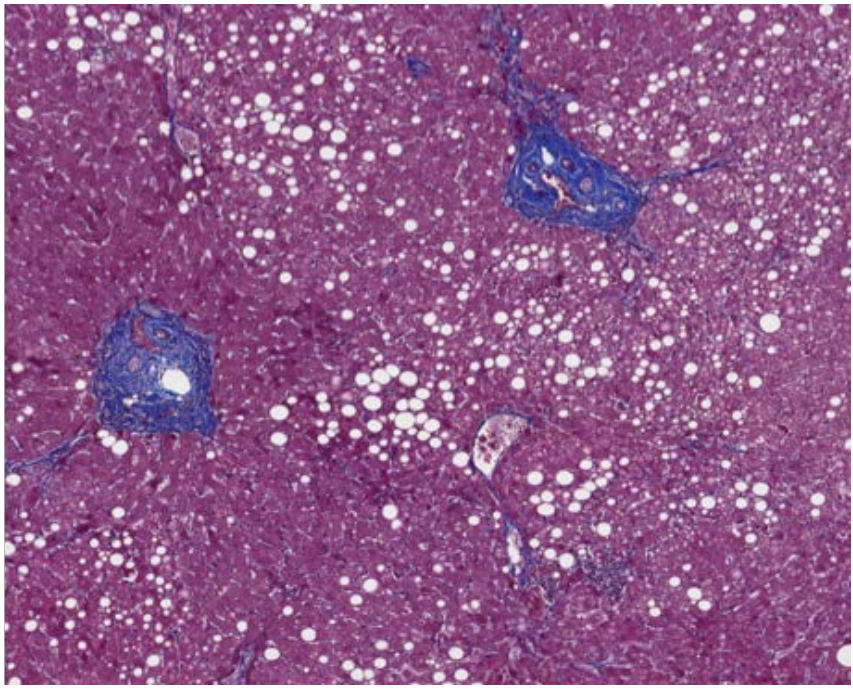
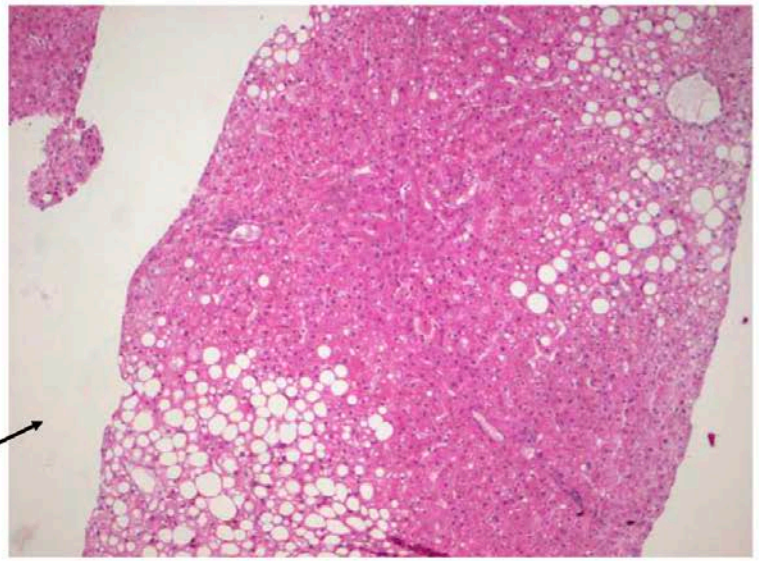
Stéatose

- US : hyperéchogène
- TDM : hypodense
- IRM : hypointense en T1 out of phase

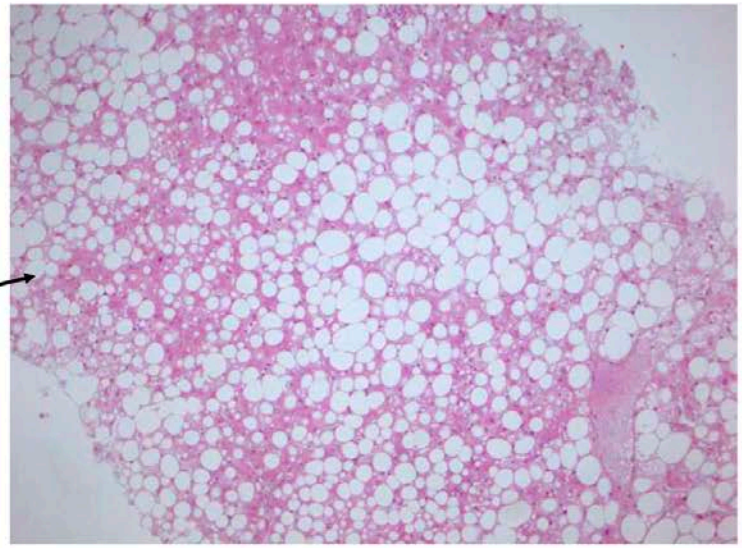
- Stéatose peut être hétérogène

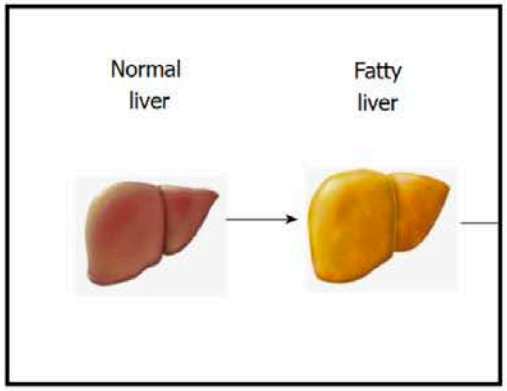


Stéatose



- Gradation : 5 stades
  - 0 % / 1-5 %
  - 6-33 %
  - 34-66 %
  - >=67 %…





Stéatose
enjeu de l'échographie

hyperéchogénicité :
objective

diffuse

signes écho à partir de 30 %
hyperéchogenicité % teneur en graisse

gradient hépato rénal facile
mais difficile de quantifier et non spécifique

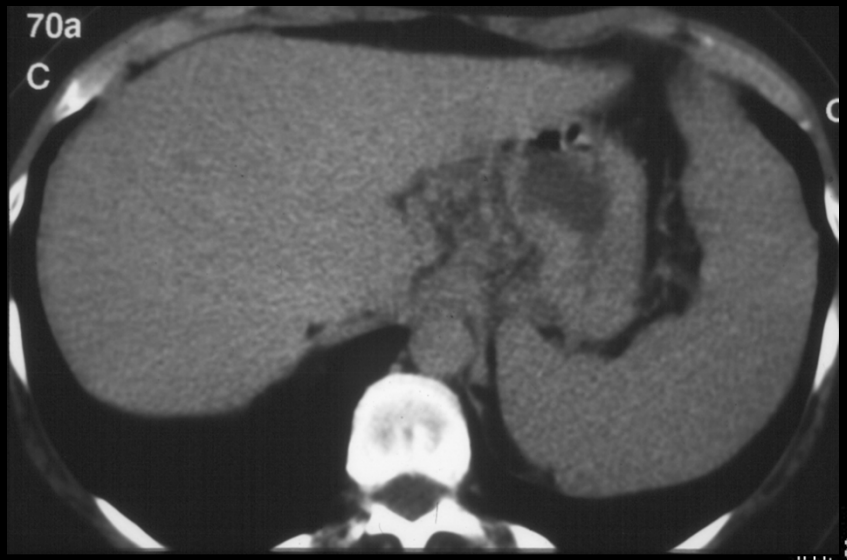
US et maladie de surcharge: stéatose // hémochromatose

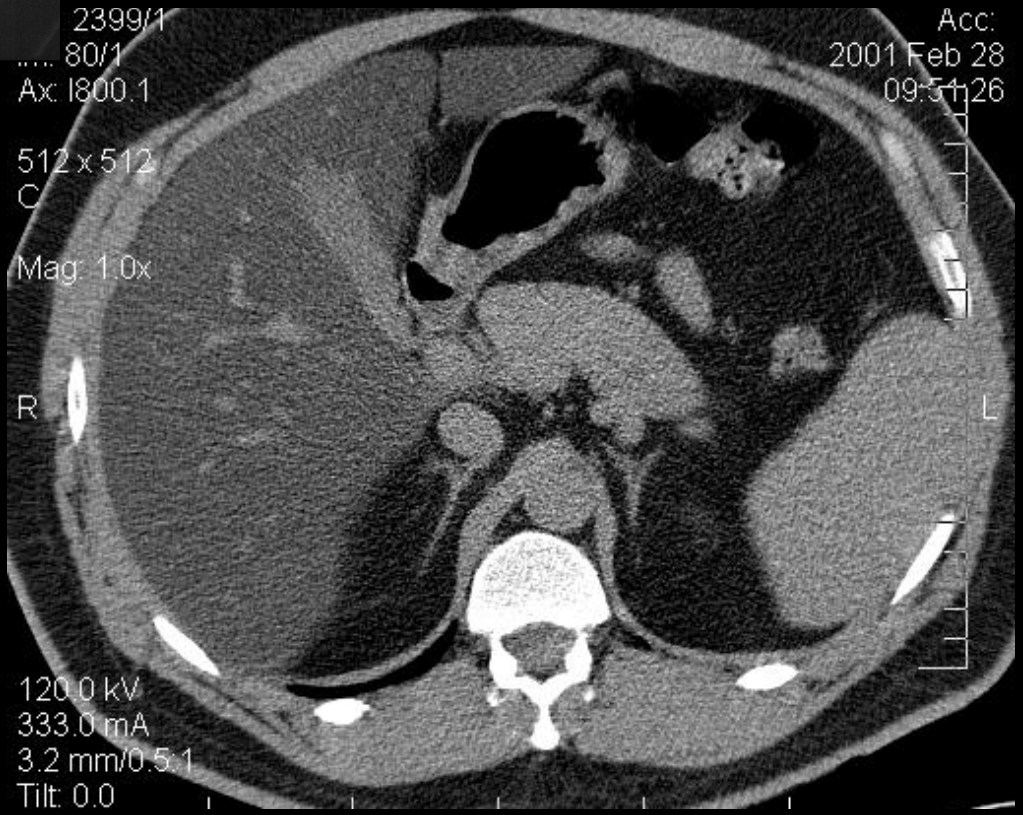
Gradient hépato-rénal:

