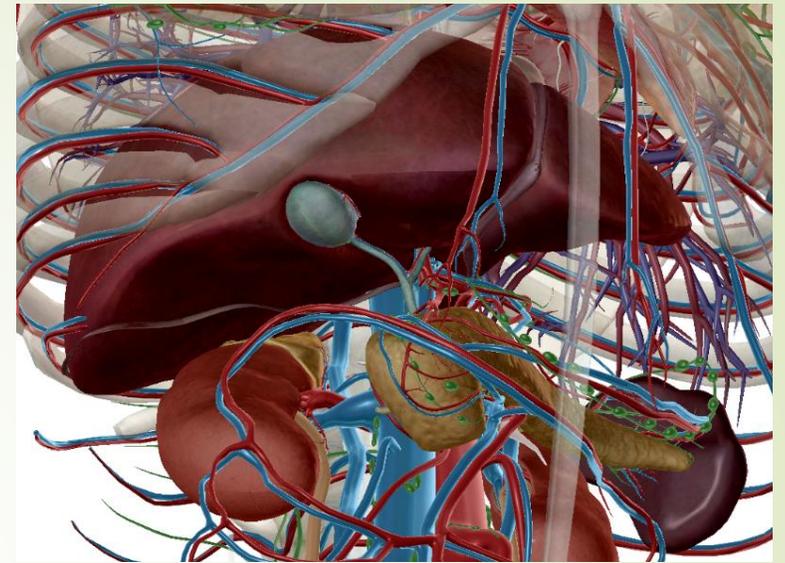
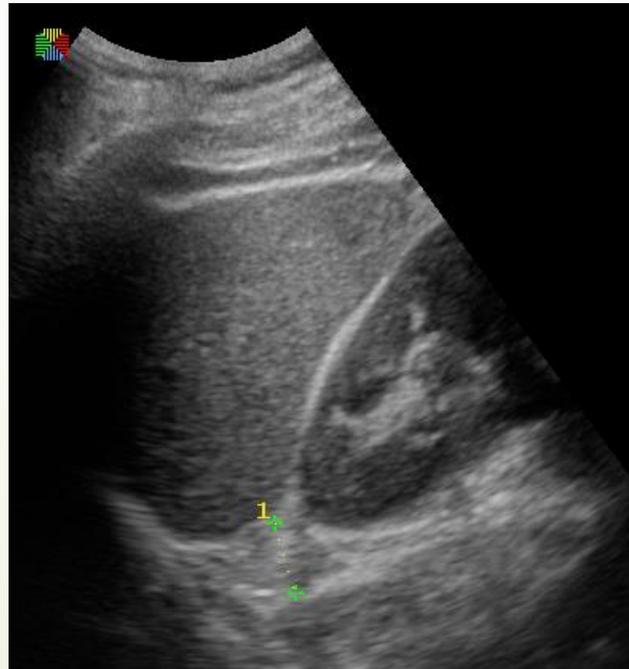
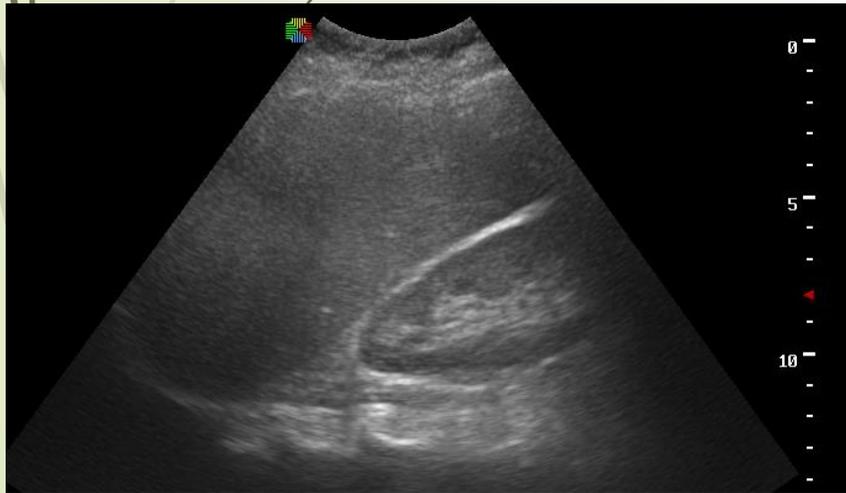


DIMENSIONI, POSIZIONE E RAPPORTI

- ▶ Le normali dimensioni sono di 3-7 cm. di lunghezza e 2-4 cm. di diametro trasverso
 - ▶ Normalmente non visualizzabili ecograficamente
- 

Il surrene destro è situato anteriormente, medialmente, subito sopra il polo superiore del rene destro, tra il polo renale, la VCI ed il fegato

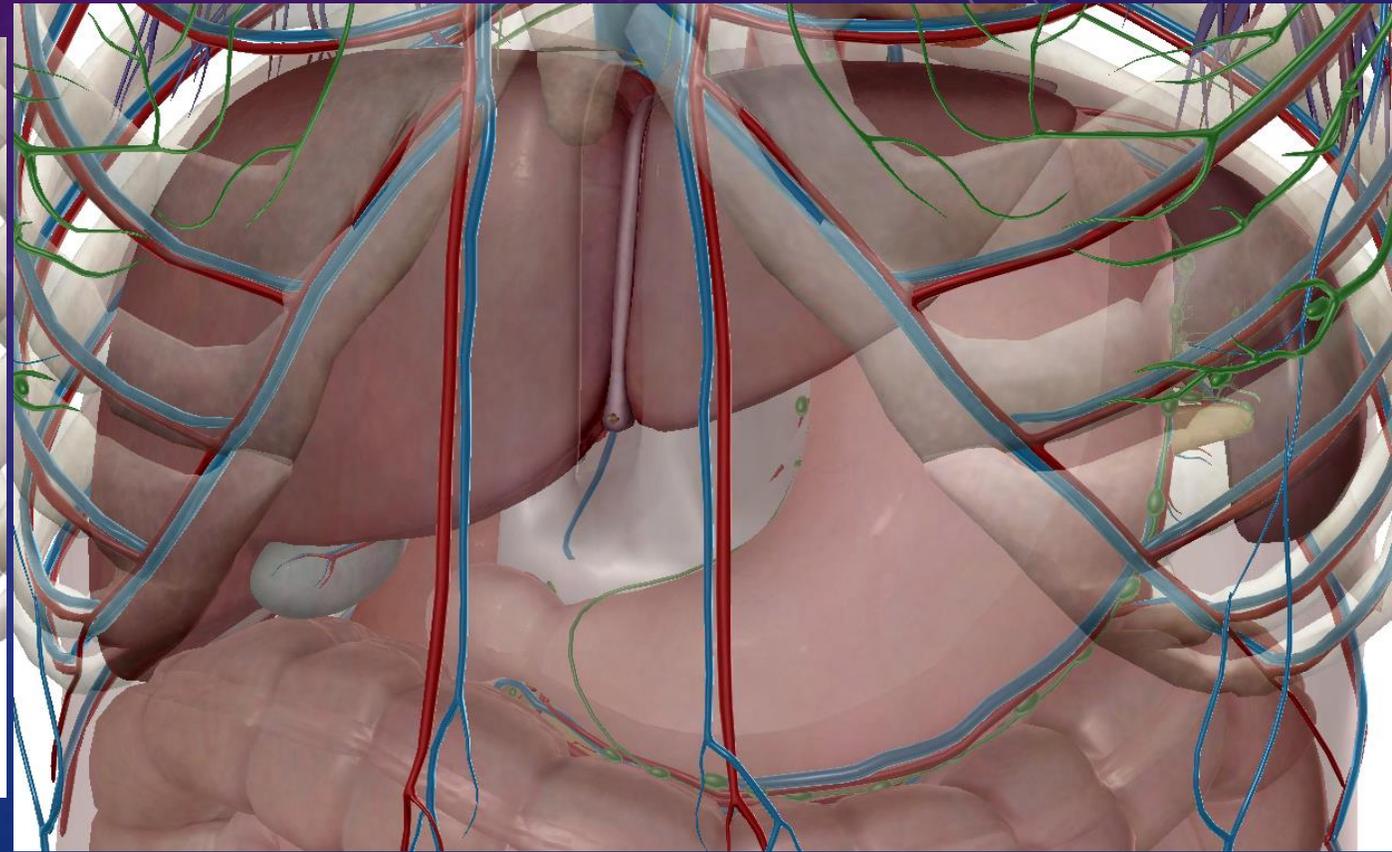
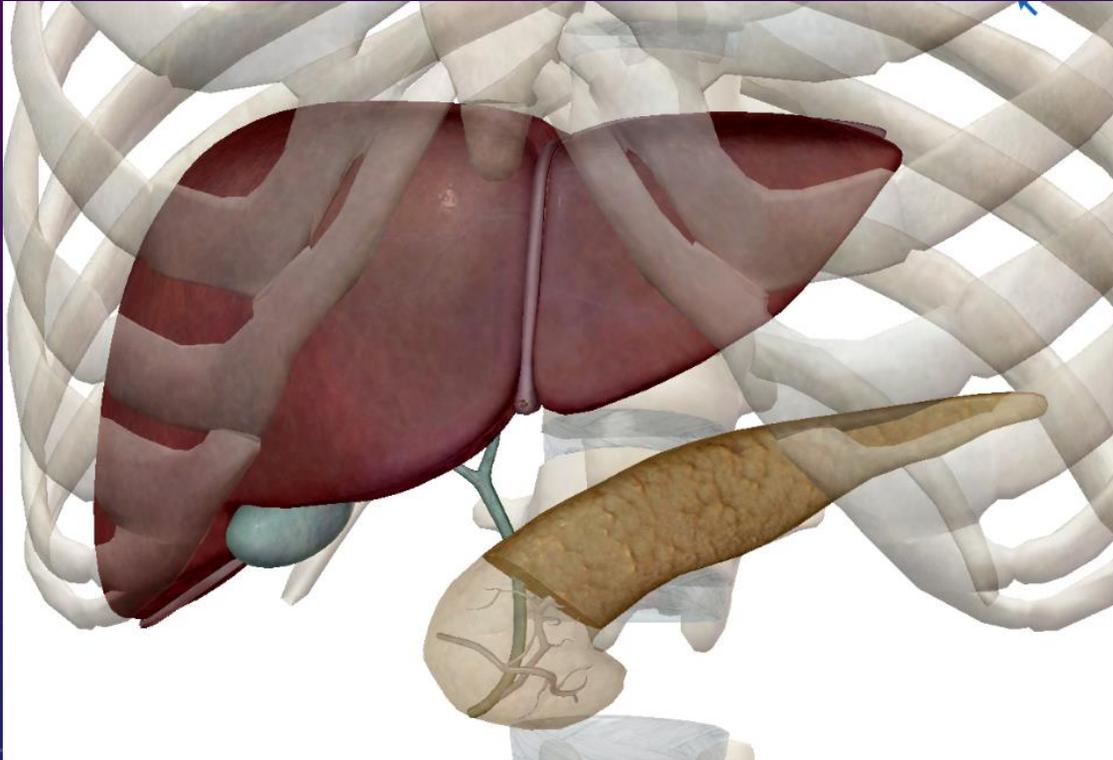
- Il surrene sinistro è, ugualmente, situato sopra al polo superiore del rene, anteriormente e medialmente, tra polo renale ed aorta



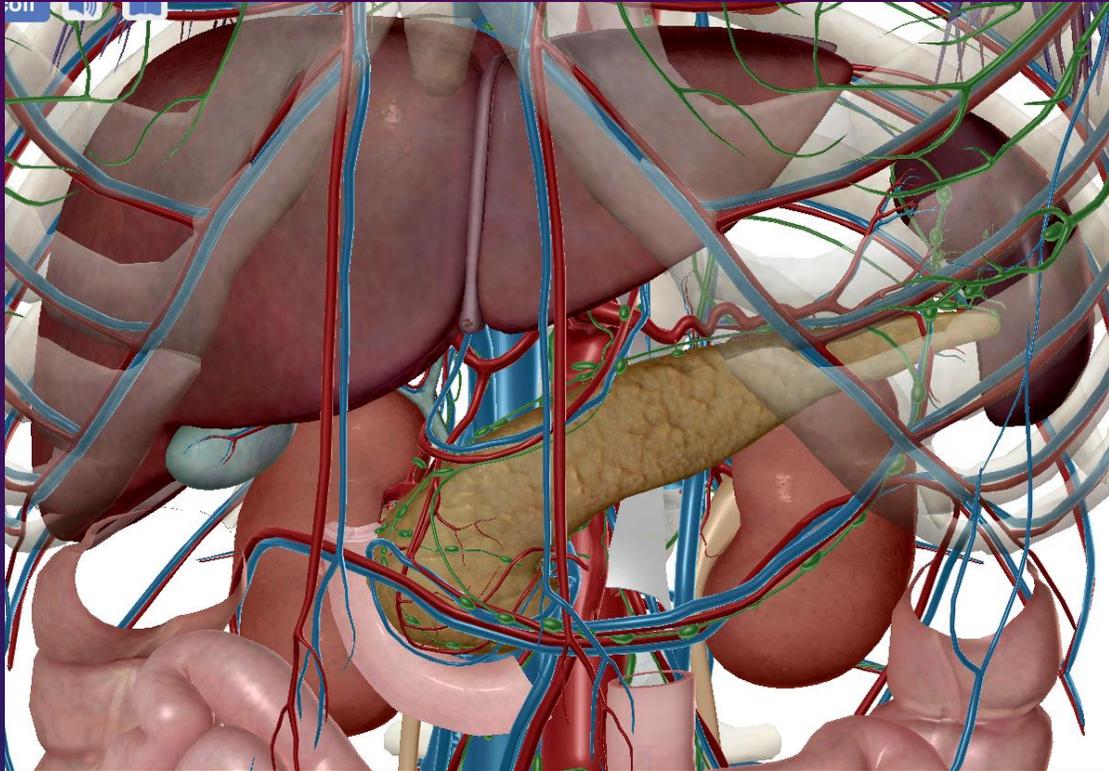
The background features a dark blue gradient with a subtle pattern of white dots. On the left side, there are several overlapping circular elements. A prominent one is a large circle with a scale around its perimeter, marked with numbers from 140 to 260 in increments of 10. Other circles are smaller and some have dashed outlines or arrows, suggesting a technical or scientific theme.

ANATOMIA ECOGRAFICA PANCREAS

POSIZIONE E RAPPORTI



POSIZIONE E RAPPORTI

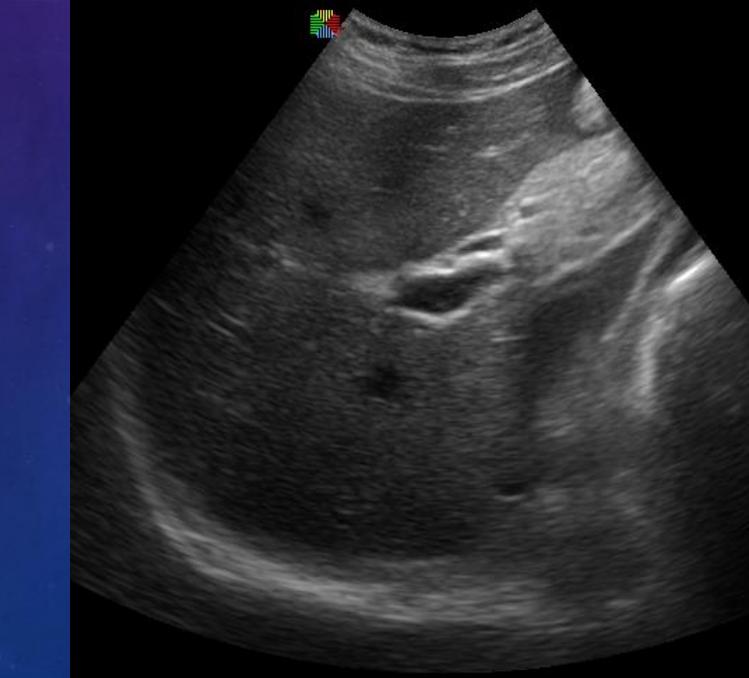


Spesso difficile da esaminare completamente a causa della sua posizione profonda e della posizione rispetto a stomaco ed intestino.

POSIZIONE E RAPPORTI

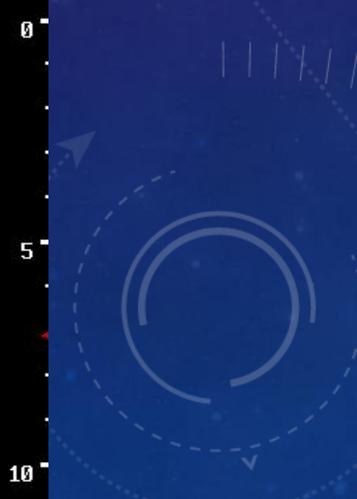
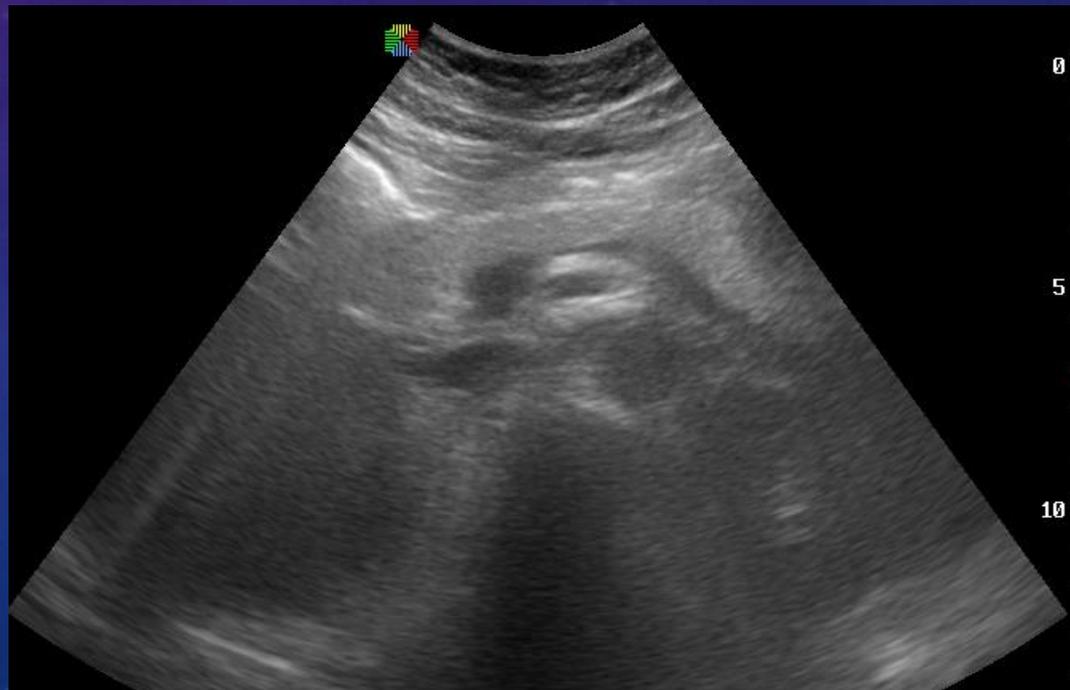
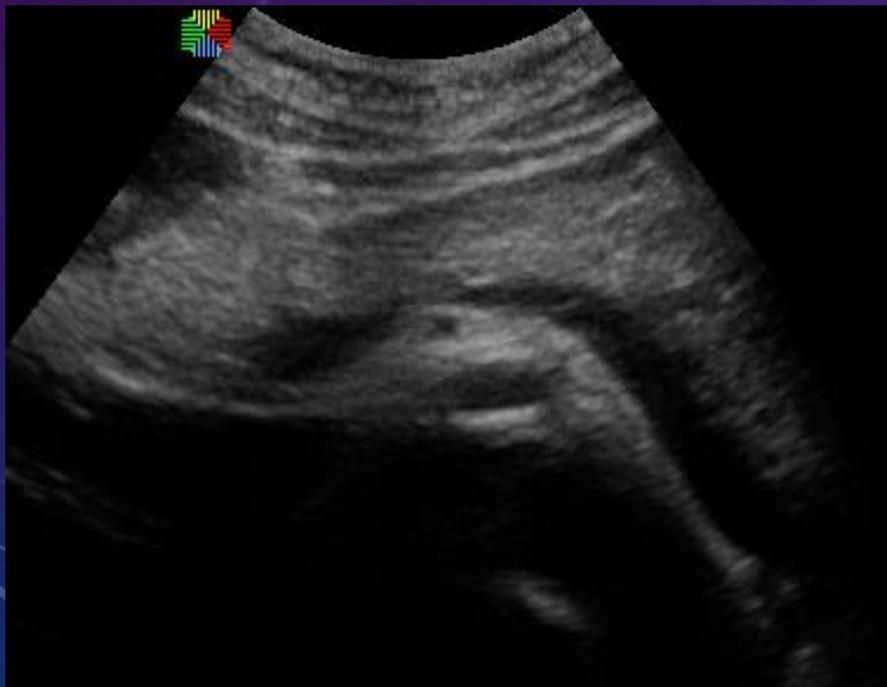


Organo retroperitoneale, diviso in tre porzioni, testa, corpo e coda. La testa è incorniciata dalla C duodenale. La coda arriva all'ilo splenico. Anteriormente il lobo sinistro del fegato, posteriormente aorta e corpo vertebrale- Dal basso a destra orientato verso l'alto a sin. e da anteriore a posteriore



TESTA: 3,5 CM.
CORPO: 2,5 CM.
CODA: 3 CM.