- normal-

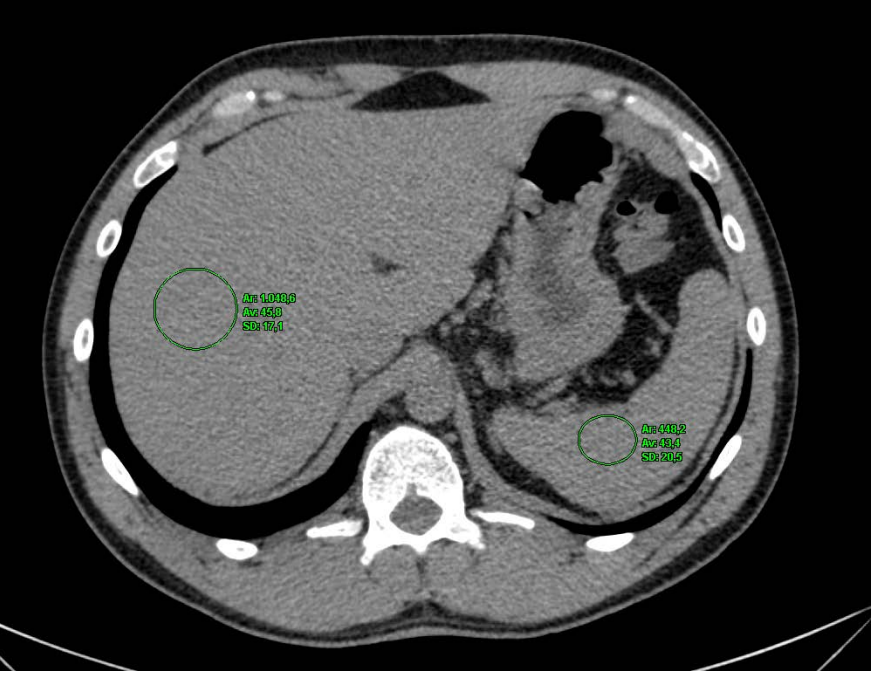
- majoré-

- majoré

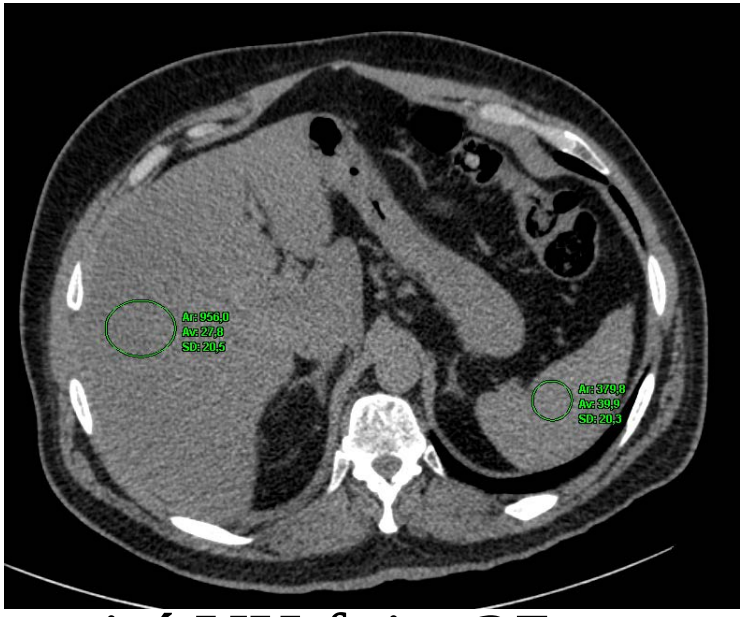

70a
C


2399/1
80/1
Ax: I800.1
512 x 512
C
Mag: 1.0x
R
L
Acc:
2001 Feb 28
120.0 kV
333.0 mA
3.2 mm/0.5:1
Tilt: 0.0

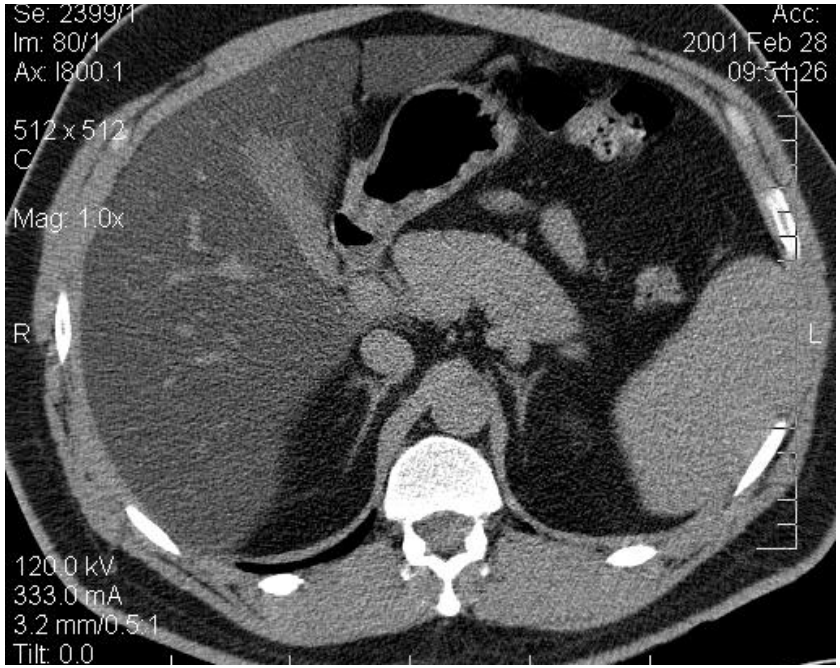
CT et maladie de surcharge : stéatose



Densité UH foie 46 et rate 43

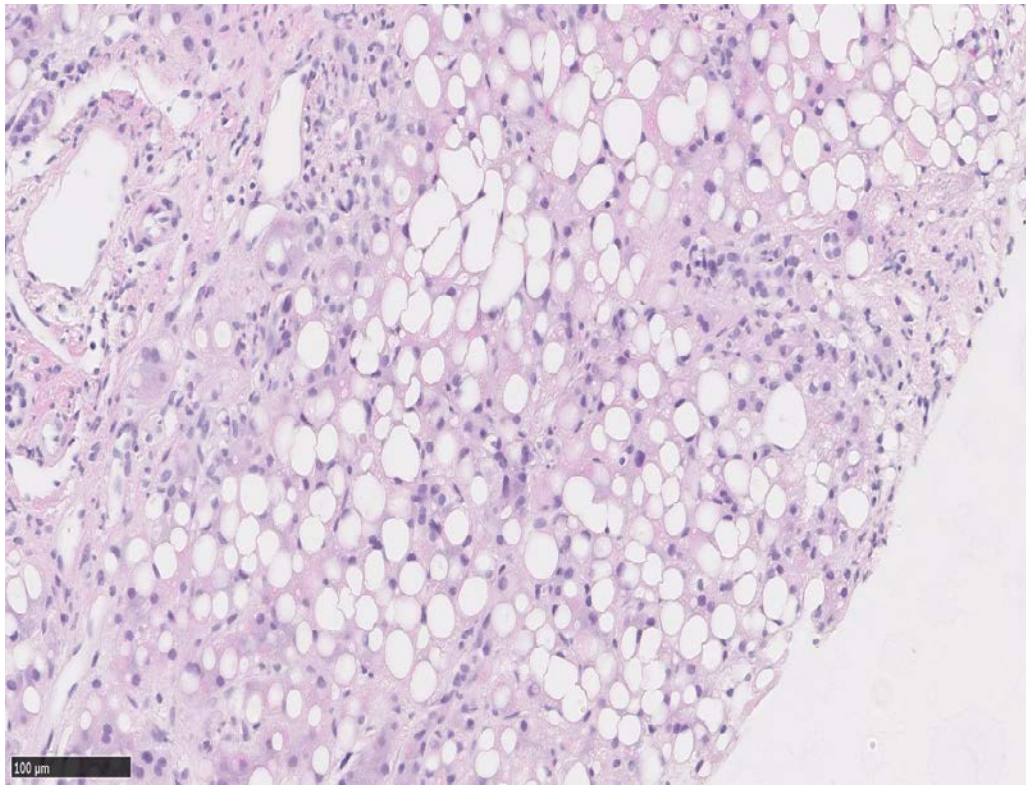


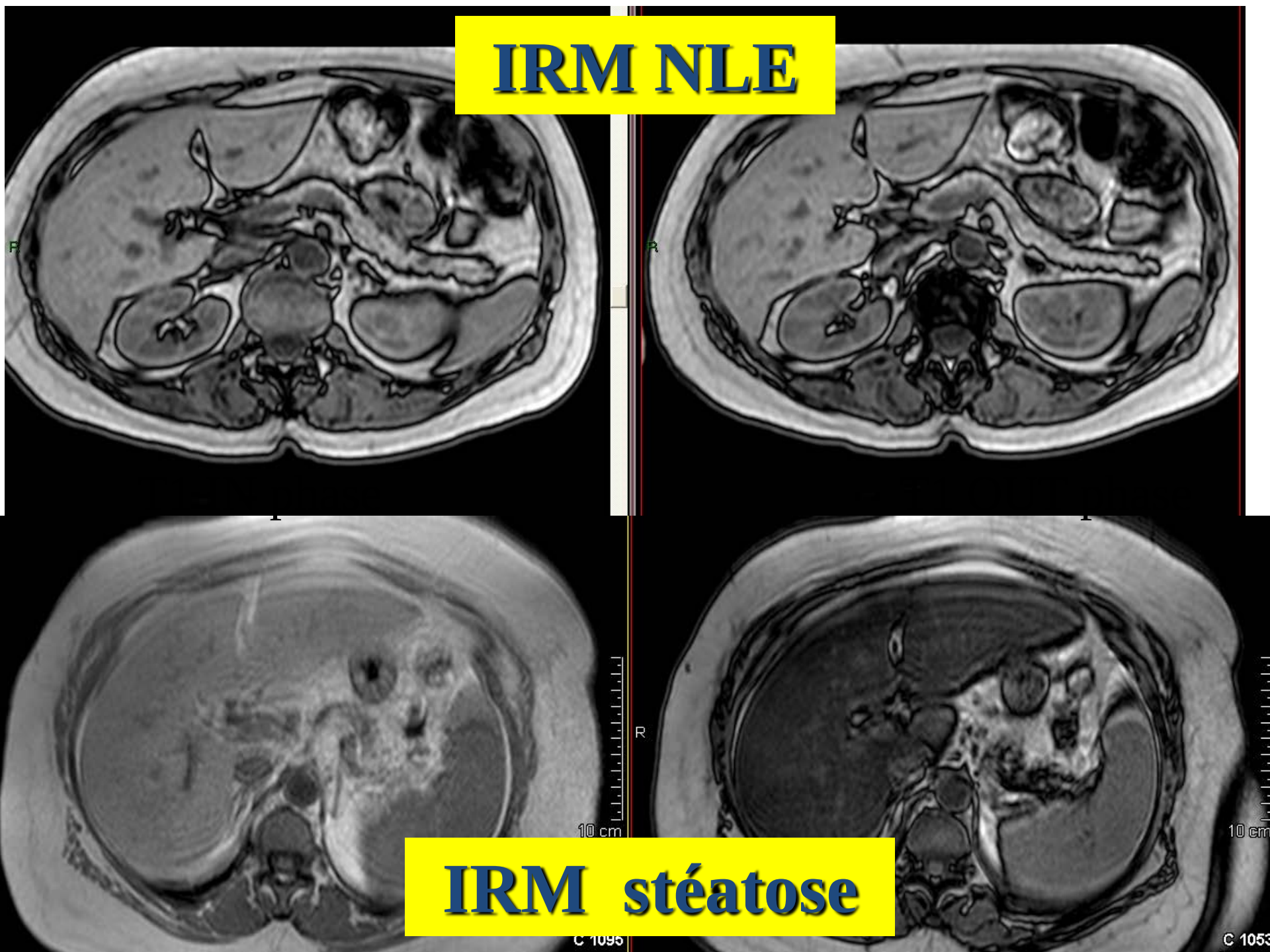
Densité UH foie 27 et rate 40

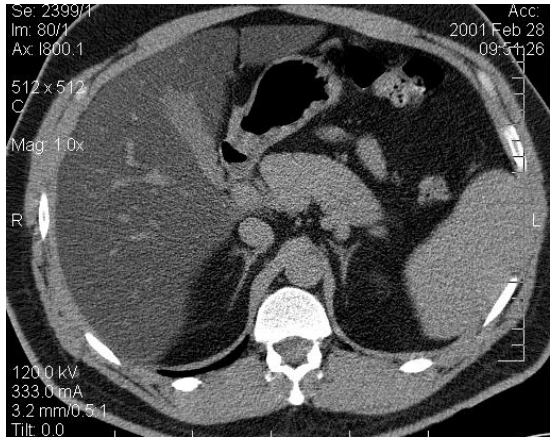


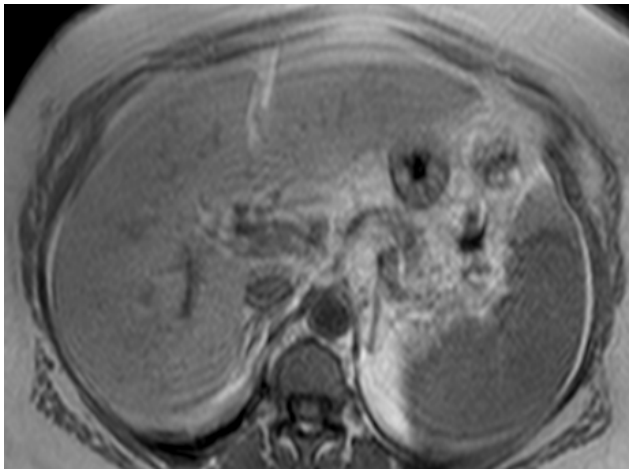
CT sans injection

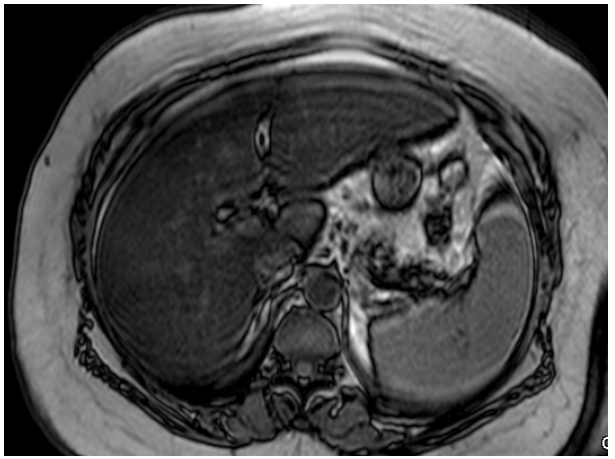
Steatose




IRM NLE
IRM stéatose
10 cm
10 cm


Se: 2399/1
Im: 80/1
Ax I800.1
512 x 512
Mag: 1.0x
Acc:
2001 Feb 28
09:51:26
R
L
120.0 kV
333.0 mA
3.2 mm/0.5:1
Tilt: 0.0