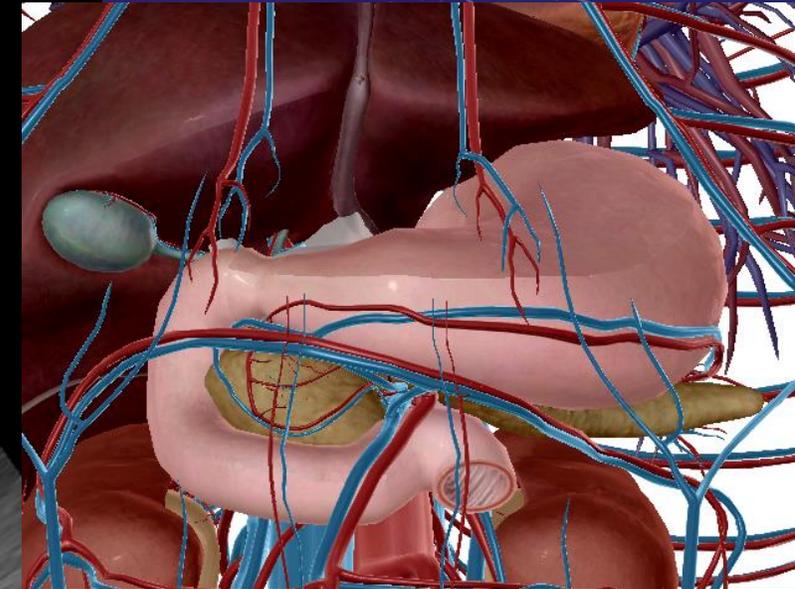
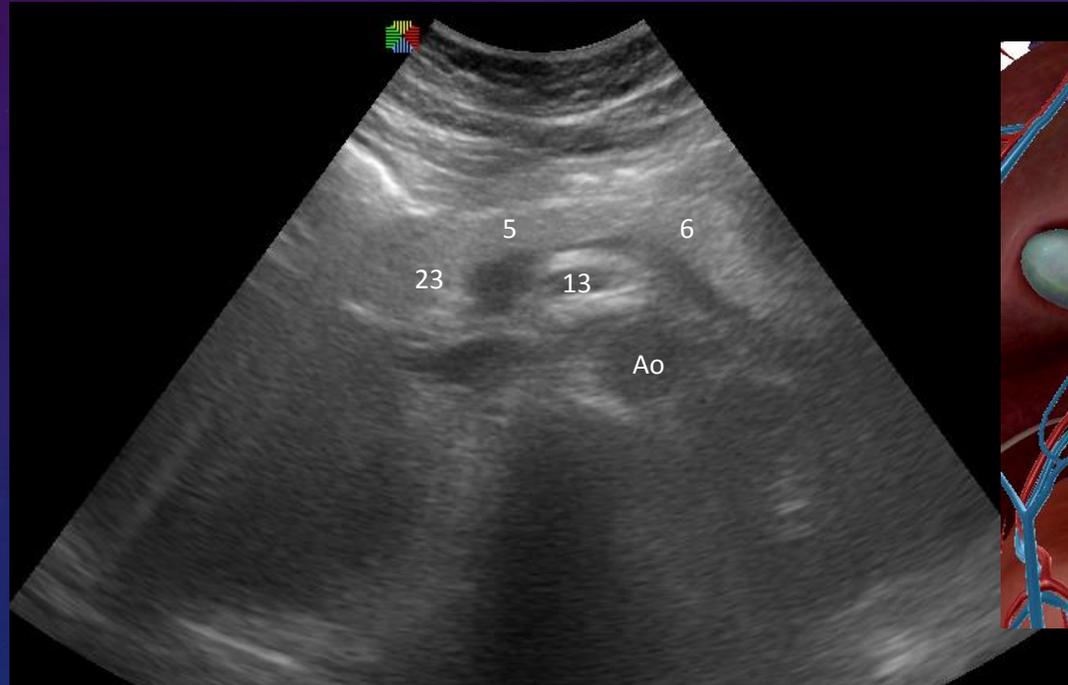


PUNTI DI REPERE ANATOMICI

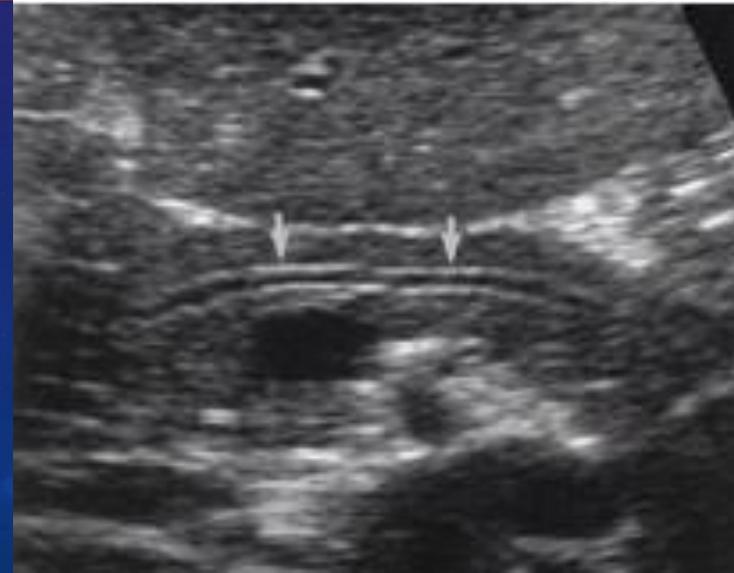
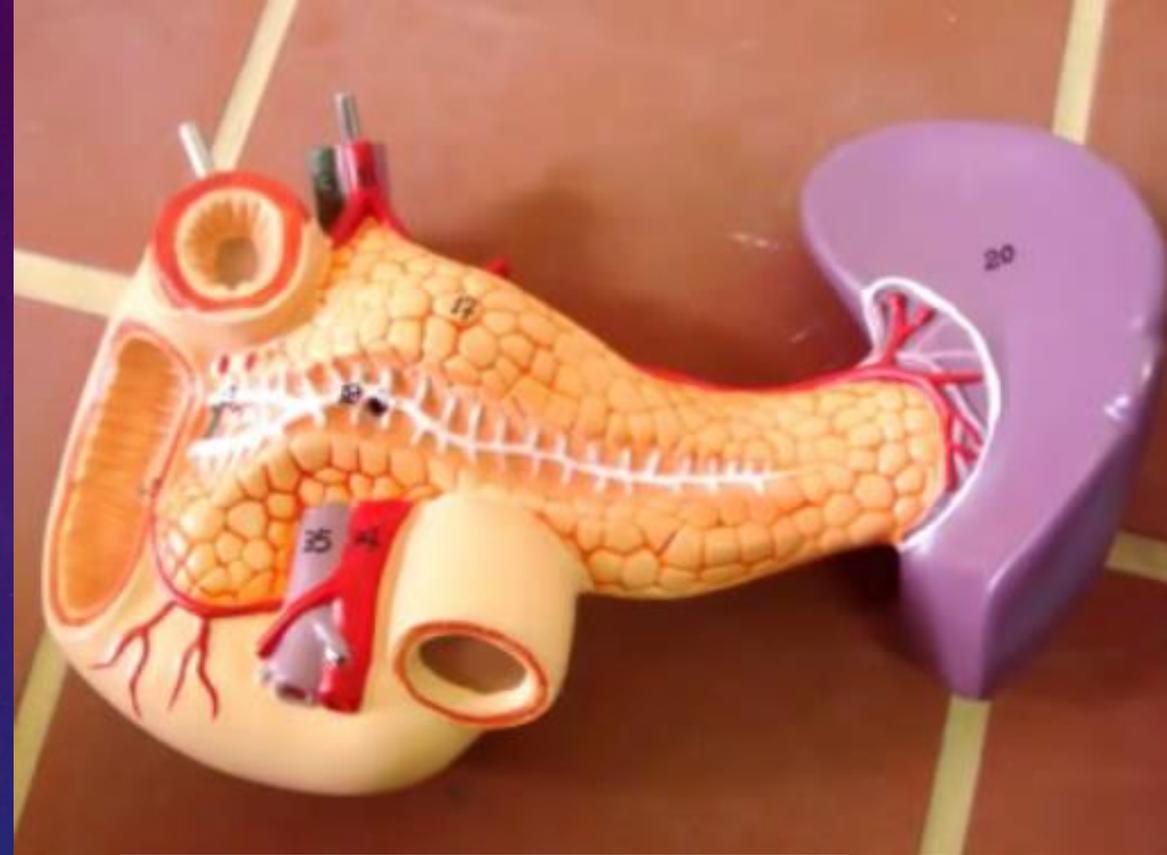
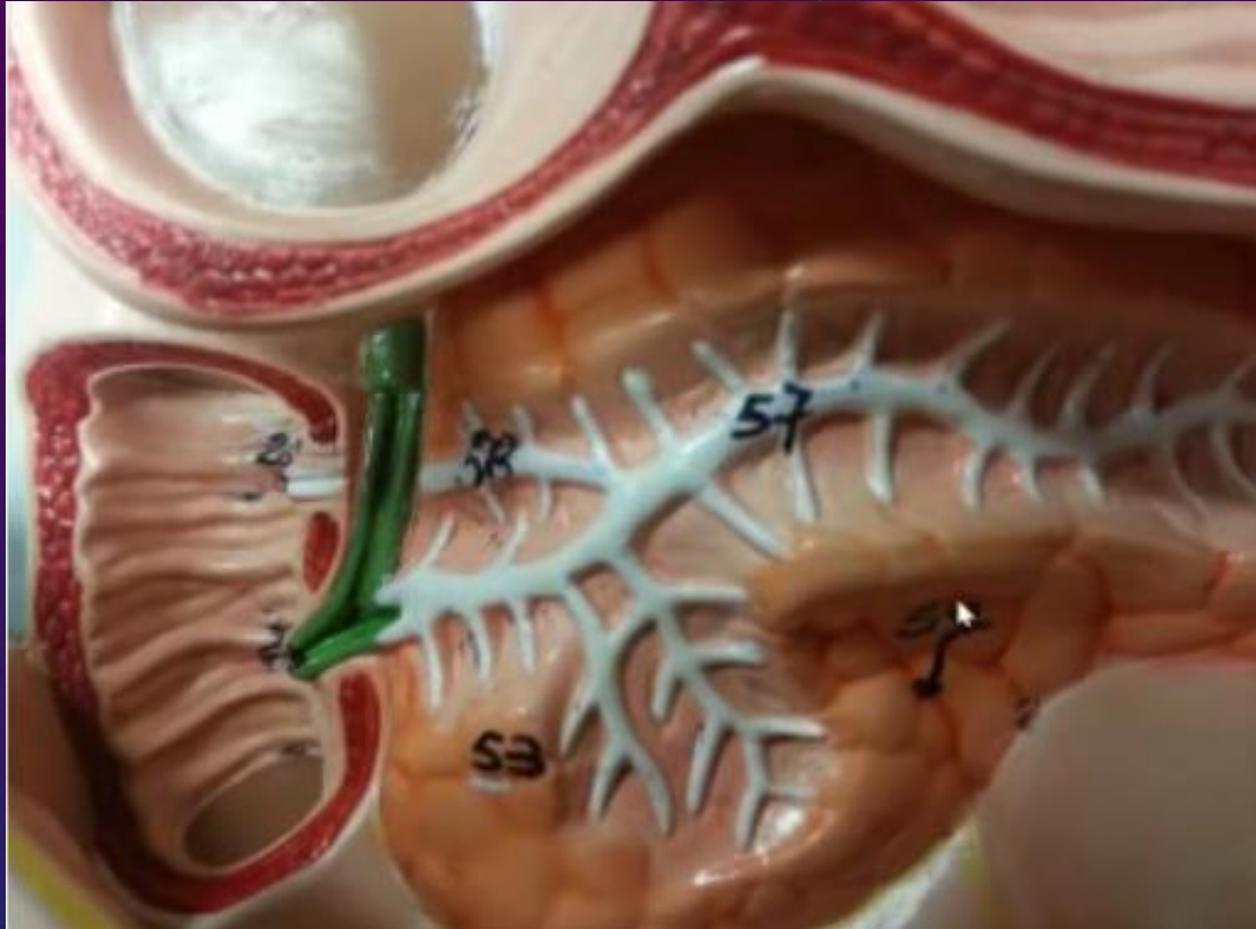
- Tronco celiaco
- Arteria mesenterica superiore
- Coledoco
- Asse splenoportale
- Aorta
- Vena Cava Inferiore

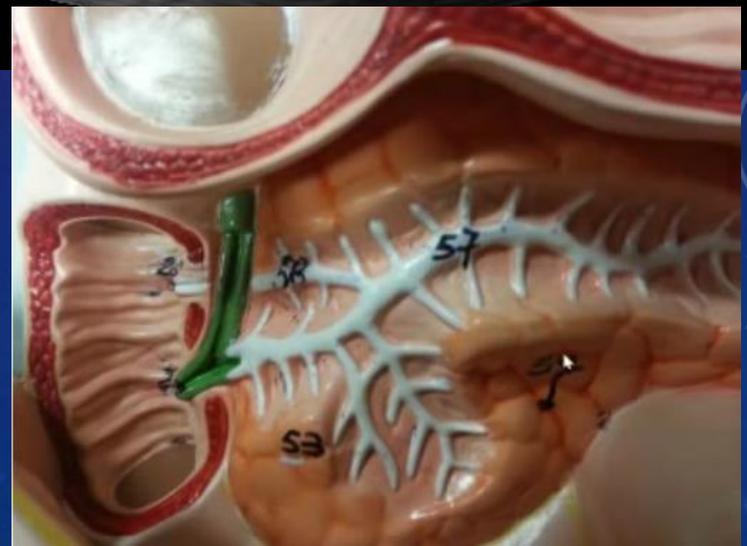
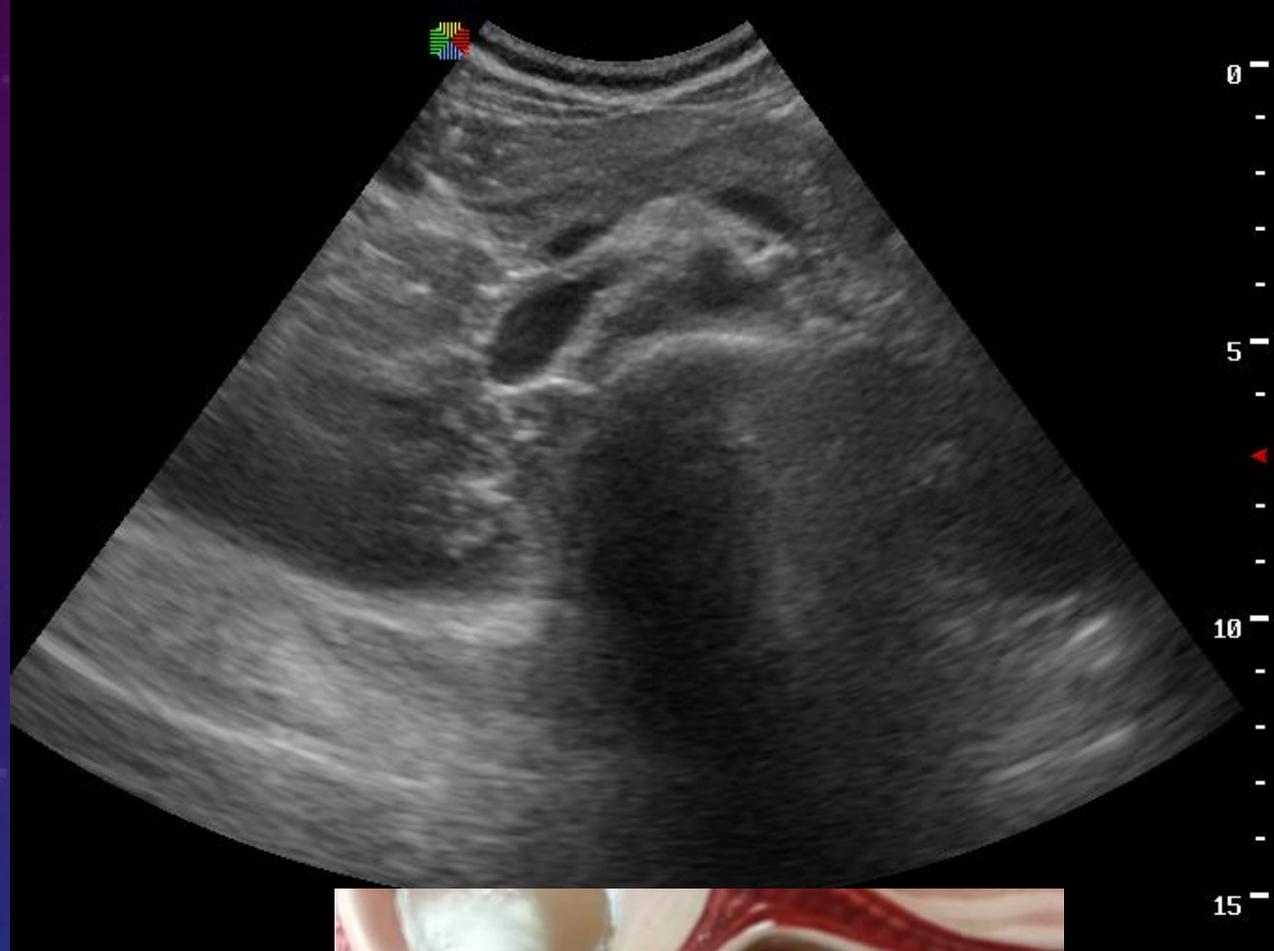