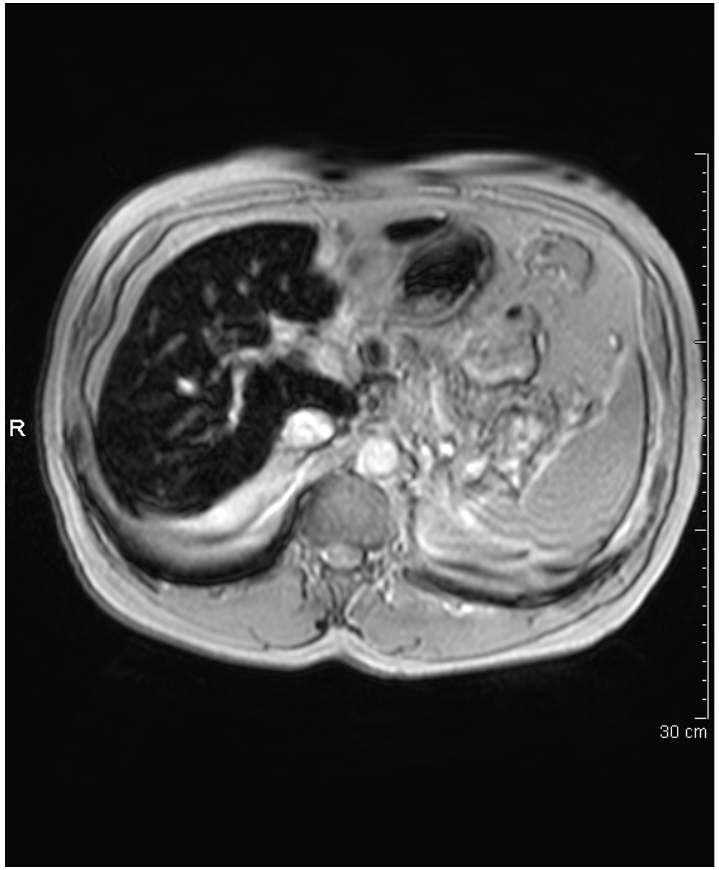


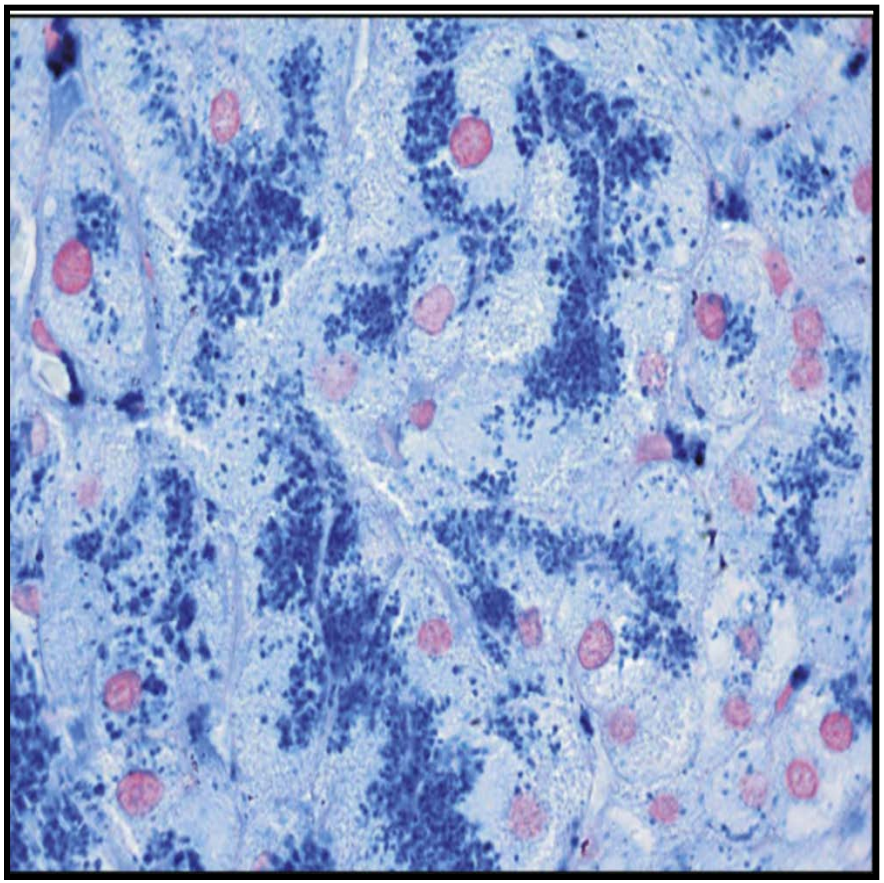


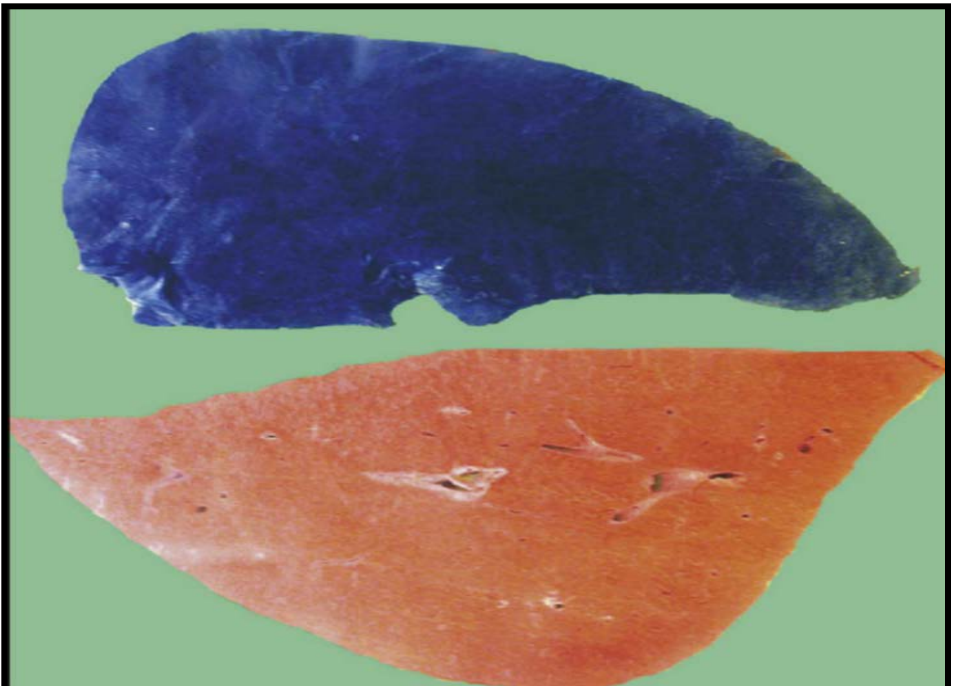
Hémochromatose

- IRM : hyposignal en particulier en T2 et en écho de gradient

- Méthode de Calcul automatisée

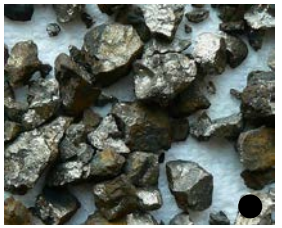


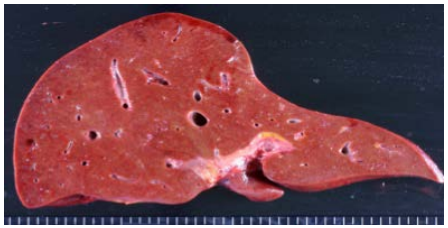




Hémochromatose-Stéatose

- Hémochromatose :
  - isolée : pas de signe de surcharge en fer visible en écho
  - compliquée d'une stéatose : on voit la stéatose en écho
  - Évolution vers la fibrose puis la cirrhose et ses complications
- Hyperférritinémie
  - NAFLD et AFLD



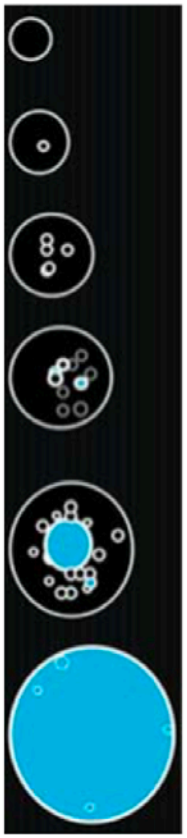


https://previews.123rf.com/images/joserpizarro/joserpizarro1308/joserpizarro130800136/22316331-Viejos-vagones-de-transporte-de-minerales-mina-abandonada-Huelva-Foto-de-archivo.jpg
https://www.google.be/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjcyvifiNLVAhXLChoKHQ9dAnYQjRwIBw&url=http%3A%2F%2Fwww.vertdurable.com%2Fmatieres-premieres%2Fhausse-du-minerai-de-fer-30-pour-la-seconde-augmentation-de-lannee&psig=AFQjCNFW-5i1iscPtt-Gp63tqJILgzuH0g&ust=1502639965200347

Cirrhose

- Atrophie en particulier du lobe droit
- Hypertrophie du lobe caudé et du lobe gauche
- Contours nodulaires
- Hypertension portale
  - Splénomégalie
  - Ascite
  - Circulation veineuse portosytémique
  - Diminution de la vitesse dans la veine porte
- TIPSS

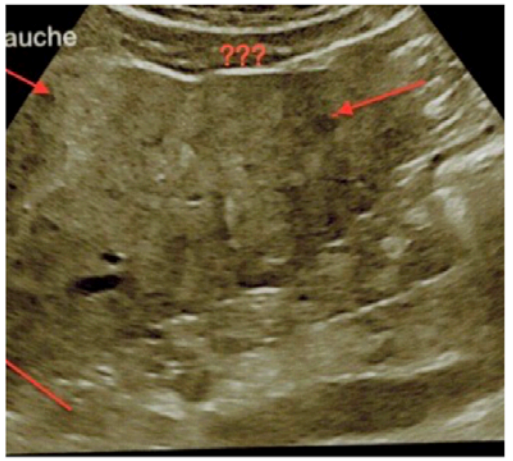
cirrhose



Nodule de régénération

Nodule dysplasique

Carcinome hépatocellulaire



Il semble exister un continuum évolutif entre ces trois entités, ces transitions s'accompagnant d'une augmentation de la taille, de la cellularité et de la néoangiogenèse de ces différents nodules