TESTA DEL PANCREAS

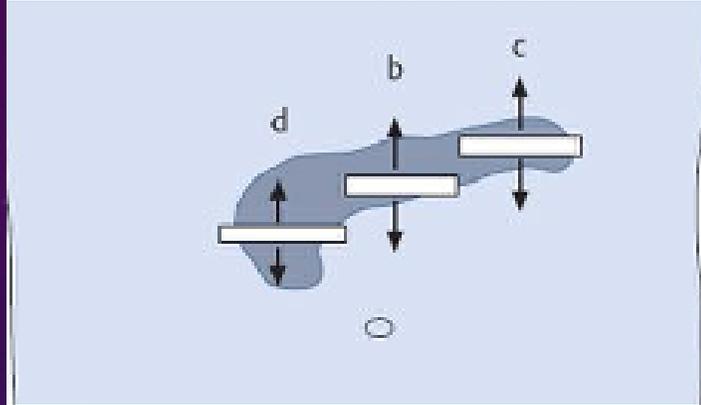


CROCICCHIO PERI-VATERIANO



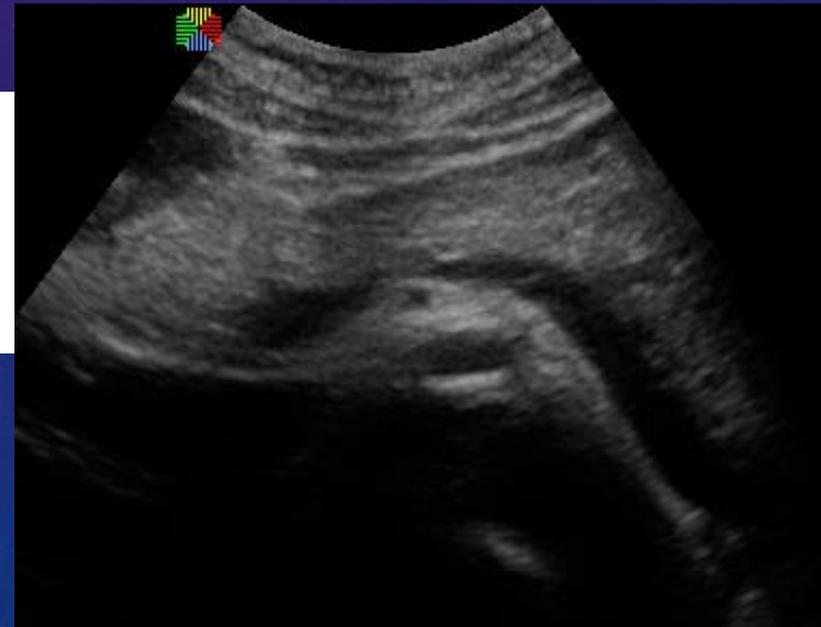
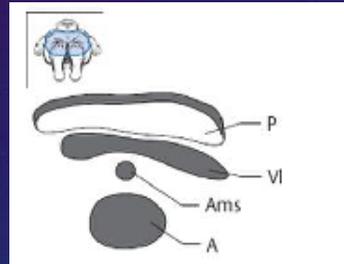


SCANSIONE TRASVERSALE



La lunghezza del pancreas (circa 15 cm.) richiede scansioni multiple per un esame completo

Il punto di riferimento per la scansione trasversale è, principalmente, l'asse spleno-portale



SCANSIONE LONGITUDINALE

- Inizio con scansione trasversale sull'epigastrio
- Localizzato il corpo del pancreas, ruotare la sonda per scansione longitudinale sull'epigastrio
- Con la vista sul pancreas, angolare leggermente per insonare l'aorta (punto di repere con a.mesenterica sup., tronco celiaco, vena splenica)



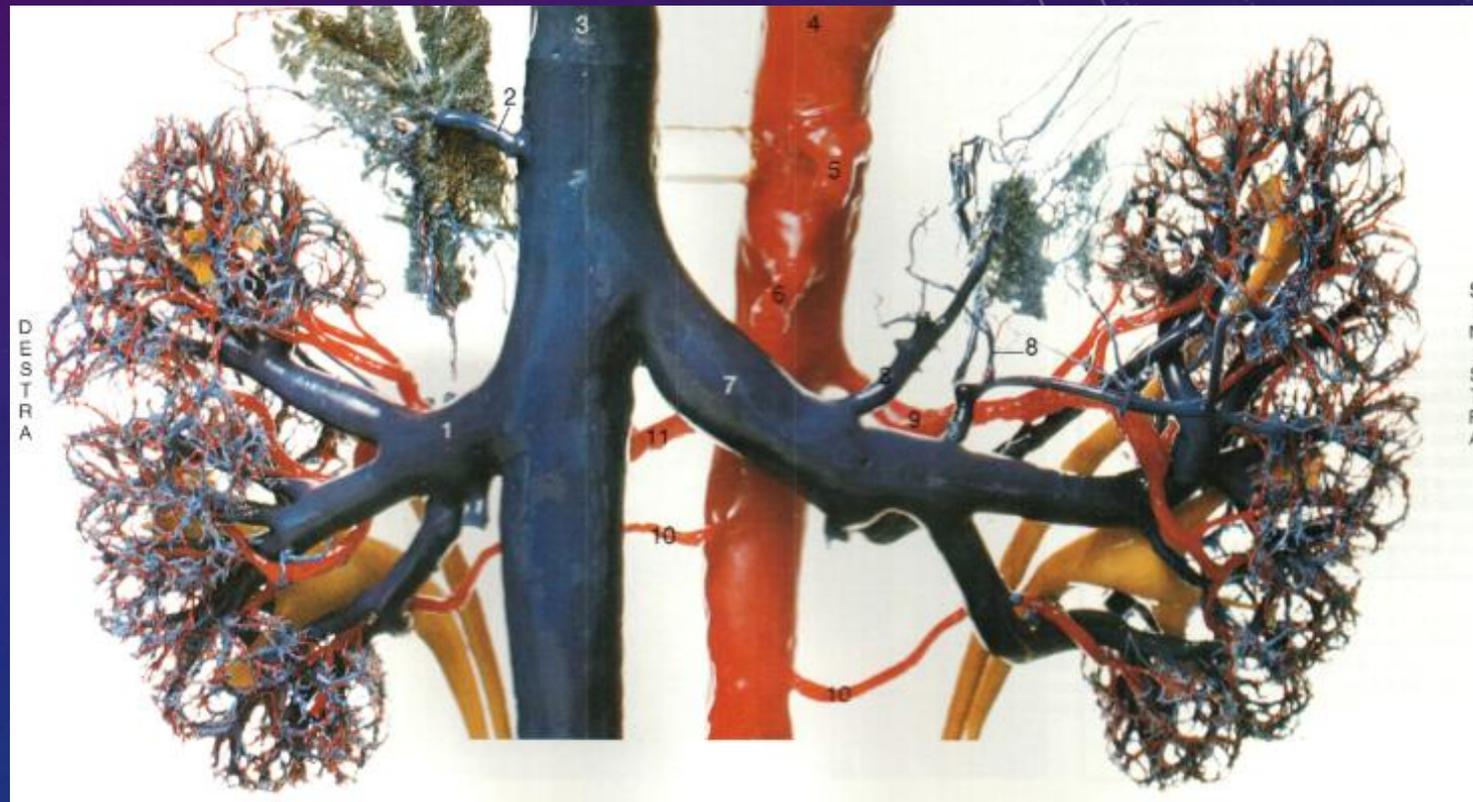
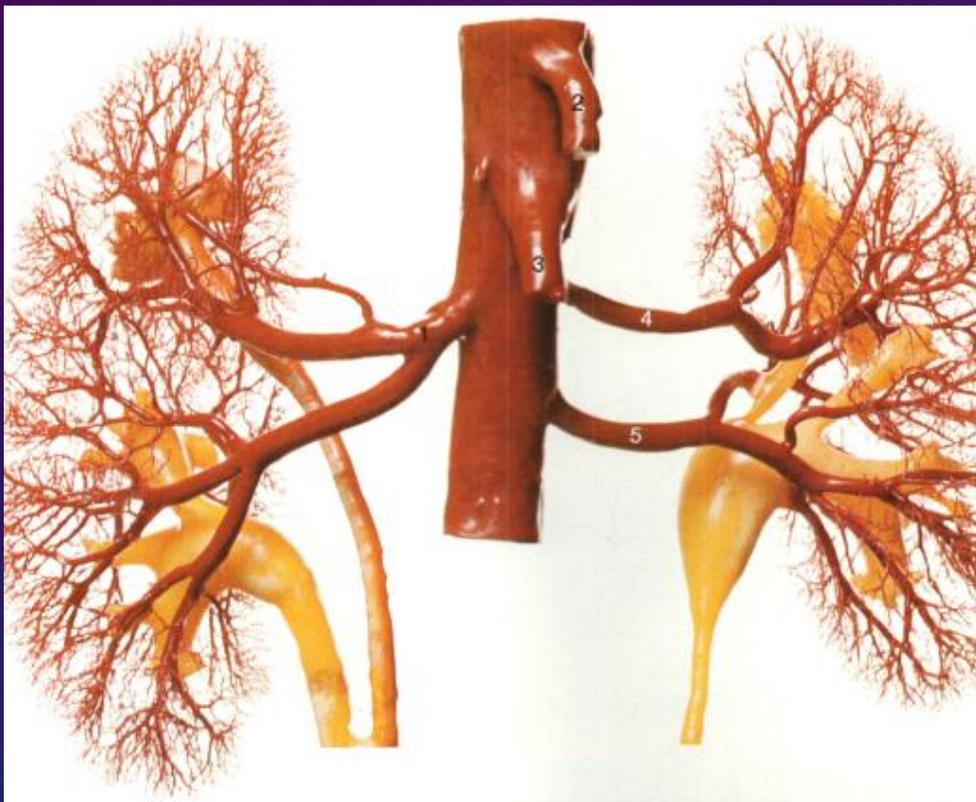
► **Pancreas**

Head < 30 mm
Body < 25 mm
Tail < 25 mm

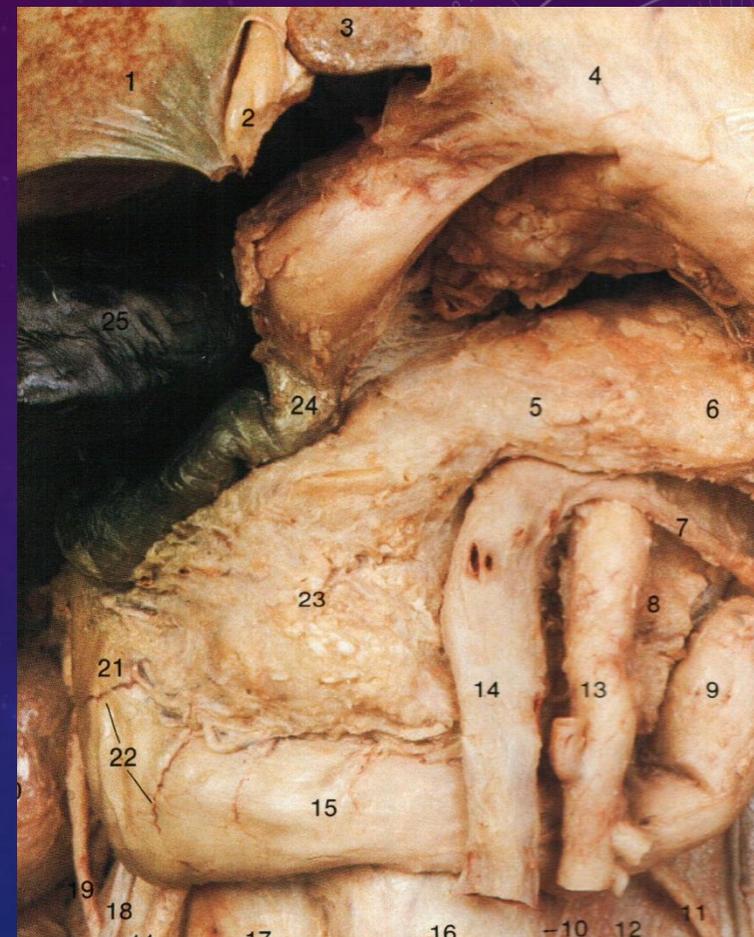
Pancreatic duct < 2 mm

Pancreatic duct

AORTA ADDOMINALE-VCI

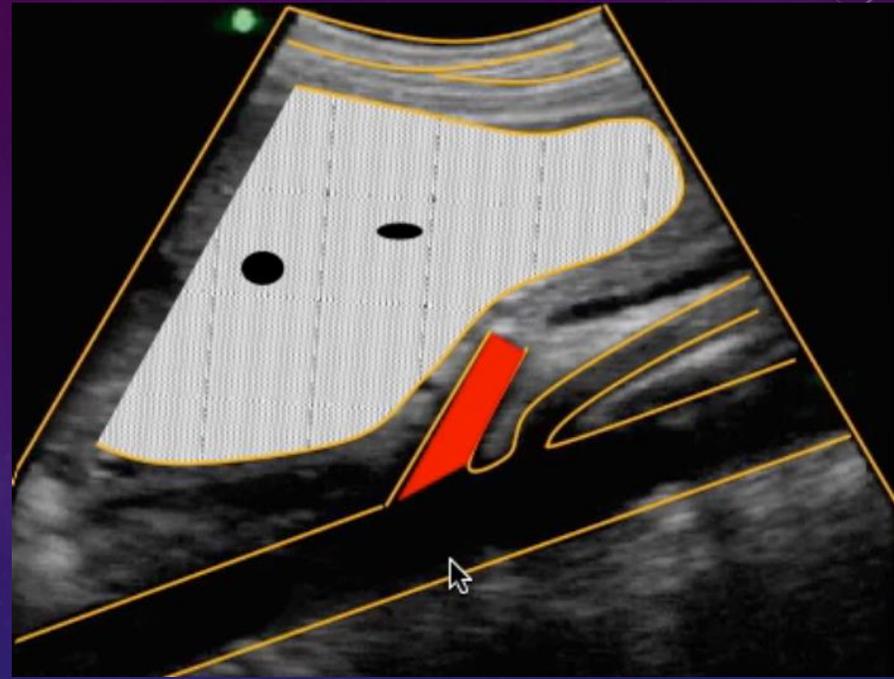


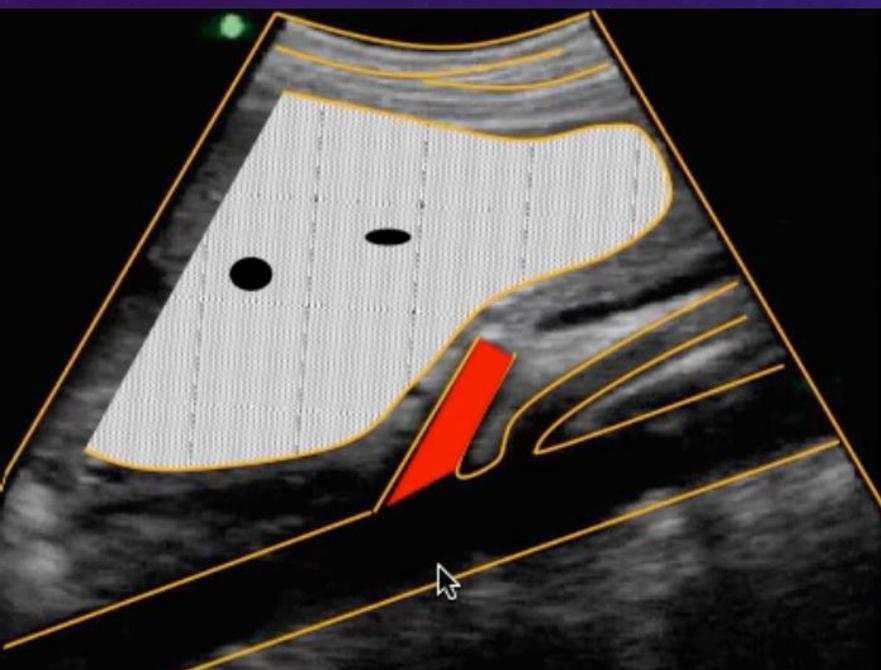
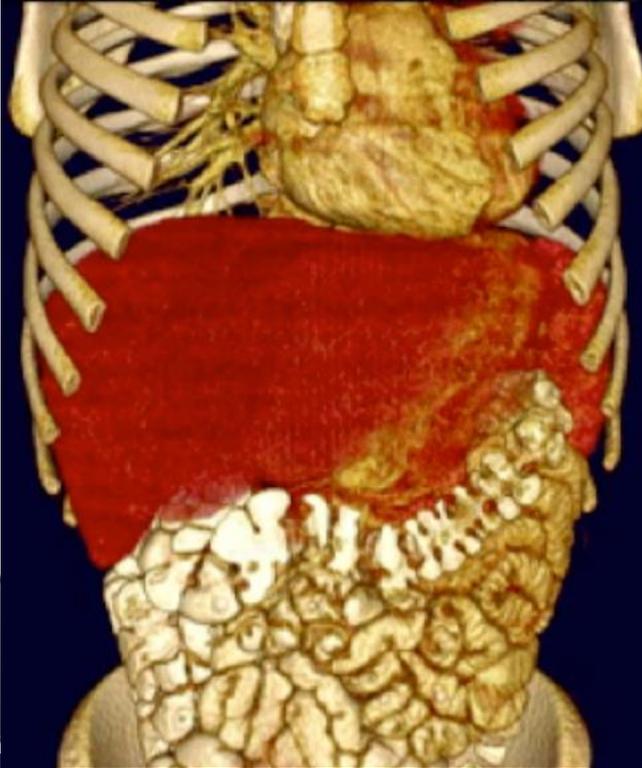
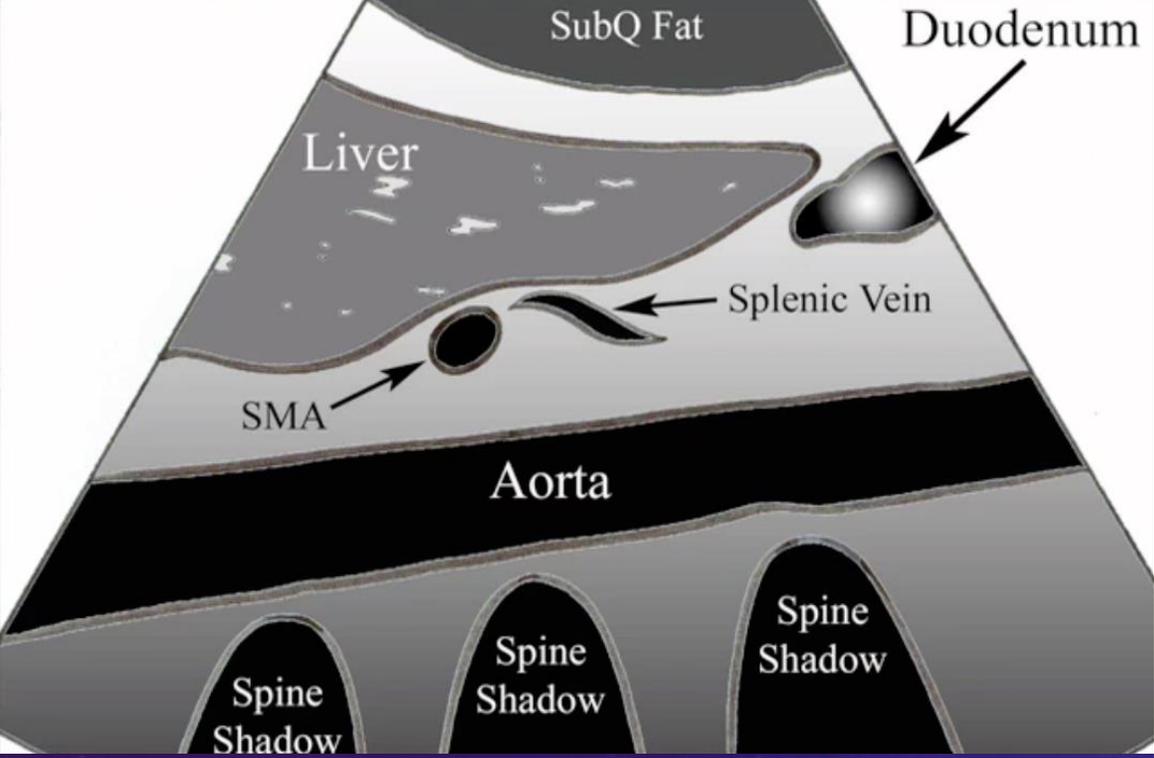
SEZIONE TRASVERSALE ADDOME SUPERIORE

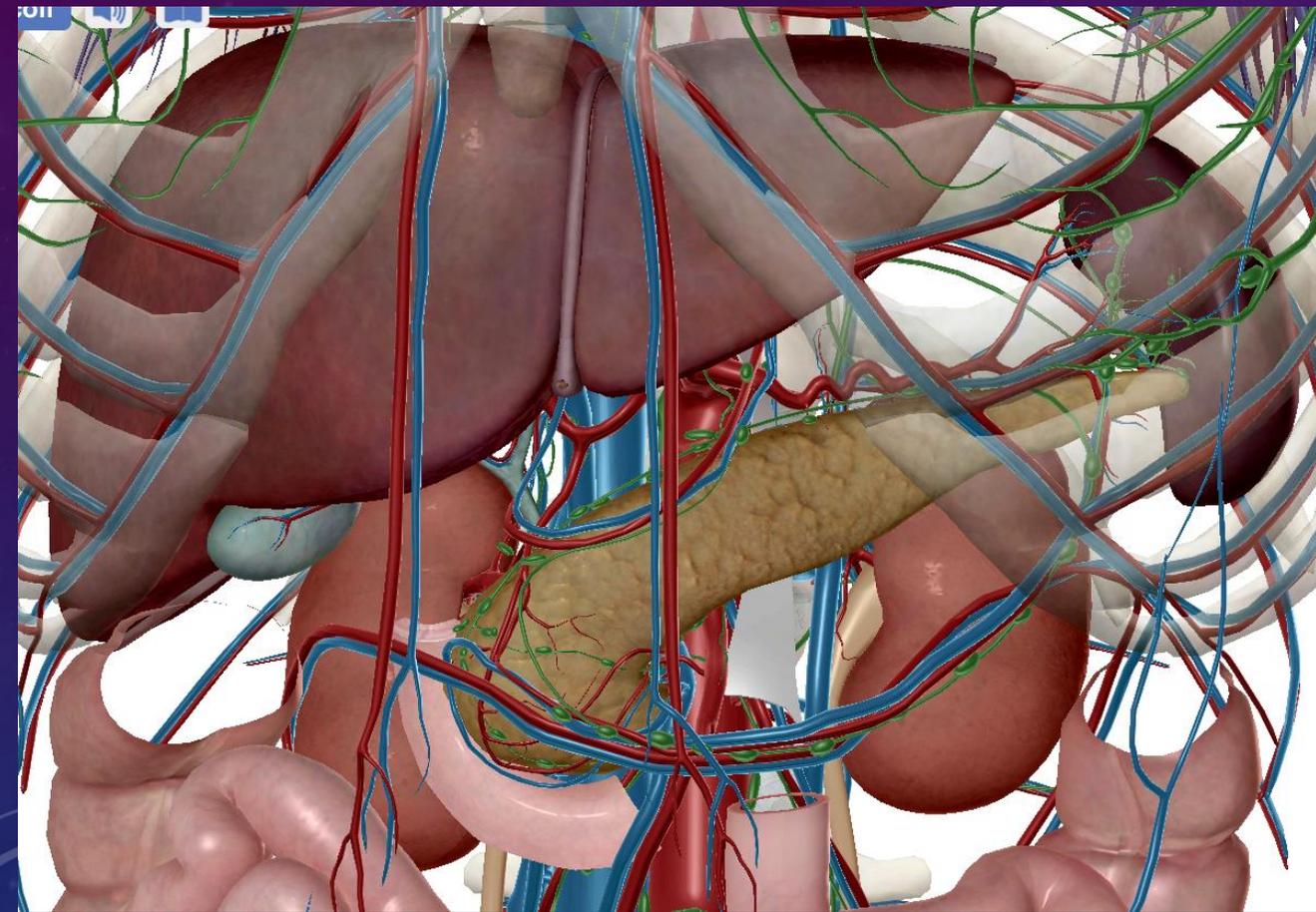


- | | |
|---------------------------------|--|
| 1 Retto addominale destro | 17 Quadrato del lombi |
| 2 Legamento falciforme | 18 Sacrospinale |
| 3 Lobo sinistro del fegato | 19 Processo spinoso della prima vertebra lombare |
| 4 Piccolo omento | 20 Cono midollare |
| 5 Pancreas | 21 Radici nervose della cauda |
| 6 Arteria mesenterica superiore | 22 Corpo della prima vertebra lombare |
| 7 Vena splenica | 23 Tronco simpatico |
| 8 Stomaco | 24 Aorta addominale |
| 9 Colon trasverso | 25 Arteria renale destra |
| 10 Grande omento | 26 Vena renale destra |
| 11 Milza | 27 Vena cava inferiore |
| 12 Decima costa | 28 Rene destro |
| 13 Colon discendente | 29 Lobo destro del fegato |
| 14 Rene sinistro | 30 Dotti epatici |
| 15 Vena renale sinistra | 31 Vena porta |
| 16 Grande psoas | 32 Arteria epatica |

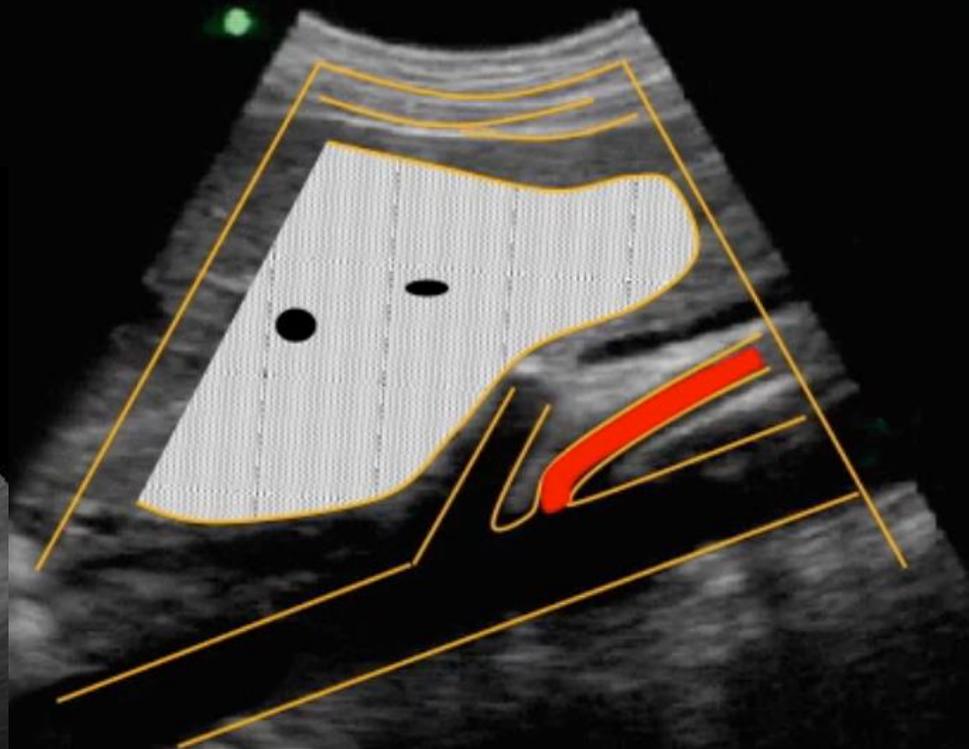
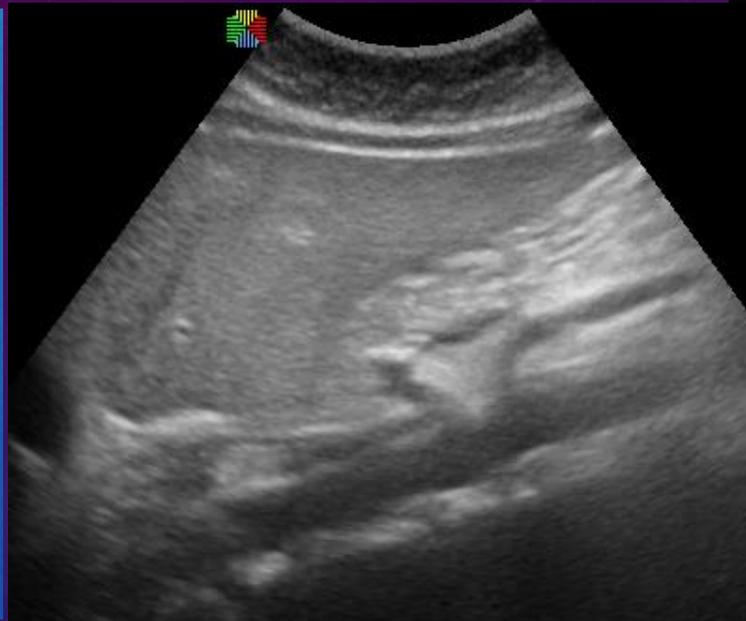
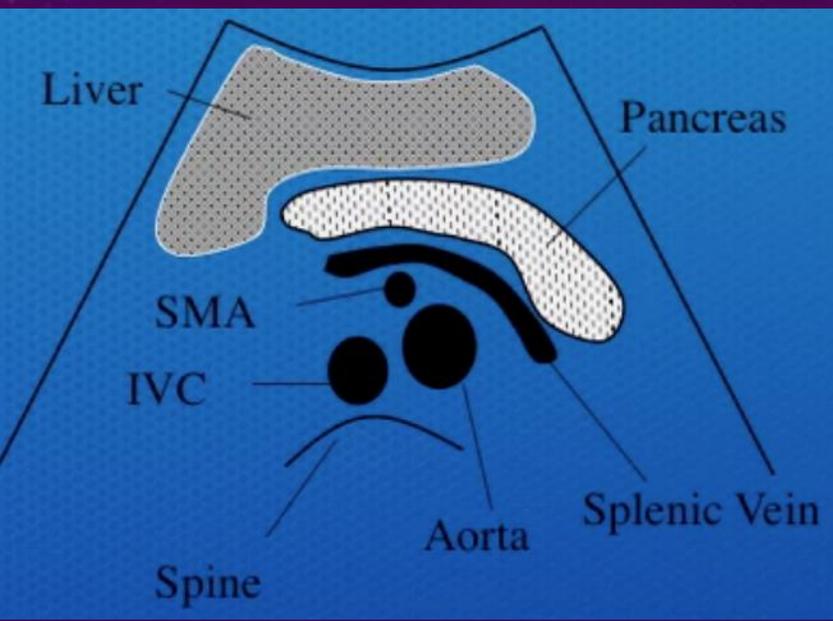
1° BRANCA PROSSIMALE: TRONCO CELIACO

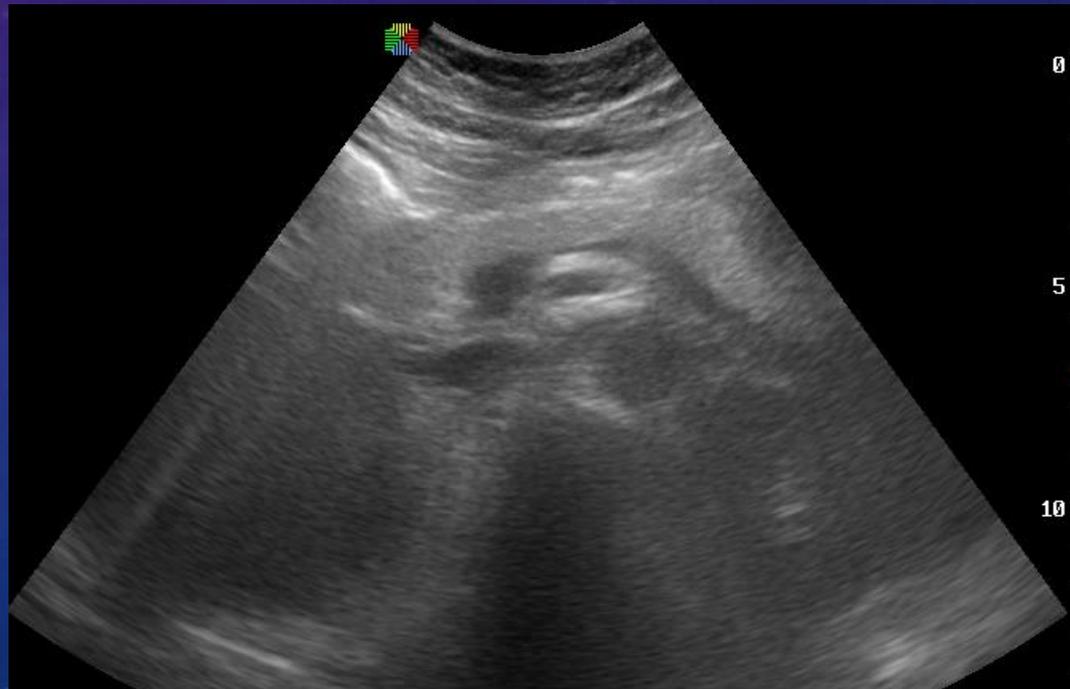
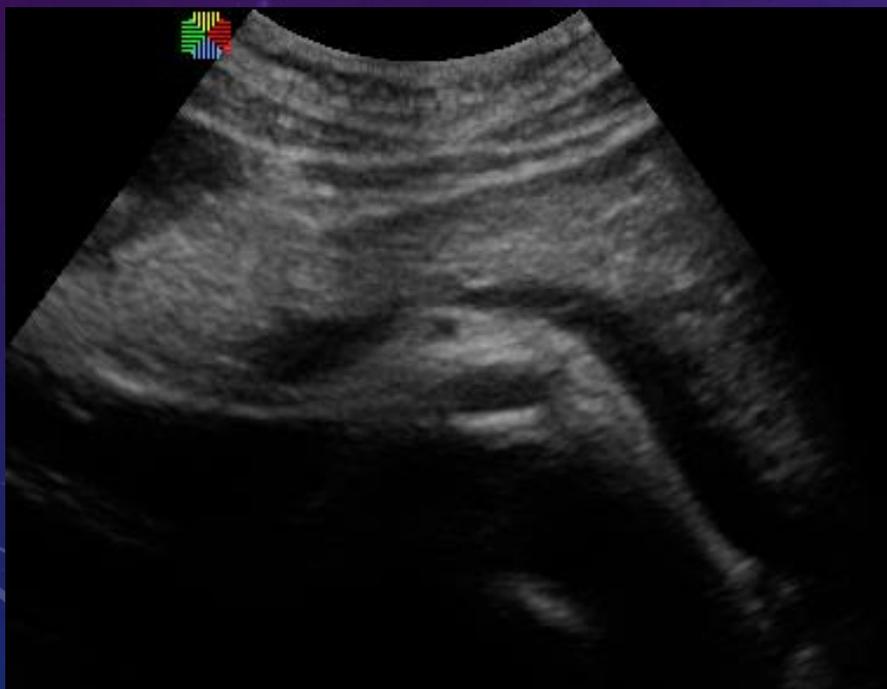




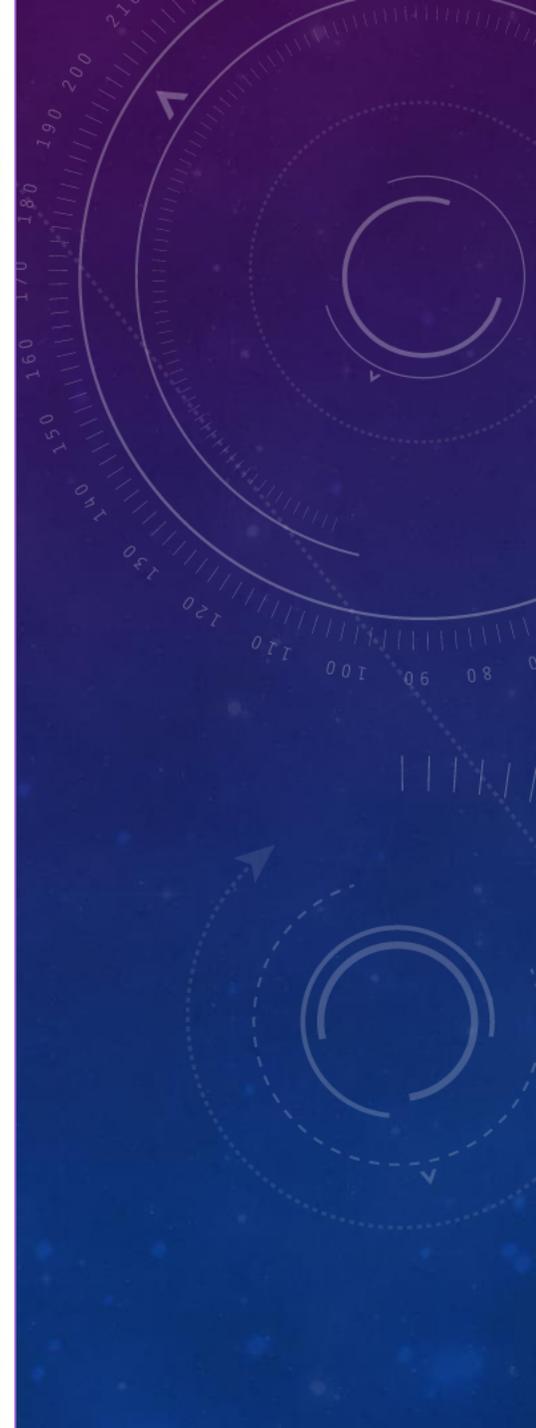
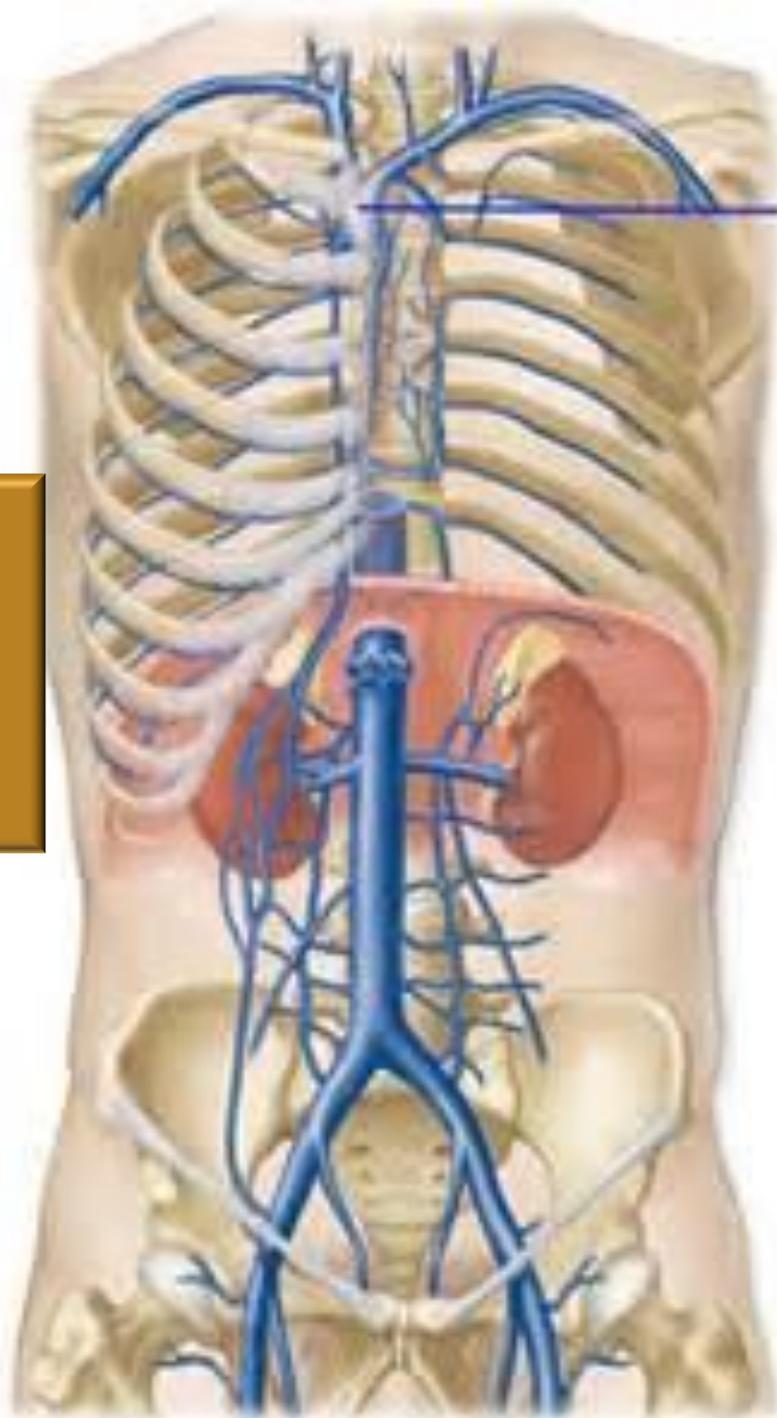