Figure 1

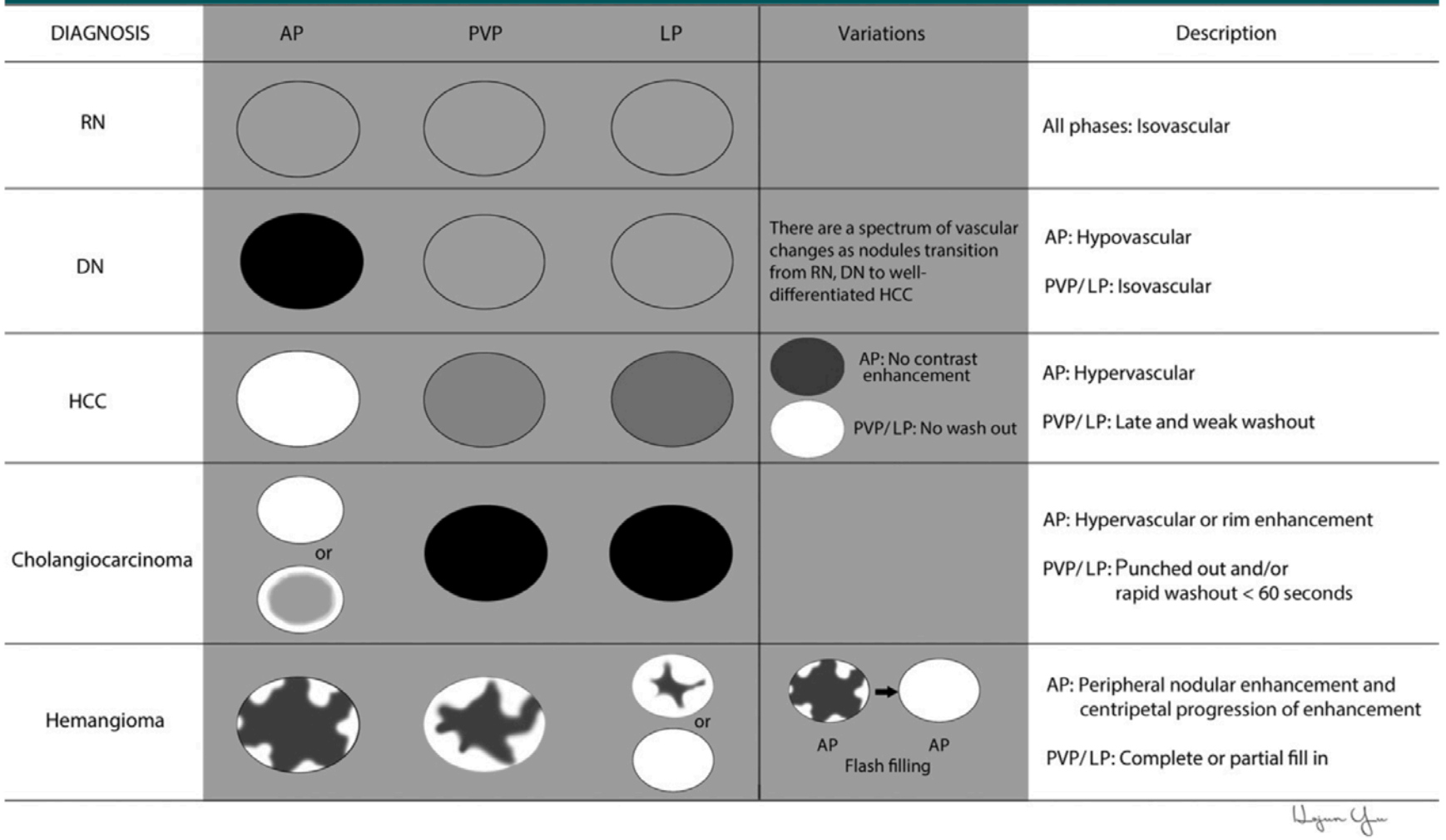
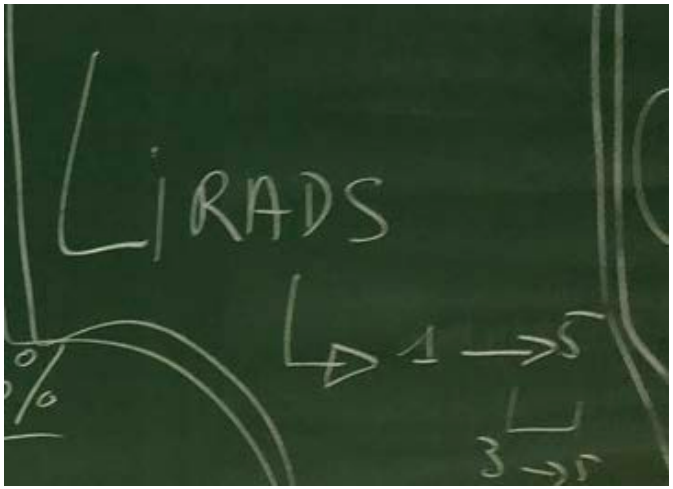
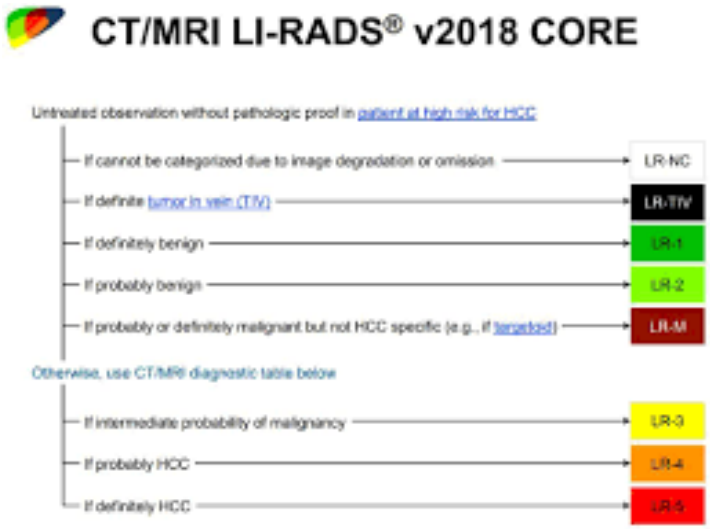


Figure 1: Schematic shows the typical enhancement patterns of common benign and malignant lesions in the cirrhotic liver. *RN* = regenerative nodule, *DN* = dysplastic nodule, *AP* = arterial phase, *PVP* = portal venous phase, *LP* = late phase





Les radiologues et les cliniciens en charge de ce type de patients discutent des lésions hépatiques suspectes d'hépatocarcinome en utilisant un système de gradation de probabilité/sévérité, accepté et remis à jour par les communautés scientifiques internantionales => c'est le score LIRADS.

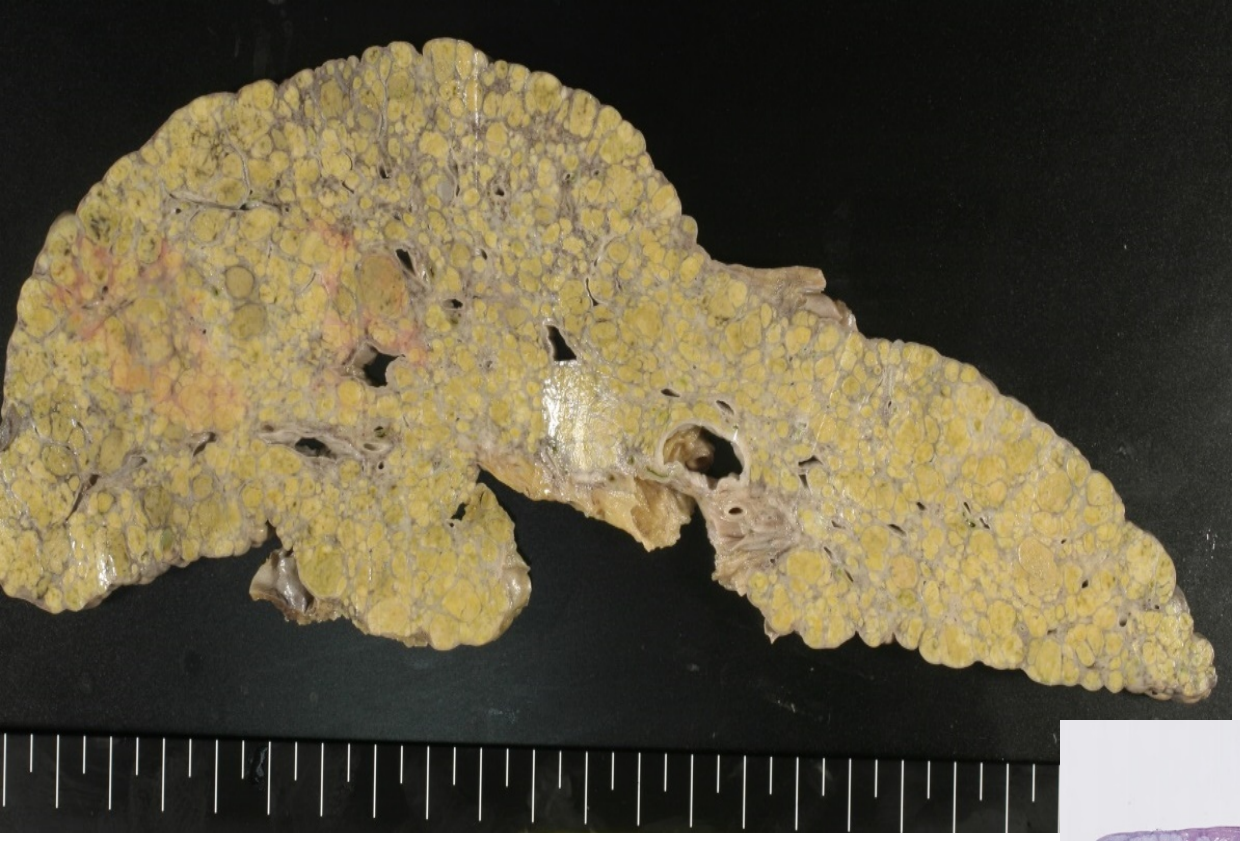
« Liver Imaging Reporting and Data System (LI-RADS) »

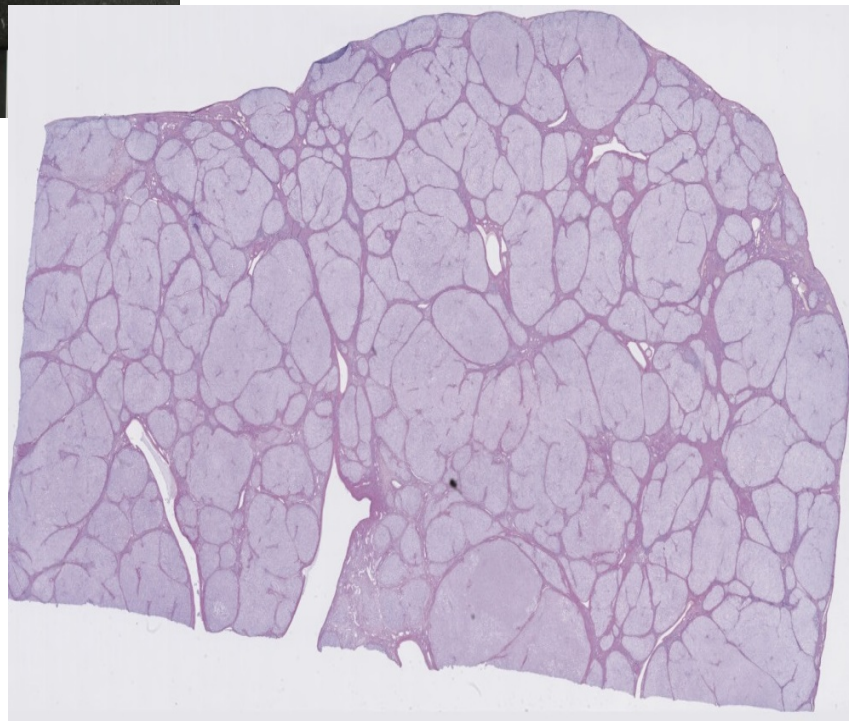
⇒Lien internet :

https://www.acr.org/Clinical-Resources/Reporting-and-Data-Systems/LI-RADS/CT-MRI-LI-RADS-v2018