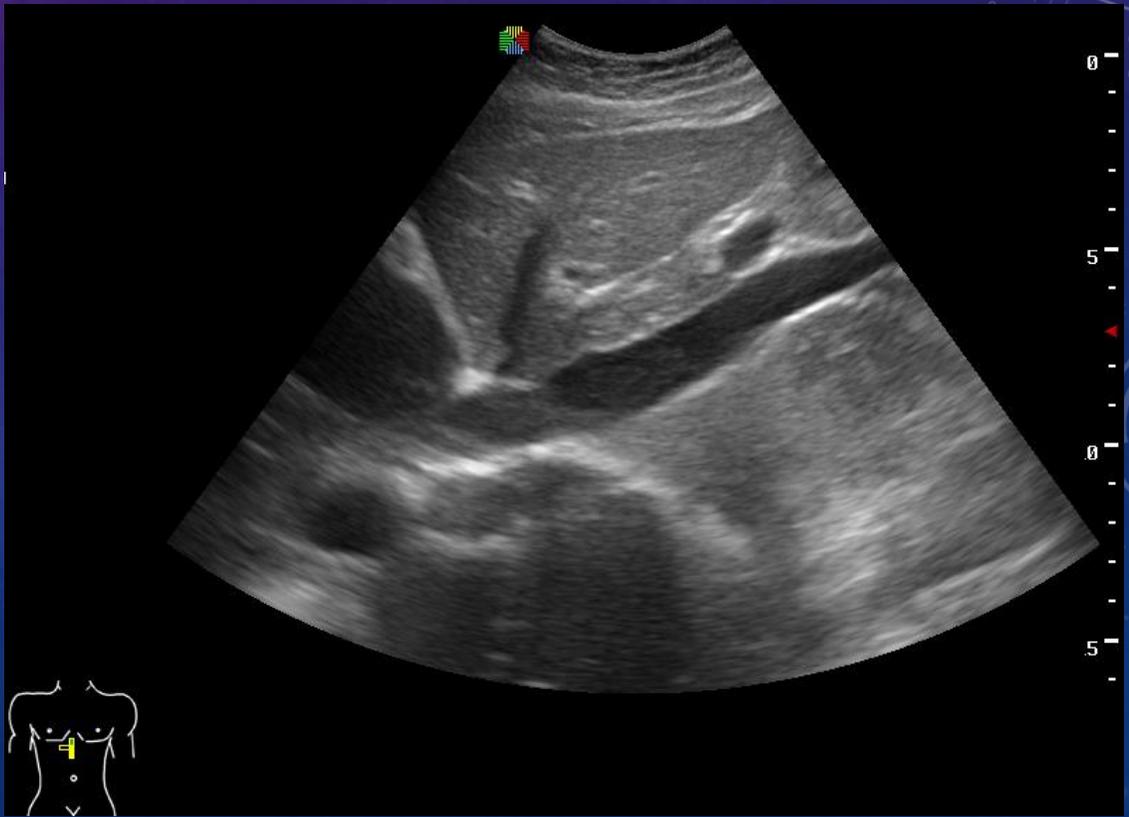
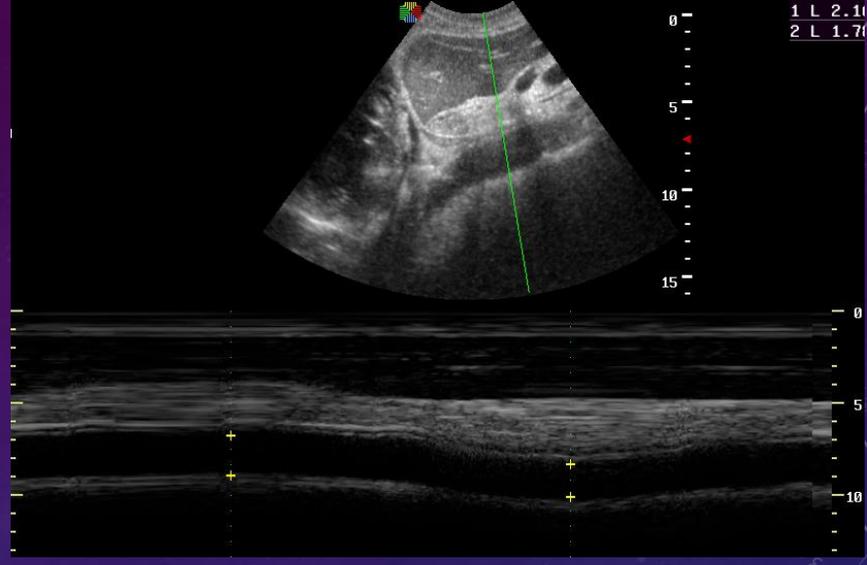
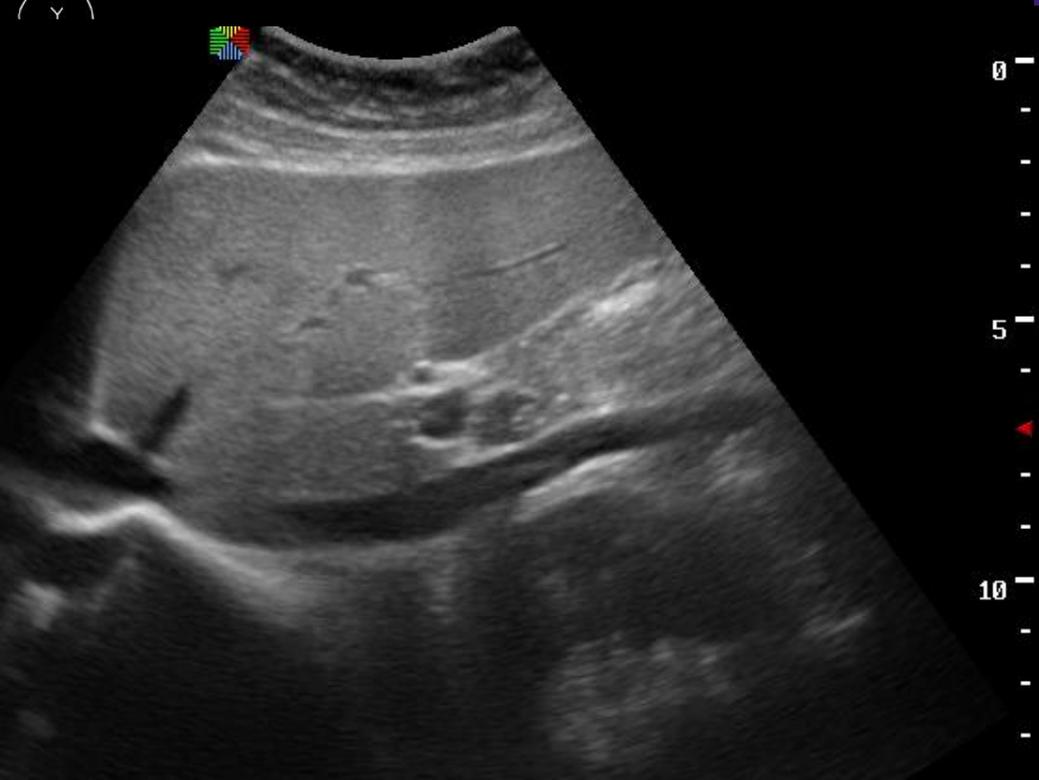
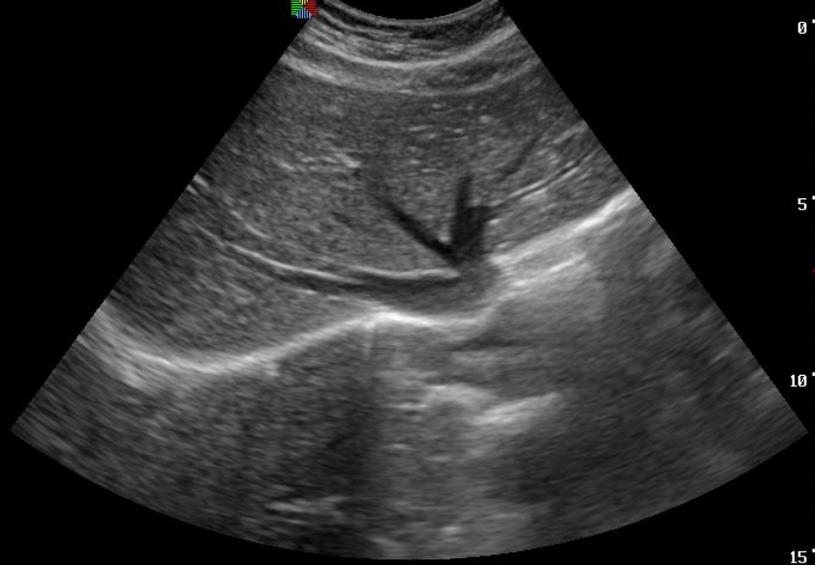
2° BRANCA PROSSIMALE: SMA



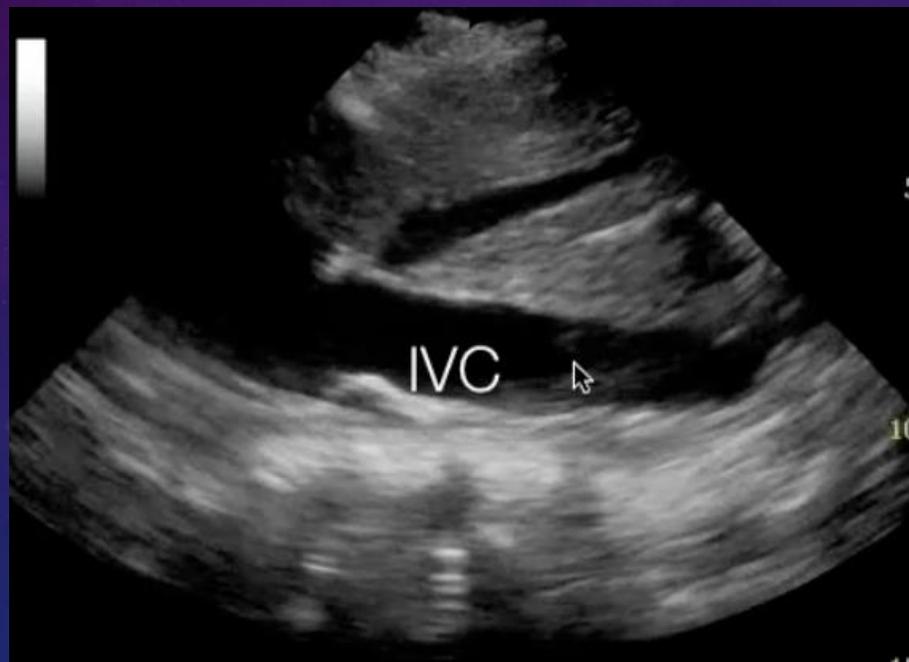


La VCI origina dalla
congiunzione delle vene
iliache e termina nell'atrio
dx.





VENA CAVA INFERIORE



IVC Size	Respiratory Change	RA Pressure (cm)
<1.5	Total Collapse	0-5
1.5-2.5	>50% Collapse	5-10
1.5-2.5	<50% Collapse	11-15
>2.5	<50% Collapse	16-20
>2.5	None	>20

ANATOMIA ECOGRAFICA MILZA

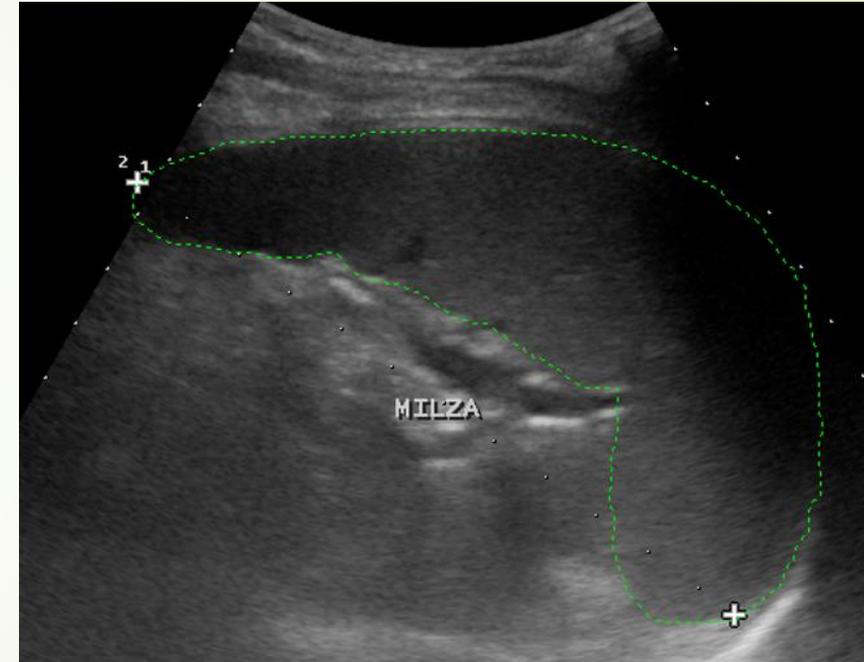
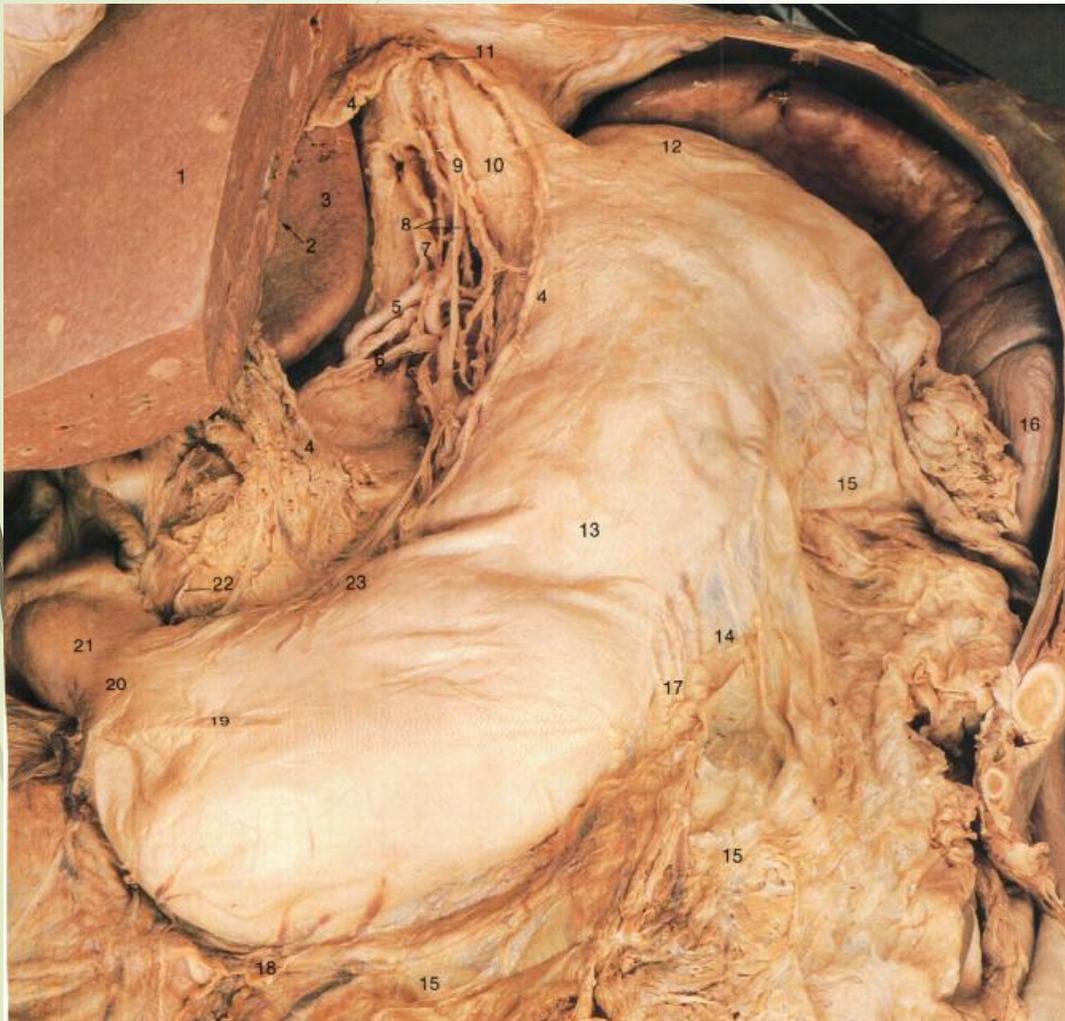


- Porzione postero-superiore emiaddome di sinistra
- La superficie posterolaterale, convessa, è in contatto superiormente con l'emidiaframma sinistro e la parete addominale
- Inferiormente rapporti con il rene sinistro
- Anteriormente, la superficie è concava, presenta l'ilo splenico ed ha rapporti con la coda del pancreas e lo stomaco

1	Retto addominale destro	17	Quadrato dei lombi
2	Legamento falciforme	18	Sacrospinale
3	Lobo sinistro del fegato	19	Processo spinoso della prima vertebra lombare
4	Piccolo omento	20	Cono midollare
5	Pancreas	21	Radici nervose della cauda
6	Arteria mesenterica superiore	22	Corpo della prima vertebra lombare
7	Vena splenica	23	Tronco simpatico
8	Stomaco	24	Aorta addominale
9	Colon trasverso	25	Arteria renale destra
10	Grande omento	26	Vena renale destra
11	Milza	27	Vena cava inferiore
12	Decima costa	28	Rene destro
13	Colon discendente	29	Lobo destro del fegato
14	Rene sinistro	30	Dotti epatici
15	Vena renale sinistra	31	Vena porta
16	Grande psoas	32	Arteria epatica

ANATOMIA ECOGRAFICA MILZA

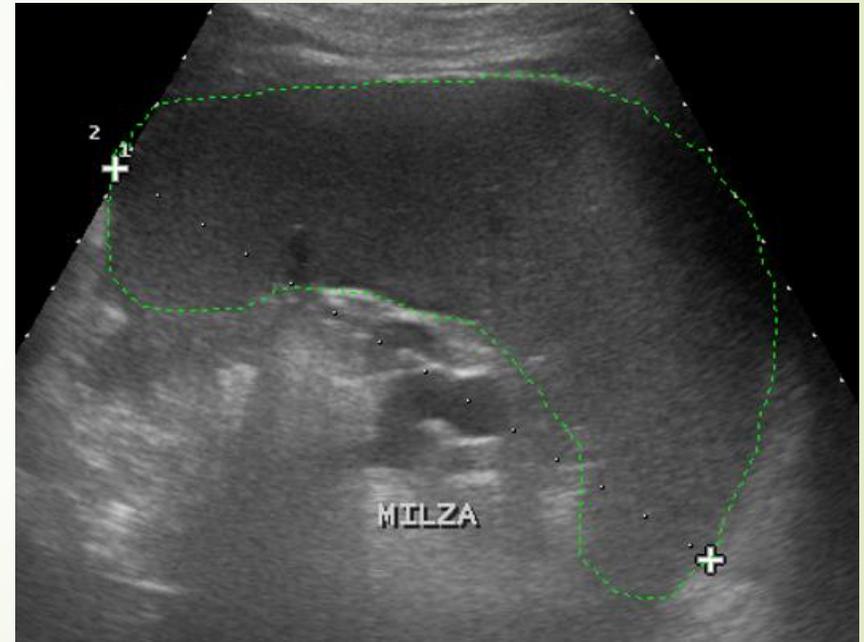
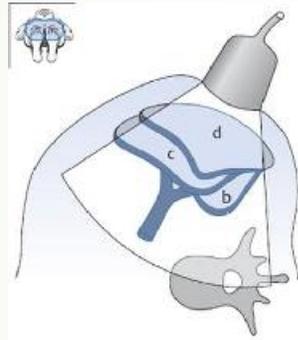
- ▶ Studio ecografico in decubito supino o laterale dx.
- ▶ Sonde settoriali ed eventualmente lineari da 5-10 MHz (spazi intercostali)



- 1 Lobo destro del fegato
- 2 Scissura per il legamento venoso
- 3 Lobo caudato del fegato
- 4 Piccolo omento (parte sezionata)
- 5 Arteria gastrica sinistra
- 6 Vena gastrica sinistra
- 7 Tronco vagale posteriore
- 8 Rami esofagei dei vasi gastrici di sinistra
- 9 Tronco vagale anteriore
- 10 Esofago
- 11 Orifizio esofageo nel diaframma

- 12 Fondo
- 13 Corpo
- 14 Grande curva
- 15 Grande omento
- 16 Estremità inferiore della milza
- 17 Vasi dei rami gastroepiploici di sinistra
- 18 Rami e vasi gastroepiploici di destra
- 19 Parte pilorica dello stomaco
- 20 Pilo
- 21 Porzione superiore del duodeno (prima)
- 22 Arteria gastrica destra
- 23 Piccola curva

ANATOMIA ECOGRAFICA MILZA



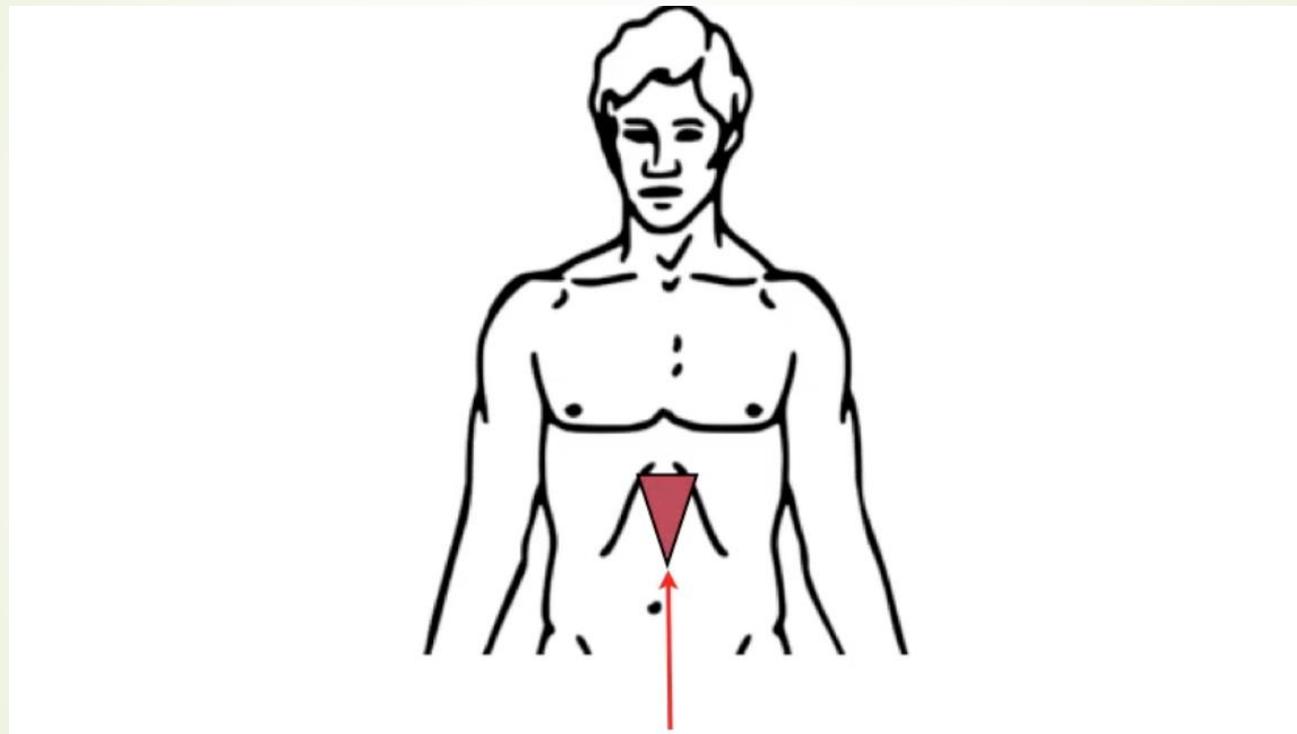


SCANSIONE ADDOME

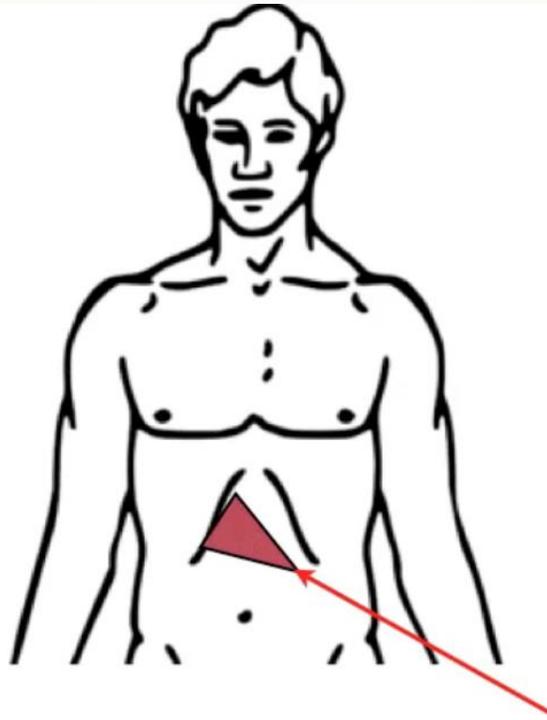
Materiali e metodi

- ▶ Paziente digiuno da almeno 6 ore
- ▶ Sonda ecografica: convex multifrequenza tra 3,5 e 5 MHz
- ▶ Posizione del paziente: decubito supino e/o laterale dx e sx
- ▶ Quali scansioni usare:
 - ▶ Sagittali, trasversali, epigastrio, oblique sottocostali e intercostali , longitudinali laterali, coronali , trasversali, longitudinali ed oblique sovrapubicche.
- ▶ Che cosa dobbiamo valutare:
 - ▶ VCI-aorta-Lobo dx, lobo sx, lobo caudato, identificazione dei segmenti epatici-Vene sovraepatiche e cava inf-Tronco portale e sue branche-diramazioni-Colecisti e via biliare principale
 - ▶ Tasca di morrison-rene destro-surrene-pancreas-aorta addominale fino alle iliache-milza-rene sinistro-vescica-prostata/utero-ovaie
- ▶ Motivazione dell'esame (ecografia clinica; ecografia diagnostica)

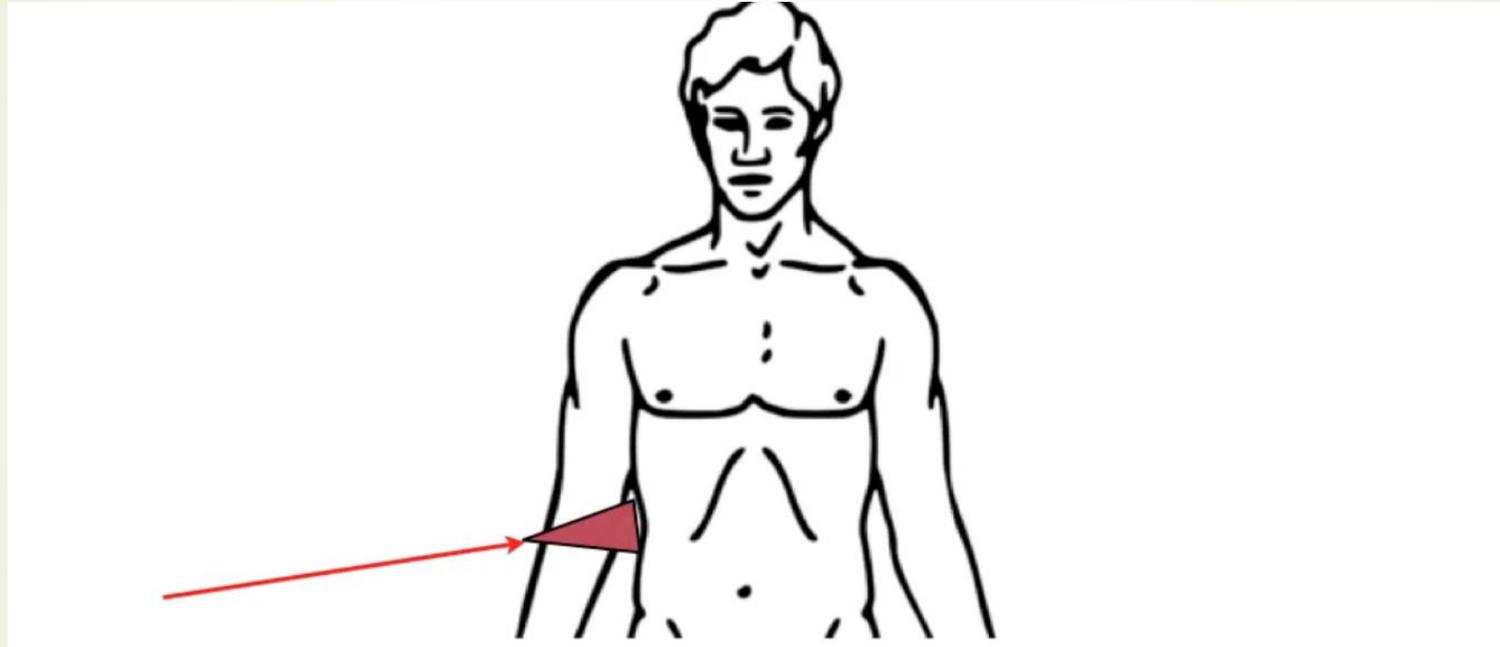
SCANSIONE SOTTOXIFOIDEA



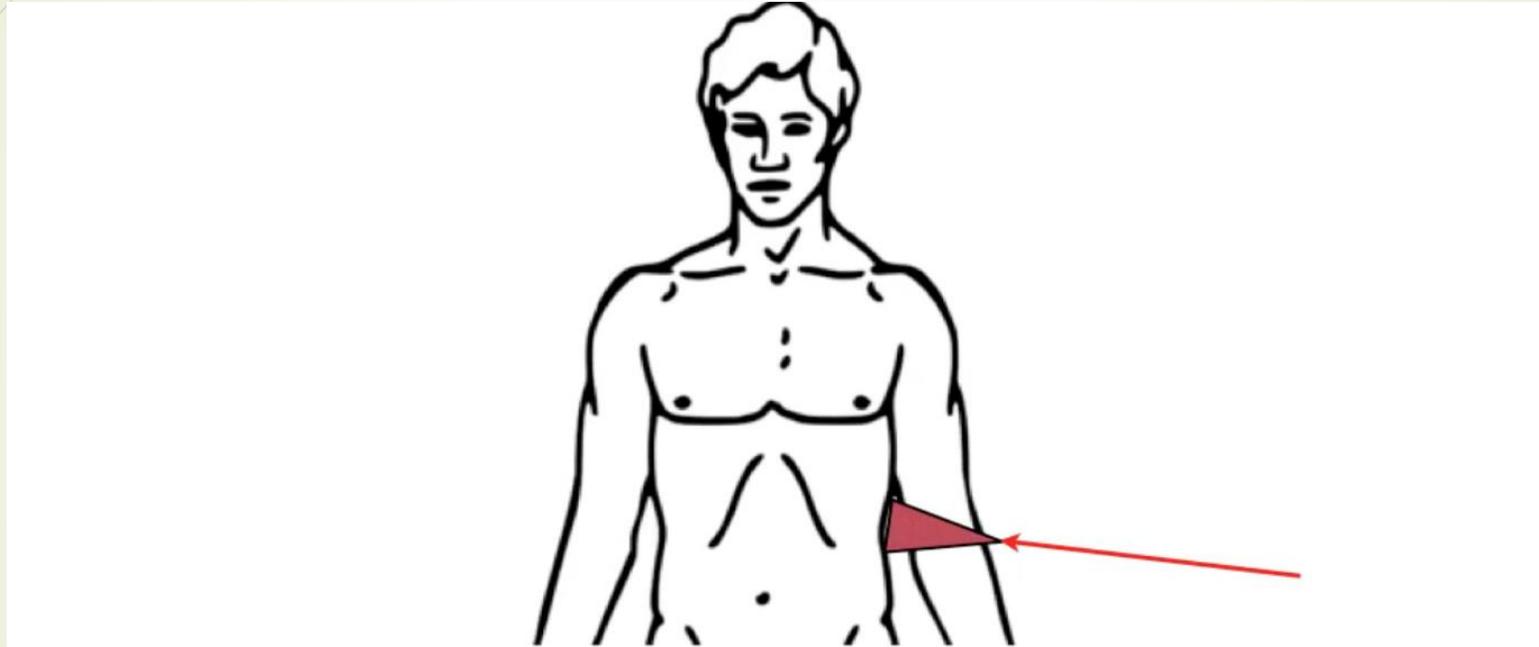
SCANSIONE LONGITUDINALE PARAMEDIANA DX. E SINISTRA: ANGOLO SINISTRO EPATICO-LOBO SINISTRO-CUORE-VCI-AORTA



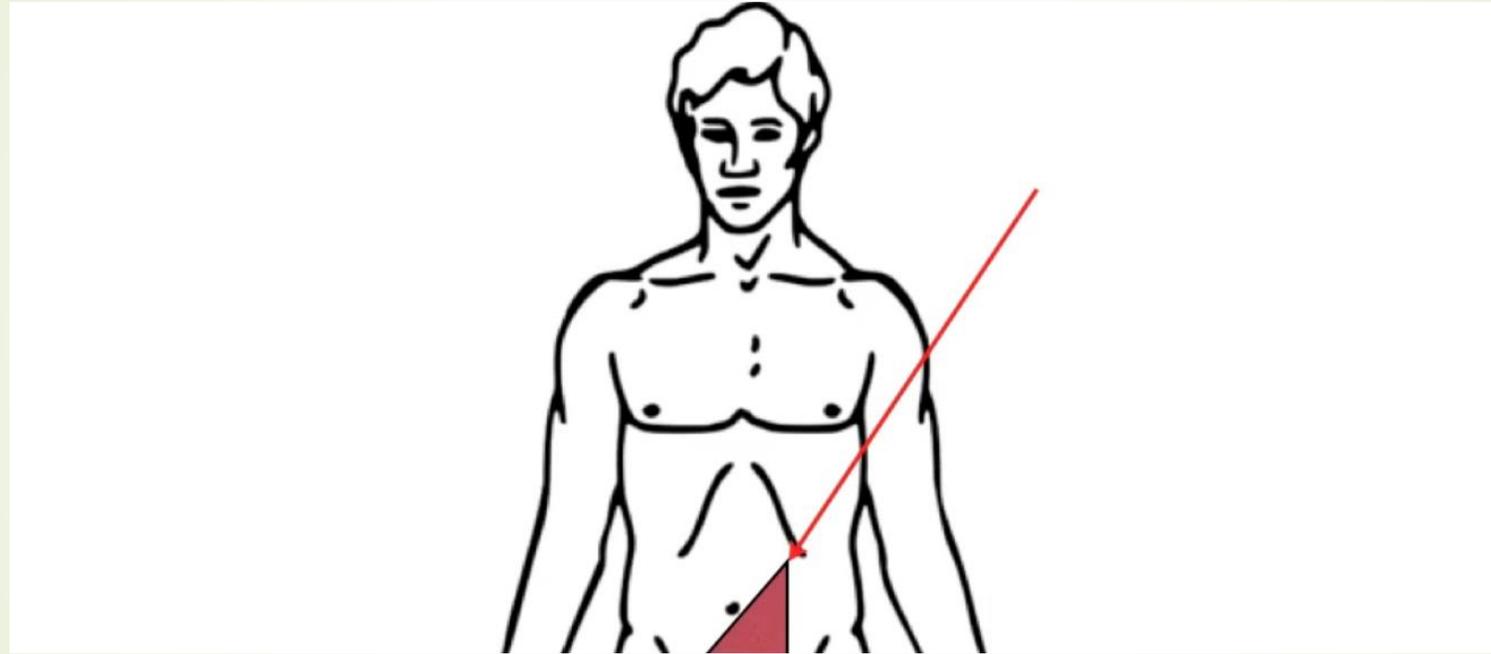
SCANSIONE OBLIQUA SOTTOCOSTALE: FEGATO, COLECISTI,
RENE DESTRO, TASCA DI MORRISON