Foie normal

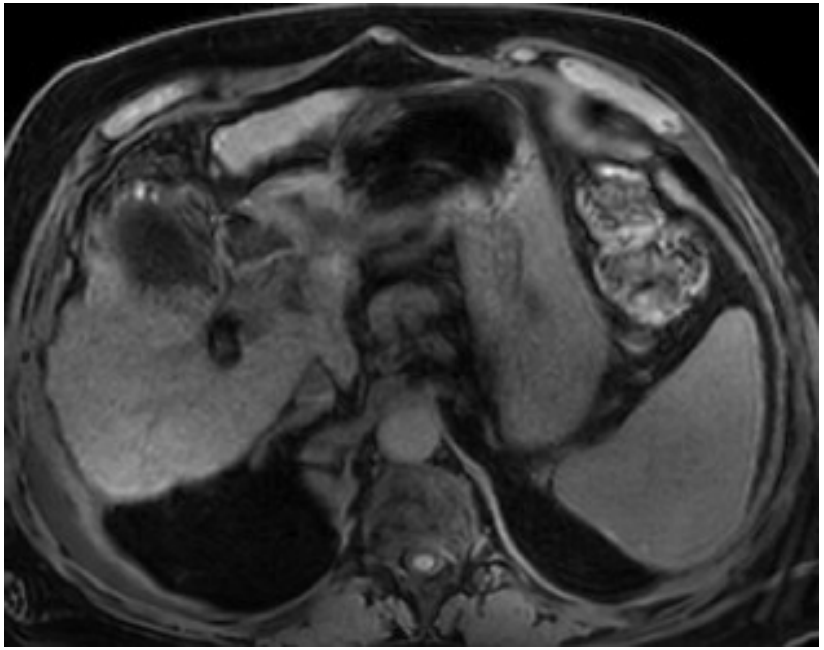
Foie stéatosique



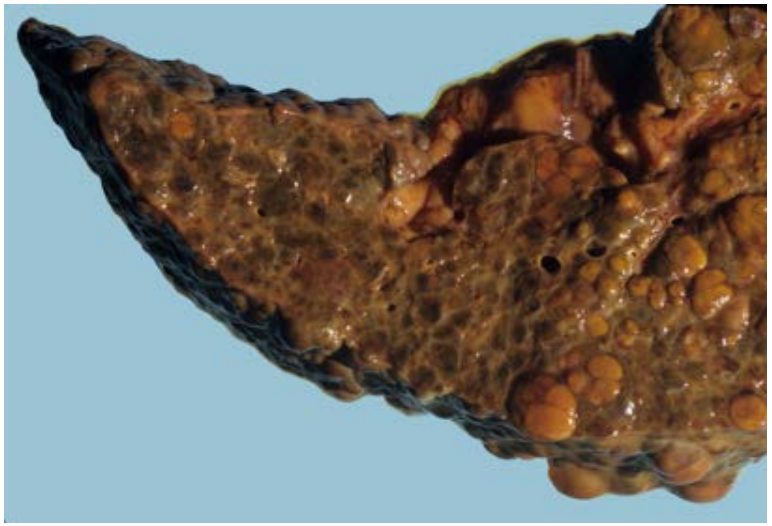


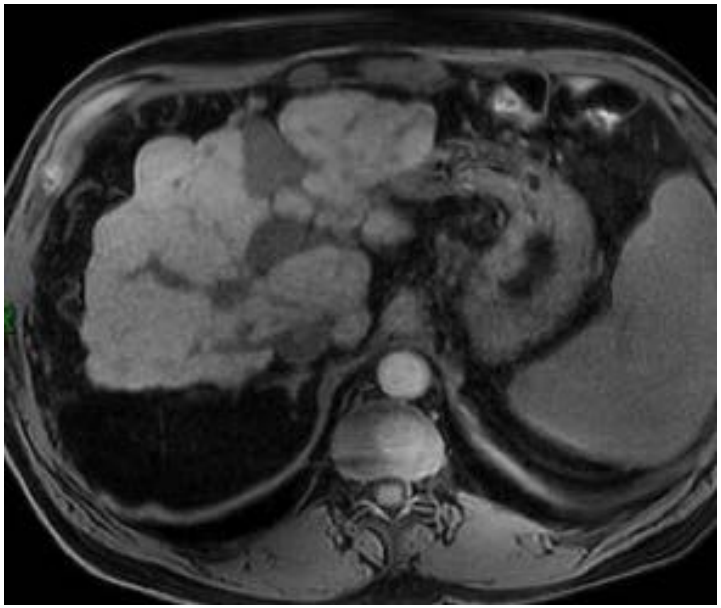
Foie cirrhotique

cirrhose



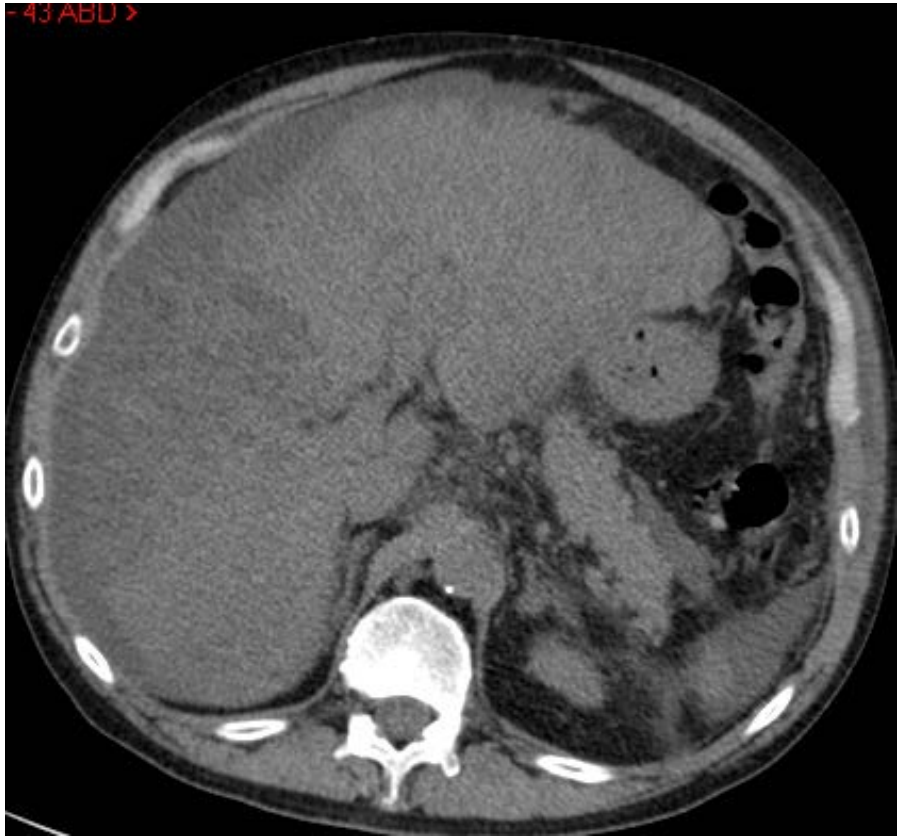
cirrhose





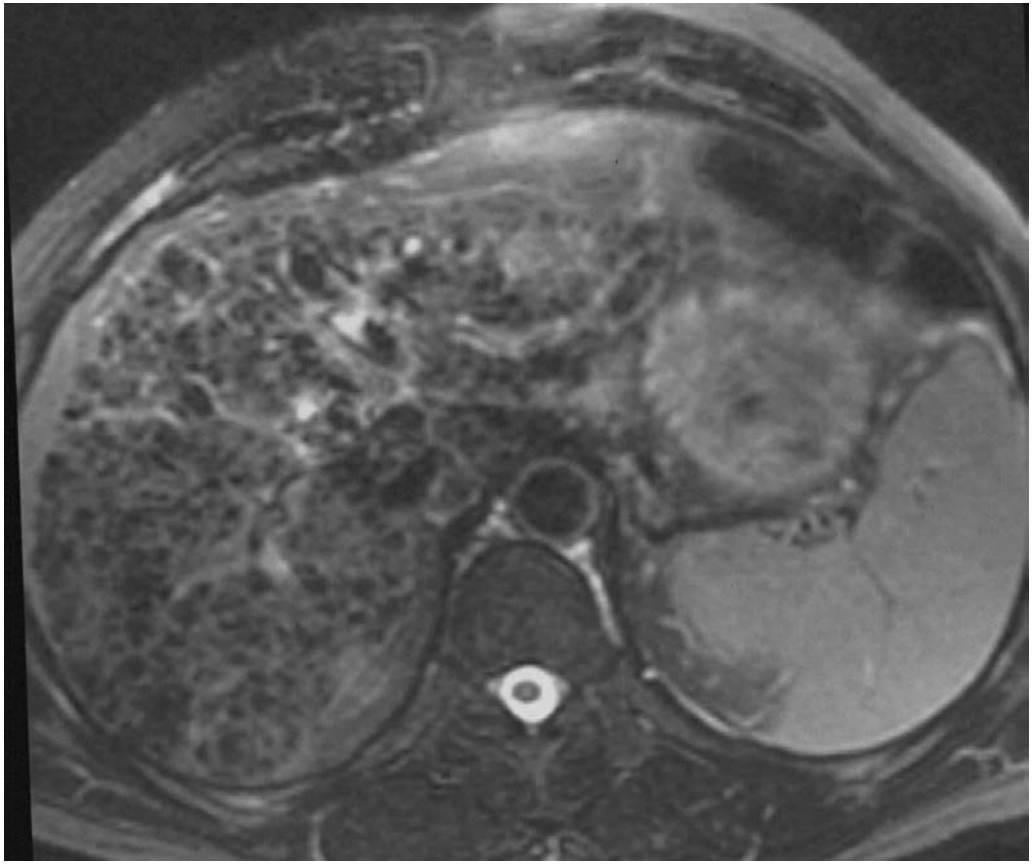
US et Cirrhose décompensée:

- Veine porte ? Ascite ?
- Hépatocarcinome ?