CORONALE DESTRA: RENE DESTRO, COLECISTI, FEGATO



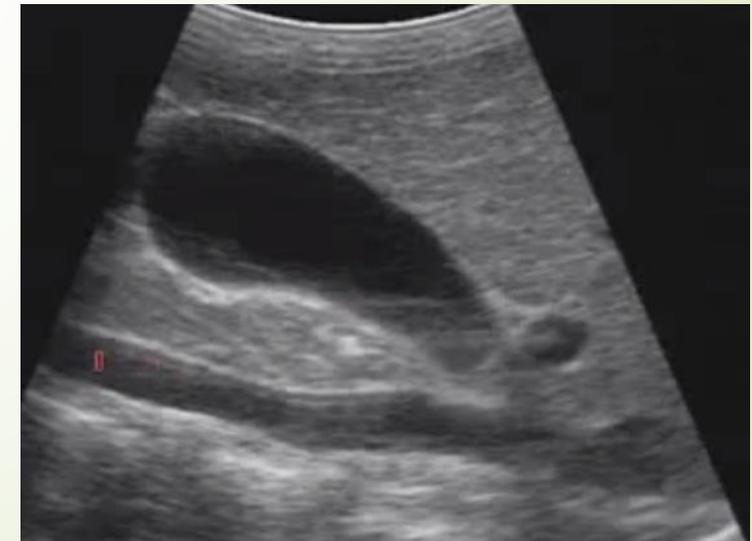
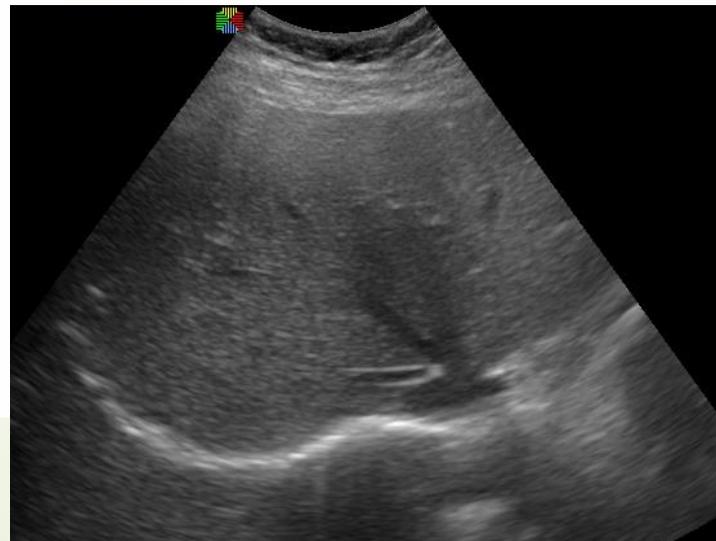
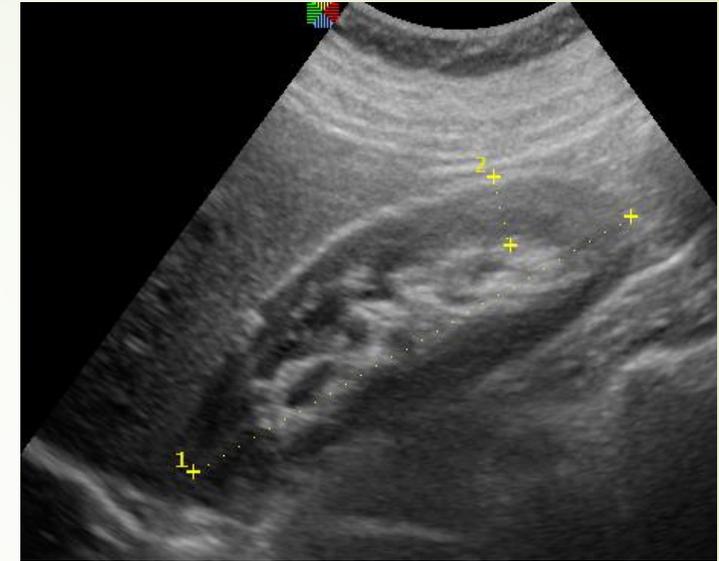
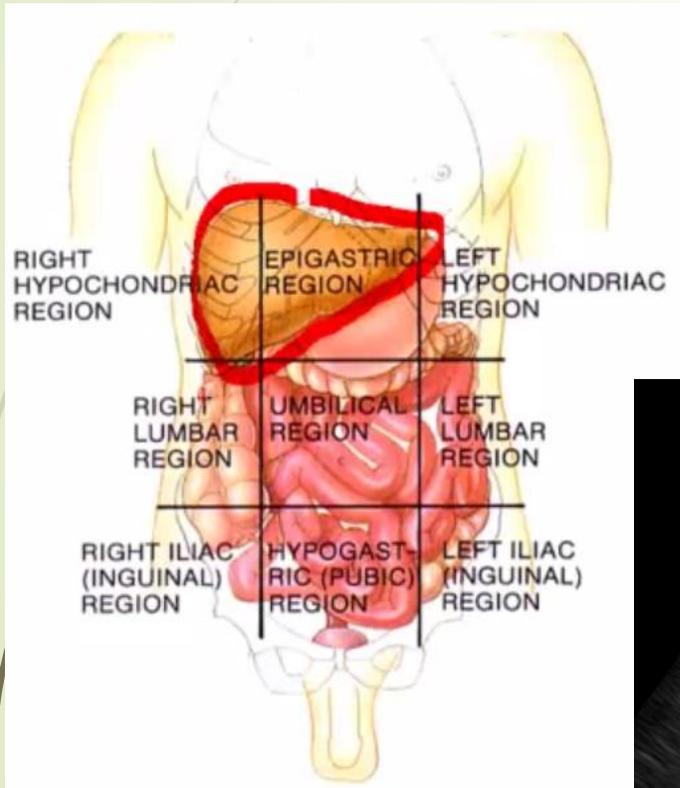
CORONALE SINISTRA: RENE SINISTRO-MILZA



SCANSIONE SOVRAPUBICA: VESCICA-PROSTATA-UTERO-OVAIE-
VERSAMENTO NEL DOUGLAS

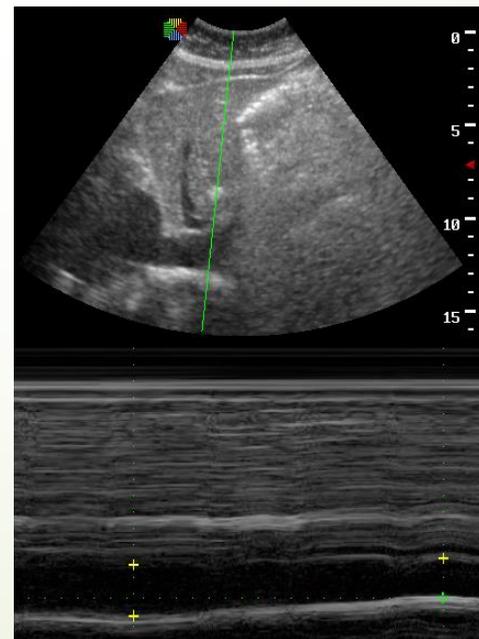
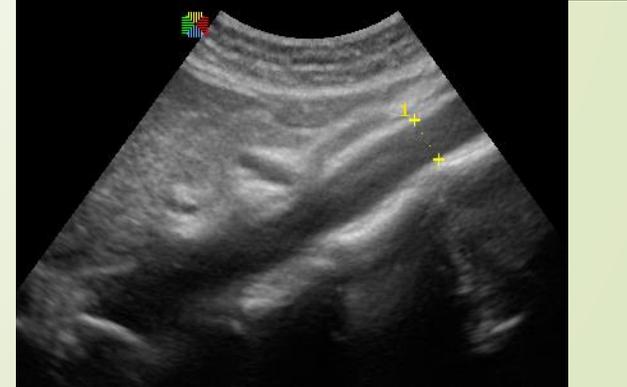
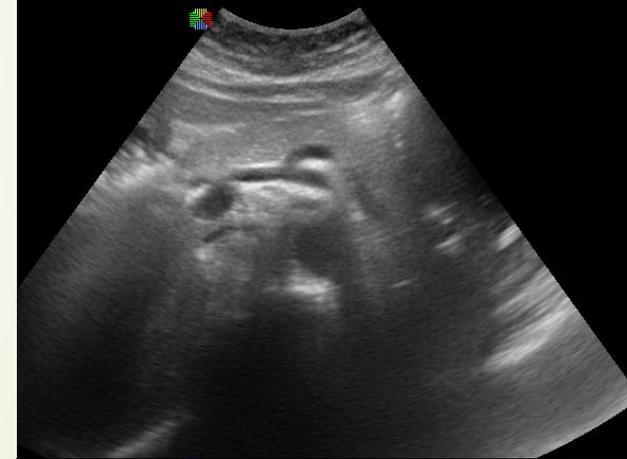
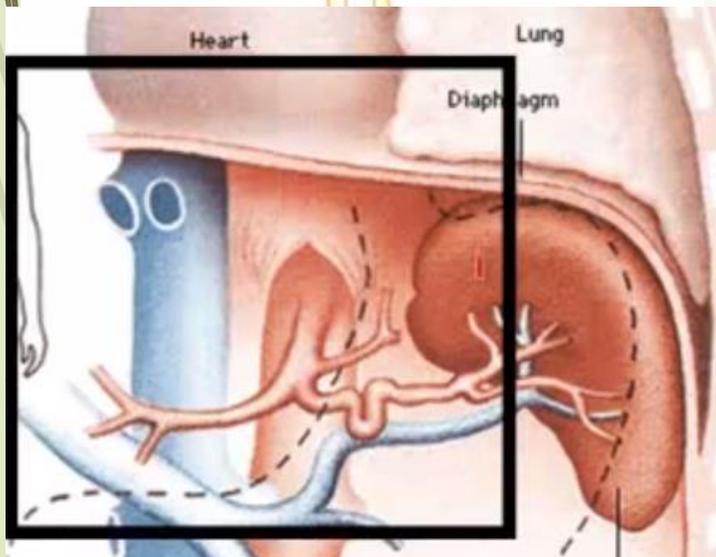
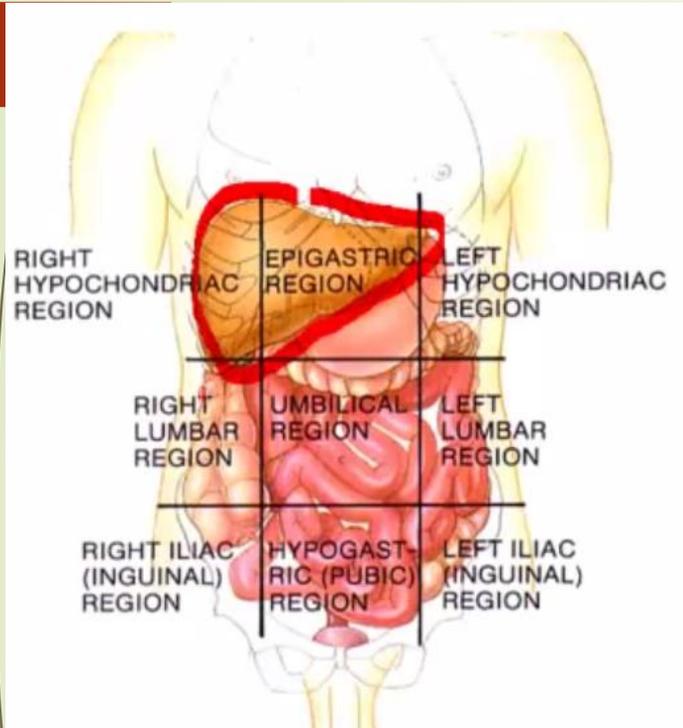
IPOCONDRIO DESTRO

- FEGATO (LOBO DESTRO)
- COLECISTI
- RENE DESTRO
- PICCOLO INTESTINO
- COLON ASCENDENTE
- COLON TRASVERSO



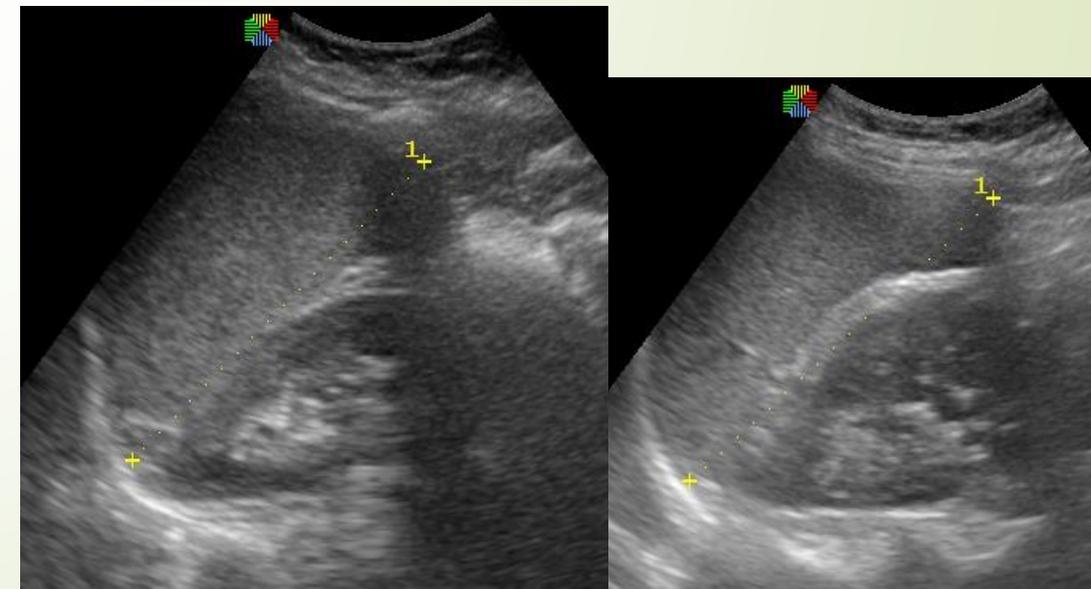
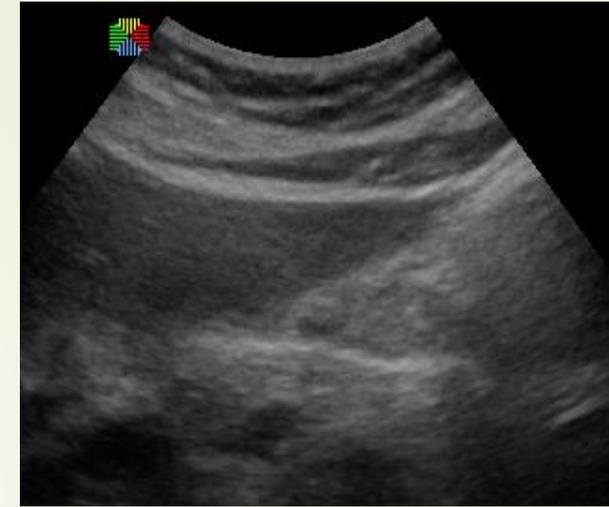
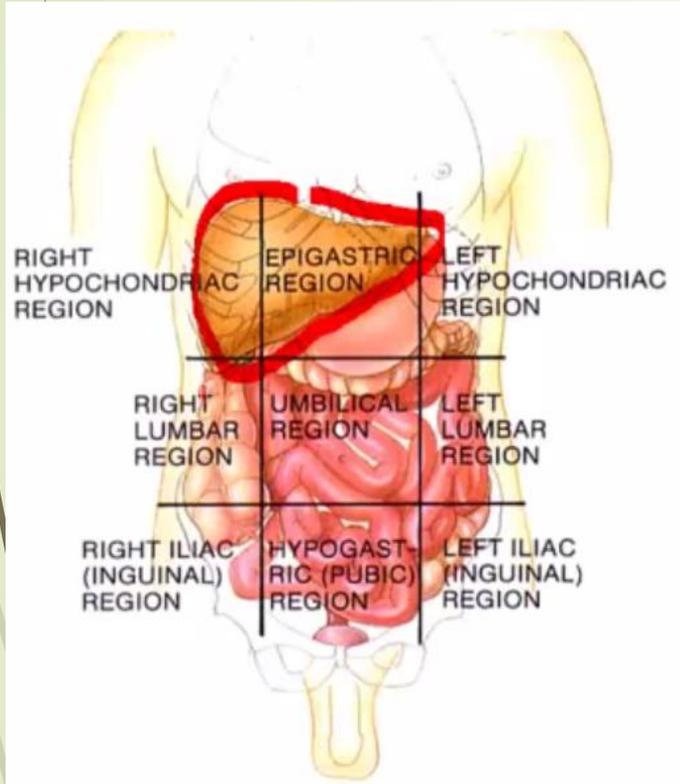
EPIGASTRIO

- FEGATO
- VCI-CUORE
- AORTA
- PANCREAS
- ESOFAGO
- STOMACO
- PICCOLO INTESTINO
- COLON TRASVERSO
- COLON TRASVERSO



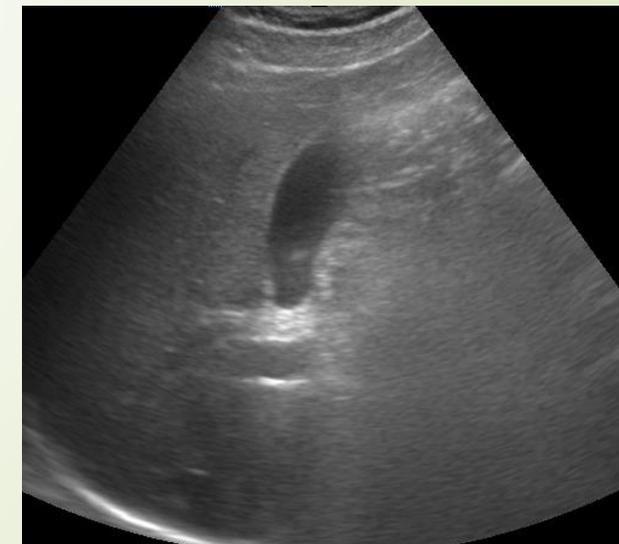
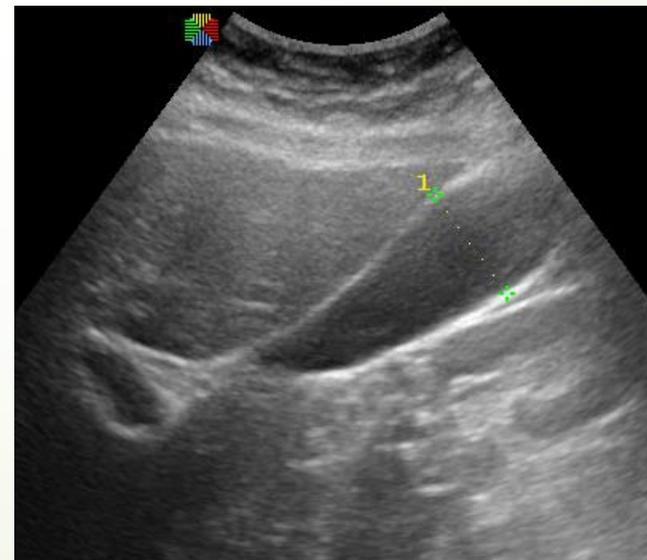
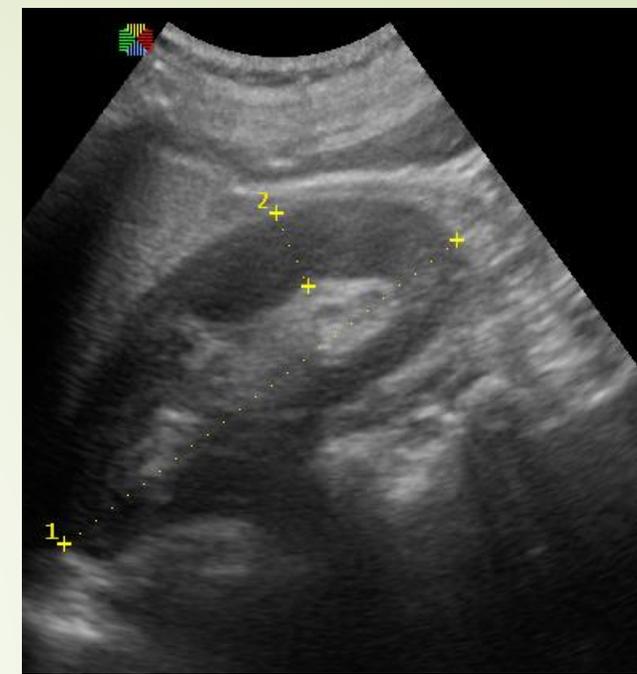
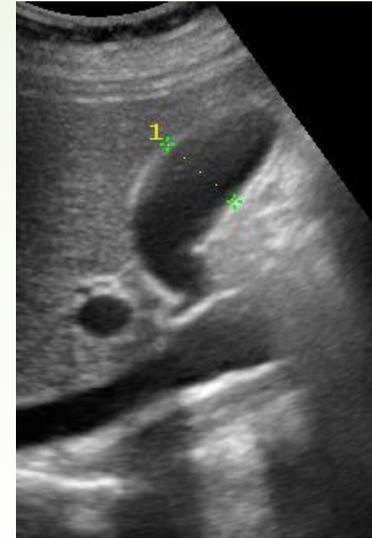
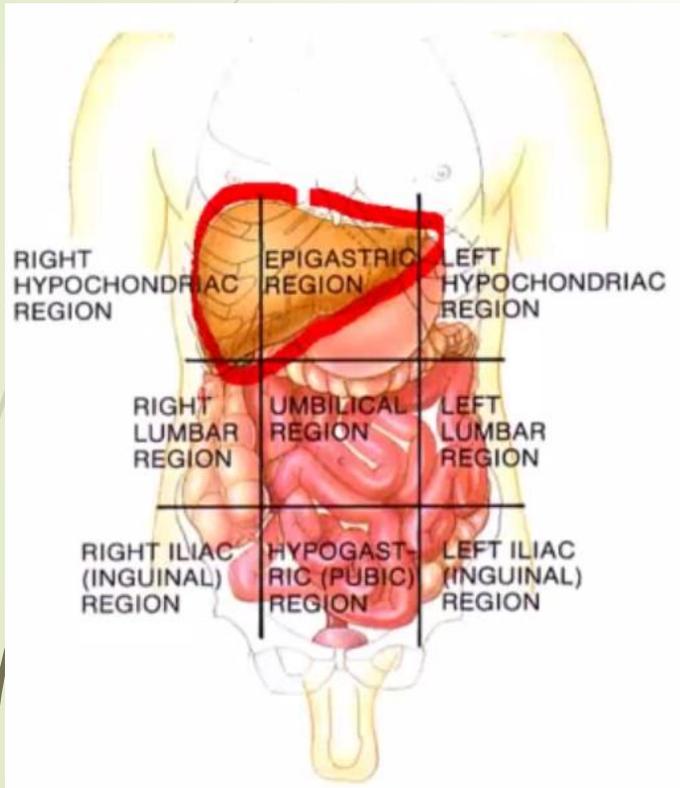
IPOCONDRIO SIN