CT et cirrhose décompensée:

- Veine porte ?
- Hépatocarcinome ?
- Autre problème : intestin (ischémie, perforation)



IRM et cirrhose décompensée:

- Veine porte ?
- Hépatocarcinome ?

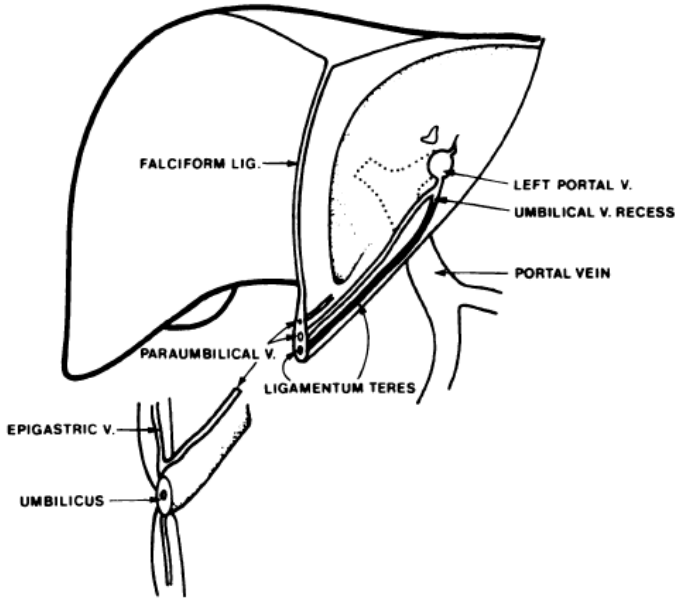


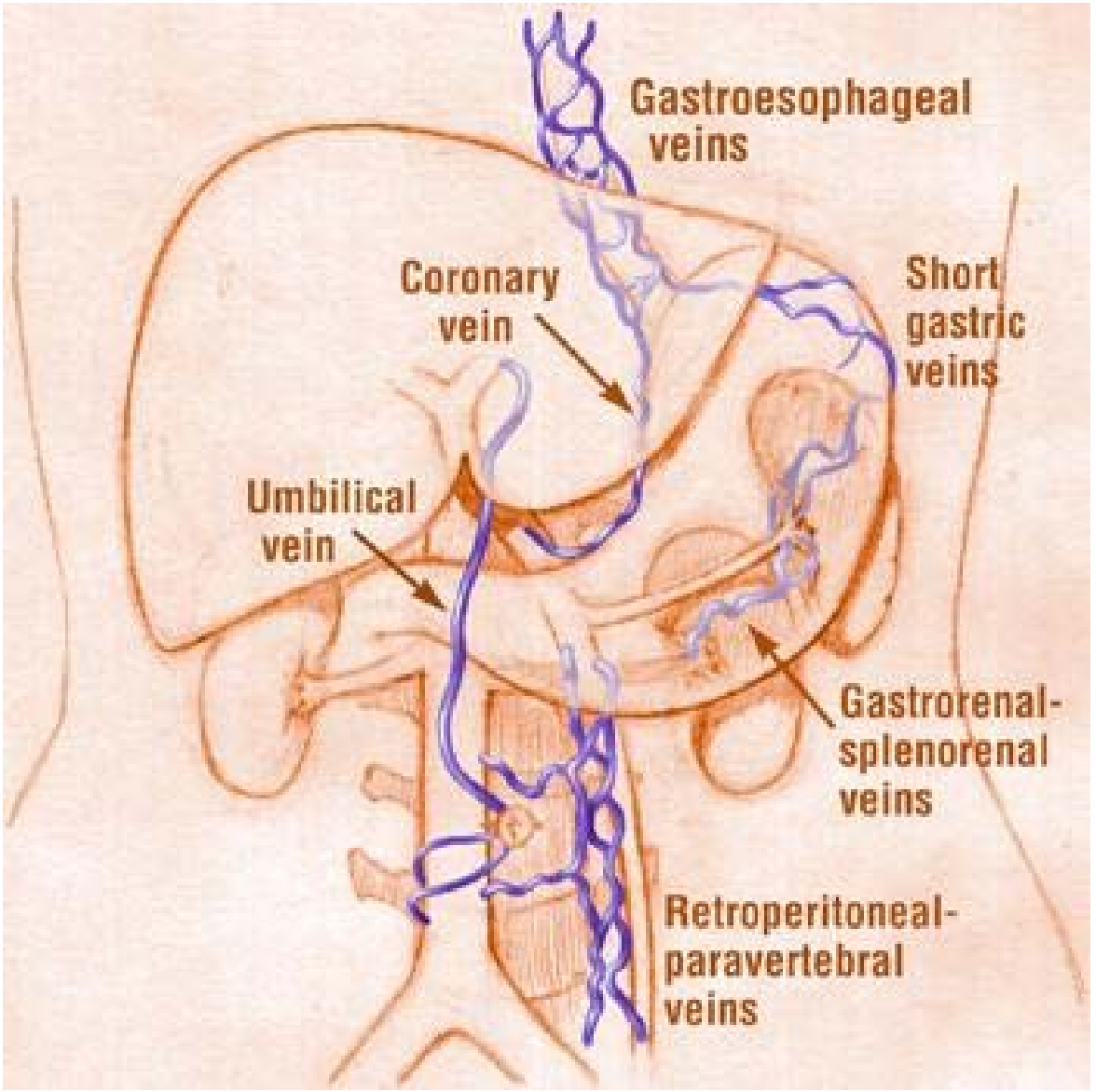
Fig. 1.—Anatomy of falciform ligament showing umbilical vein recess (Baumgarten recess) and its relation to paraumbilical vein.

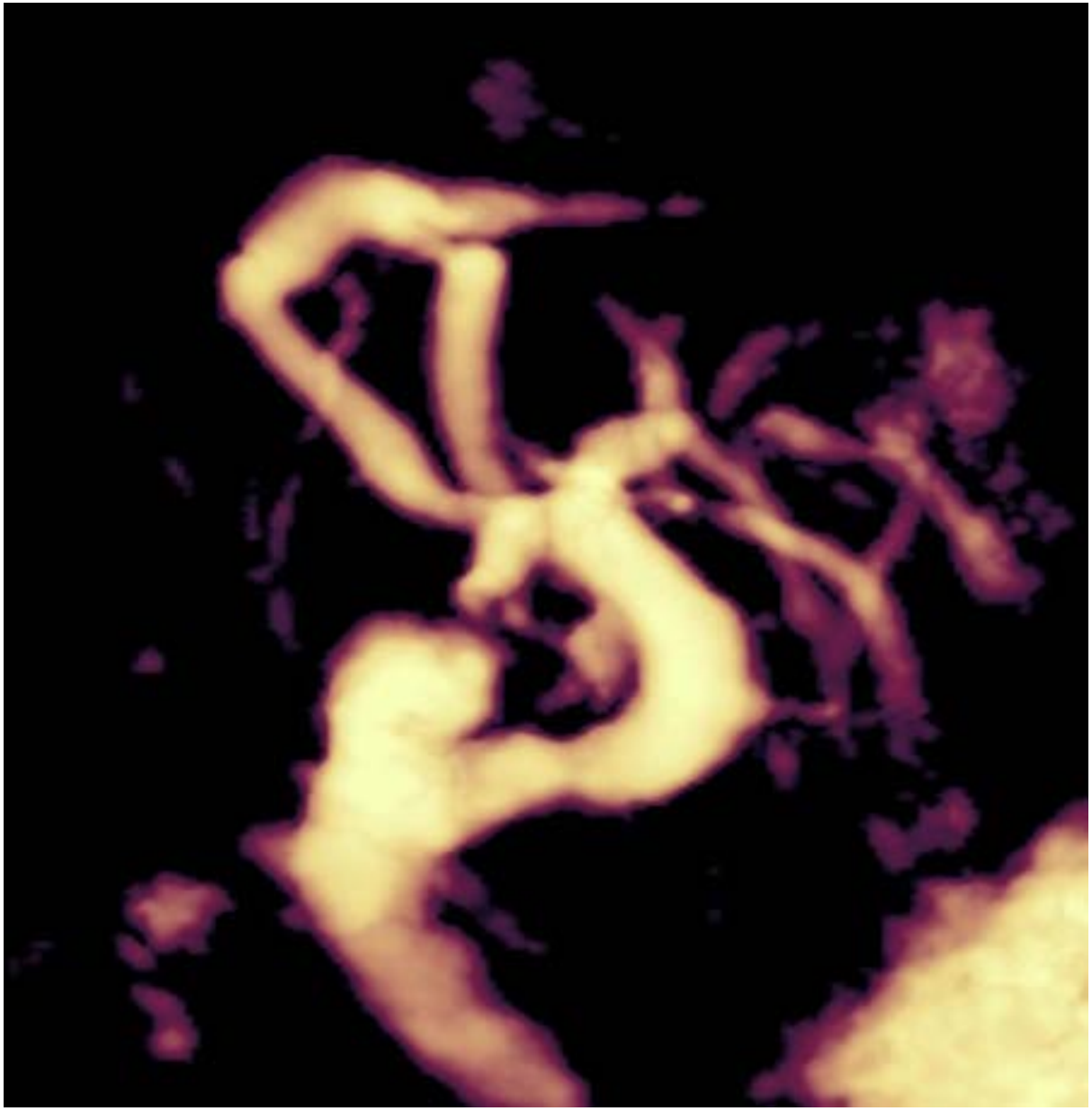
The Recanalized Umbilical Vein in Portal Hypertension: A Myth