- FEGATO (ANGOLO SUPERIORE SINISTRO)
- PANCREAS (CODA)
- RENE SINISTRO
- MILZA
- STOMACO
- PICCOLO INTESTINO
- COLON TRASVERSO
- COLON DISCENDENTE



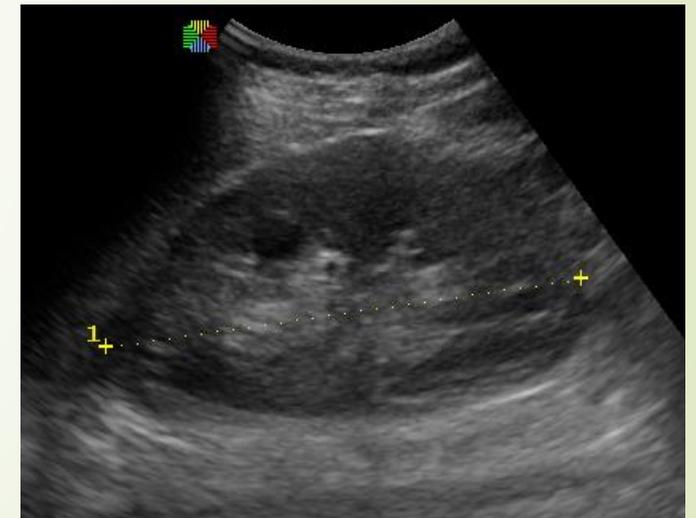
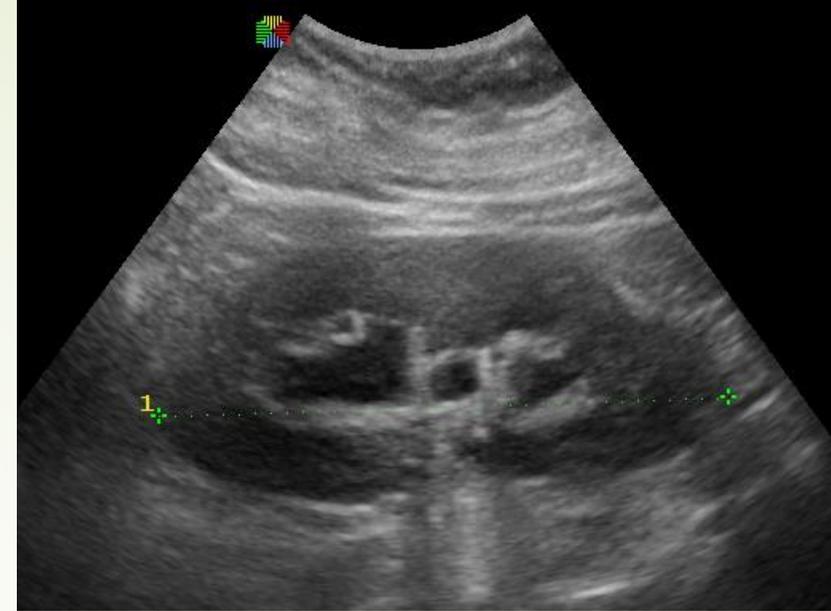
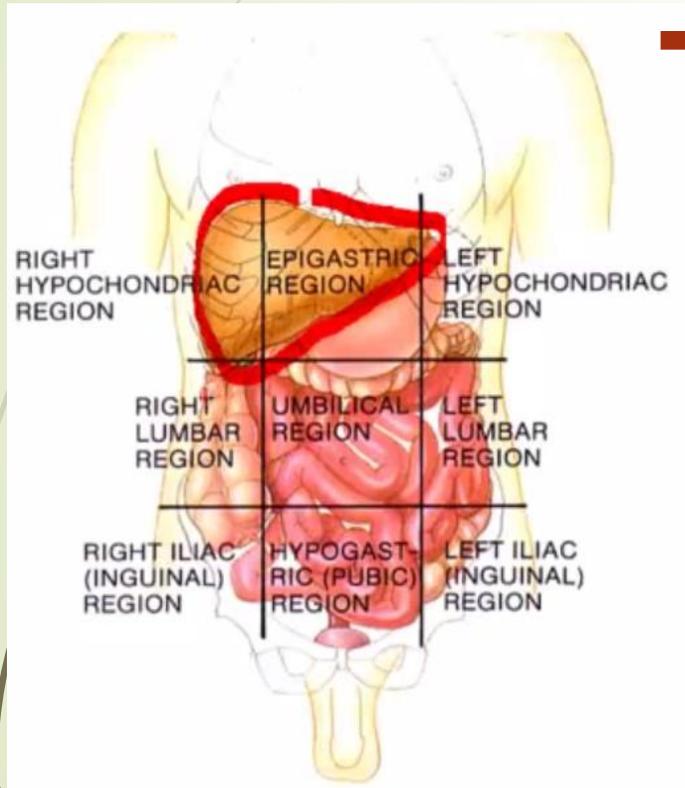
LOMBARE DESTRO

- FEGATO
- COLECISTI
- RENE DESTRO
- PICCOLO INTESTINO
- COLON ASCENDENTE



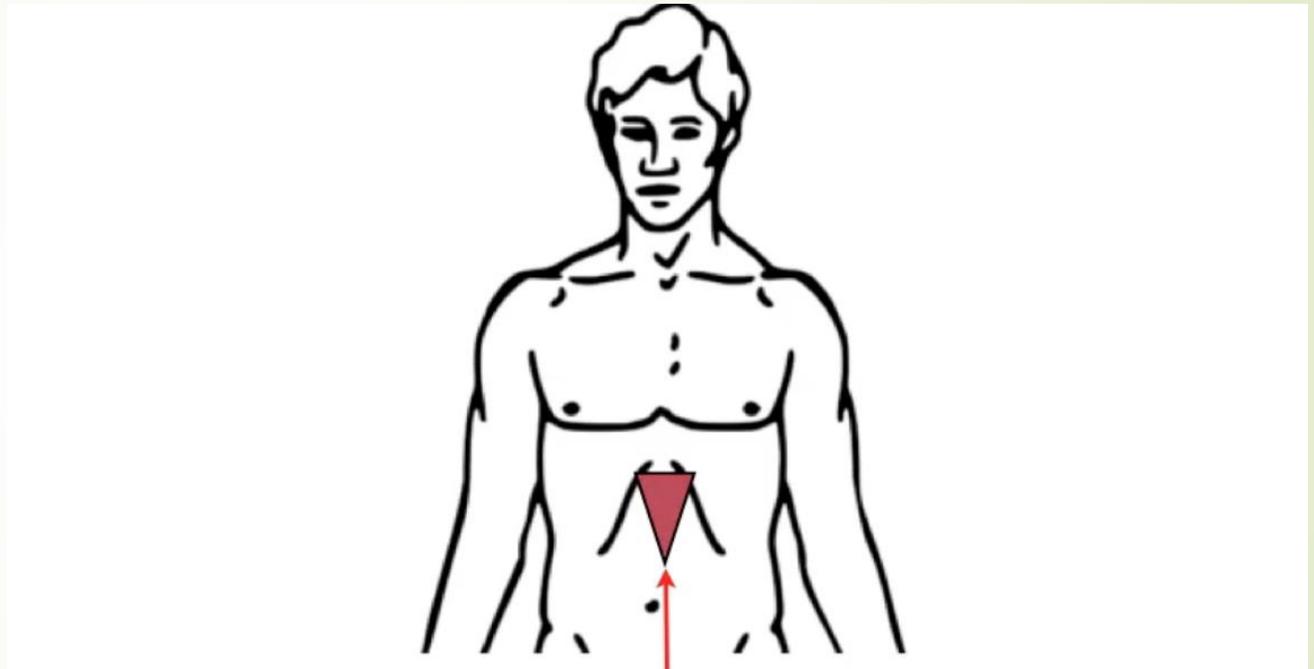
LOMBARE SINISTRO

- **RENE SINISTRO**
- PICCOLO INTESTINO
- COLON DISCENDENTE

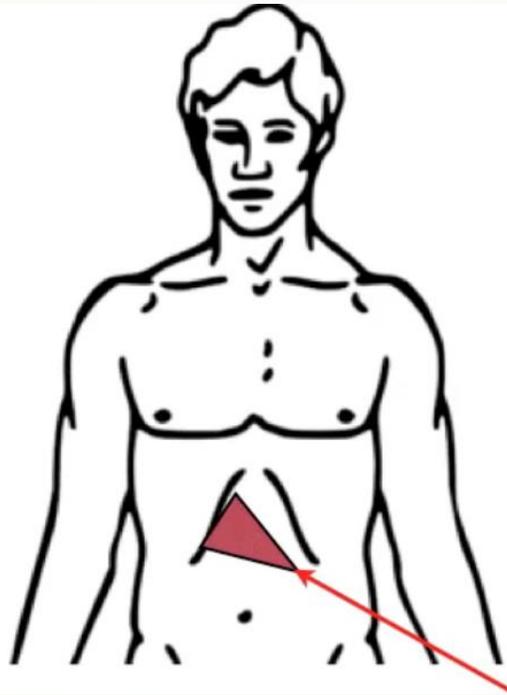


CANSIONE ADDOME

- IVC-PERICARDIO
- FEGATO
- COLECISTI
- RENE DESTRO
- TASCA DI MORRISON
- PANCREAS
- IVC
- AORTA ADDOMINALE
- MILZA
- RENE SINISTRO



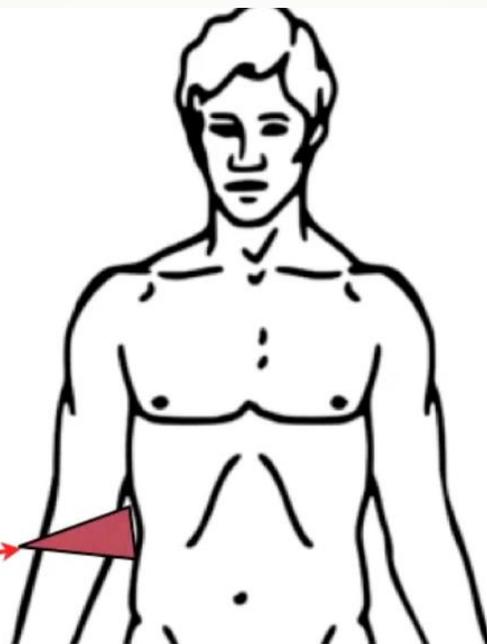
SCANSIONE SUBXIFOIDEA, LONGITUDINALE, PER VISUALIZZARE CUORE,
ATRIO DESTRO E VCI E LOBO DESTRO DEL FEGATO

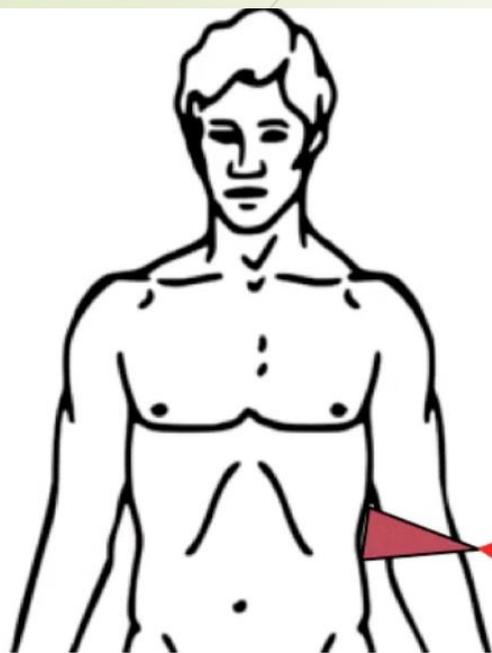


SCANSIONE OBLIQUA SOTTOCOSTALE ASCENDENTE per visualizzare fegato, piano sovraepatiche, piano della vena porta, colecisti vie biliari



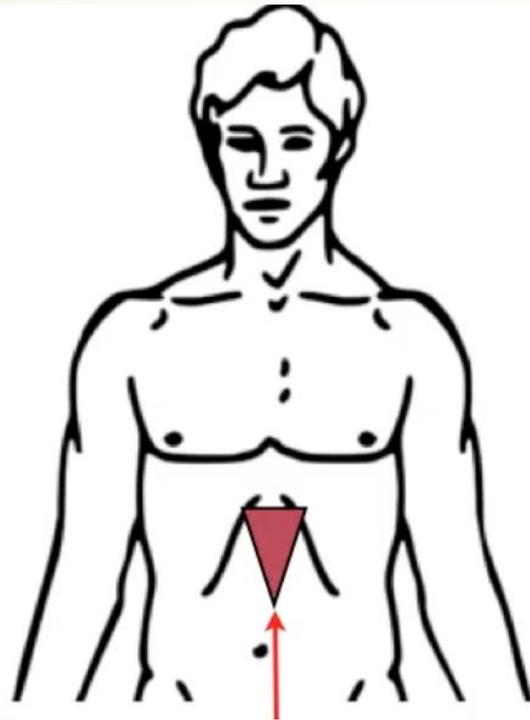
Rene destro,
colecisti, fegato

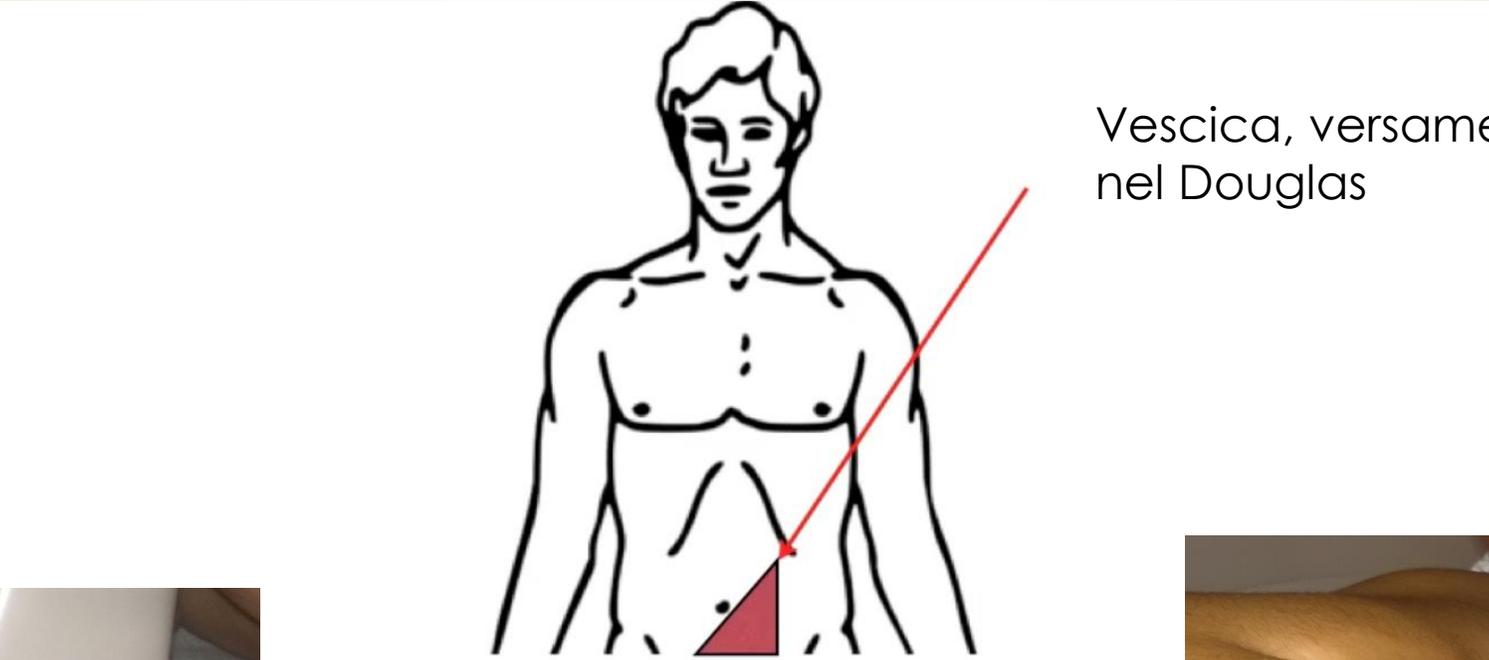




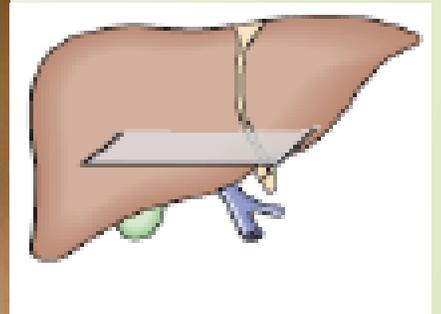
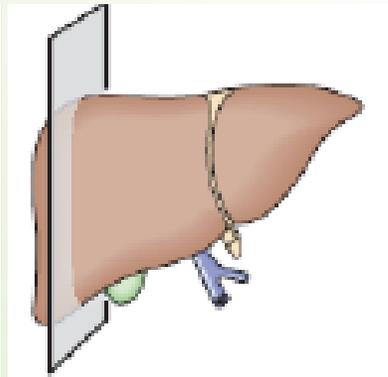
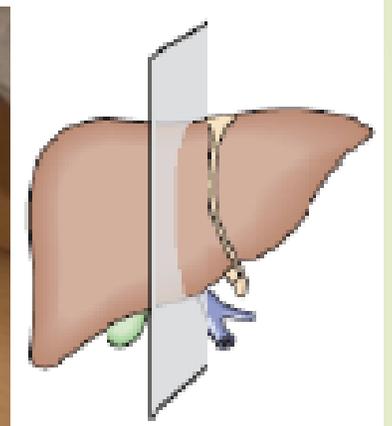
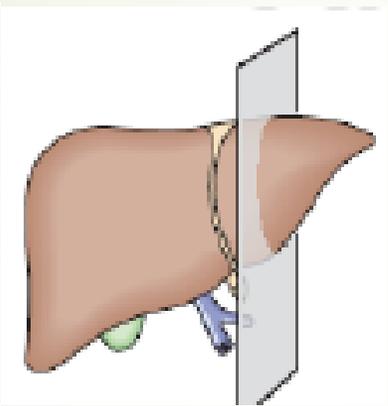
Milza, rene sinistro, aorta,
versamento pleurico-
ascitico

Trasversale e
longitudinale
epigastrio per
valutazione
pancreas, aorta.
Tronco celiaco,
a.mesenterica sup.,
seguire aorta per





Scansioni addominali





TRASV
EPIGASTRIO



LONG
PARAMEDIANA



LONG PARAM
DX



OBL S.C.
ASCENDENTE



OBL S.C.
ASCENDENTE



LONG LATERALE
DX.



CORONALE DX.



INTERCOSTALE DX.



LONG.LATERALE
SN..



CORONALE SN.



SOVRAPUBICA
TRASV



SOVRAPUBICA
LONG