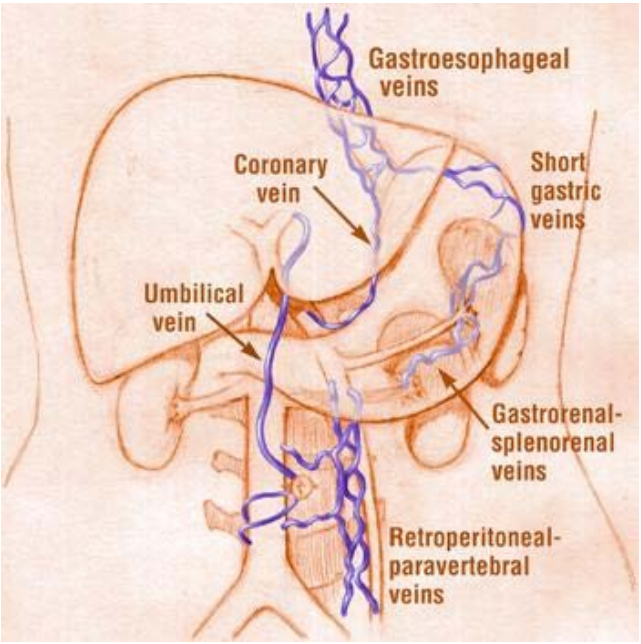
AJR 144:549–553, March 1985
0361–803X/85/1443–0549

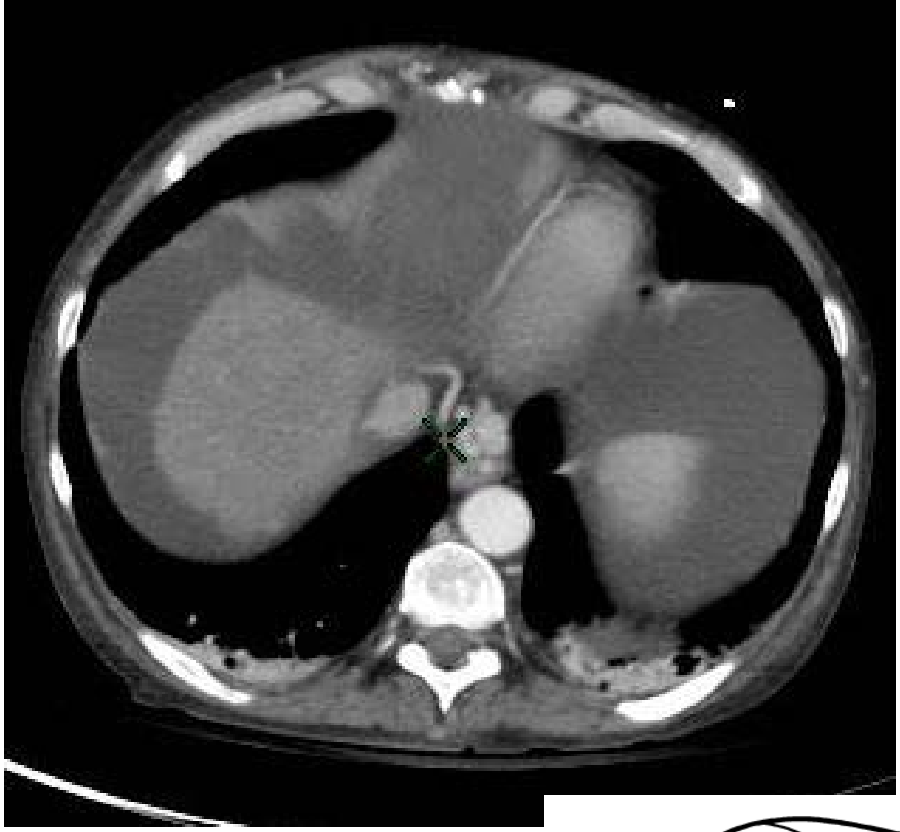
Michel Lafortune[1]
André Constantin[1]
Guy Breton[1]
André G. Légaré[1]
Pierre Lavoie[2]

The demonstration of a vessel in the falciform ligament, traditionally presumed to be a reopened umbilical vein, is an important sonographic sign of portal hypertension. This vessel was sought in 200 umbilicoportographies (all portal hypertensive) and in 41 autopsy-dissected falciform ligaments (34 normal and seven cirrhotic). The normal falciform ligament contained one to three tiny collapsed paraumbilical veins. In cirrhotics, the number and caliber of paraumbilical veins increased. A reopened umbilical vein was never found. The authors conclude that the umbilical vein does not recanalize in portal hypertension. The vessel involved is actually an enlarged paraumbilical vein.


Gastroesophageal veins
Coronary vein
Short gastric veins
Umbilical vein
Gastrorenal-splenorenal veins
Retroperitoneal-paravertebral veins




Gastroesophageal veins
Coronary vein
Short gastric veins
Umbilical vein
Gastrorenal-splenorenal veins
Retroperitoneal-paravertebral veins



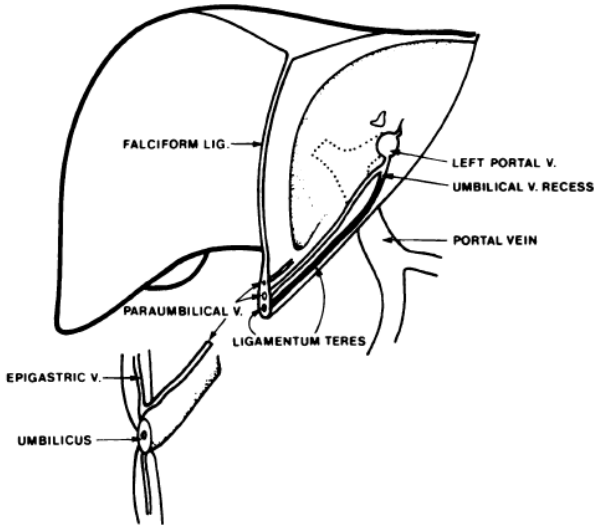
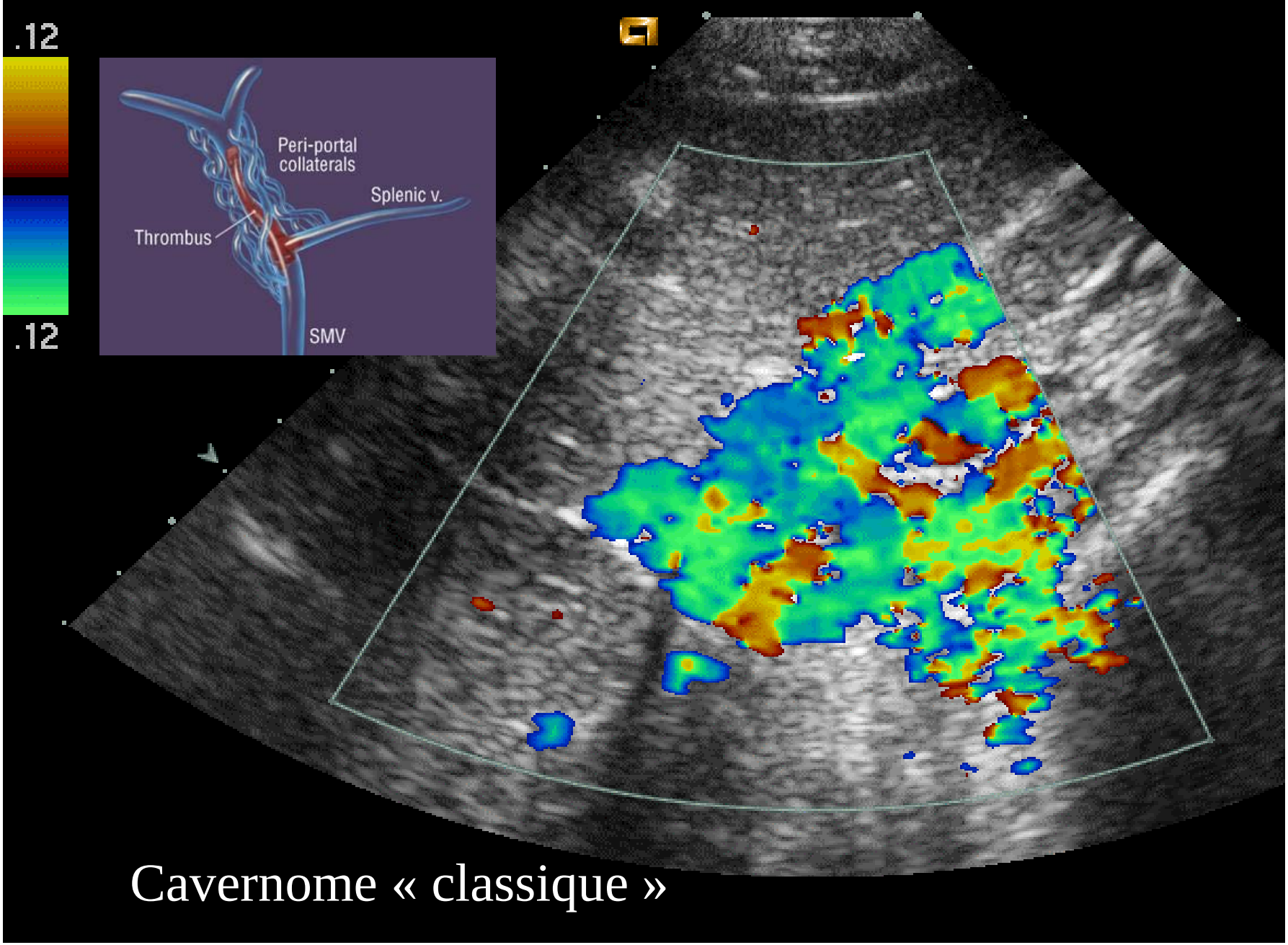
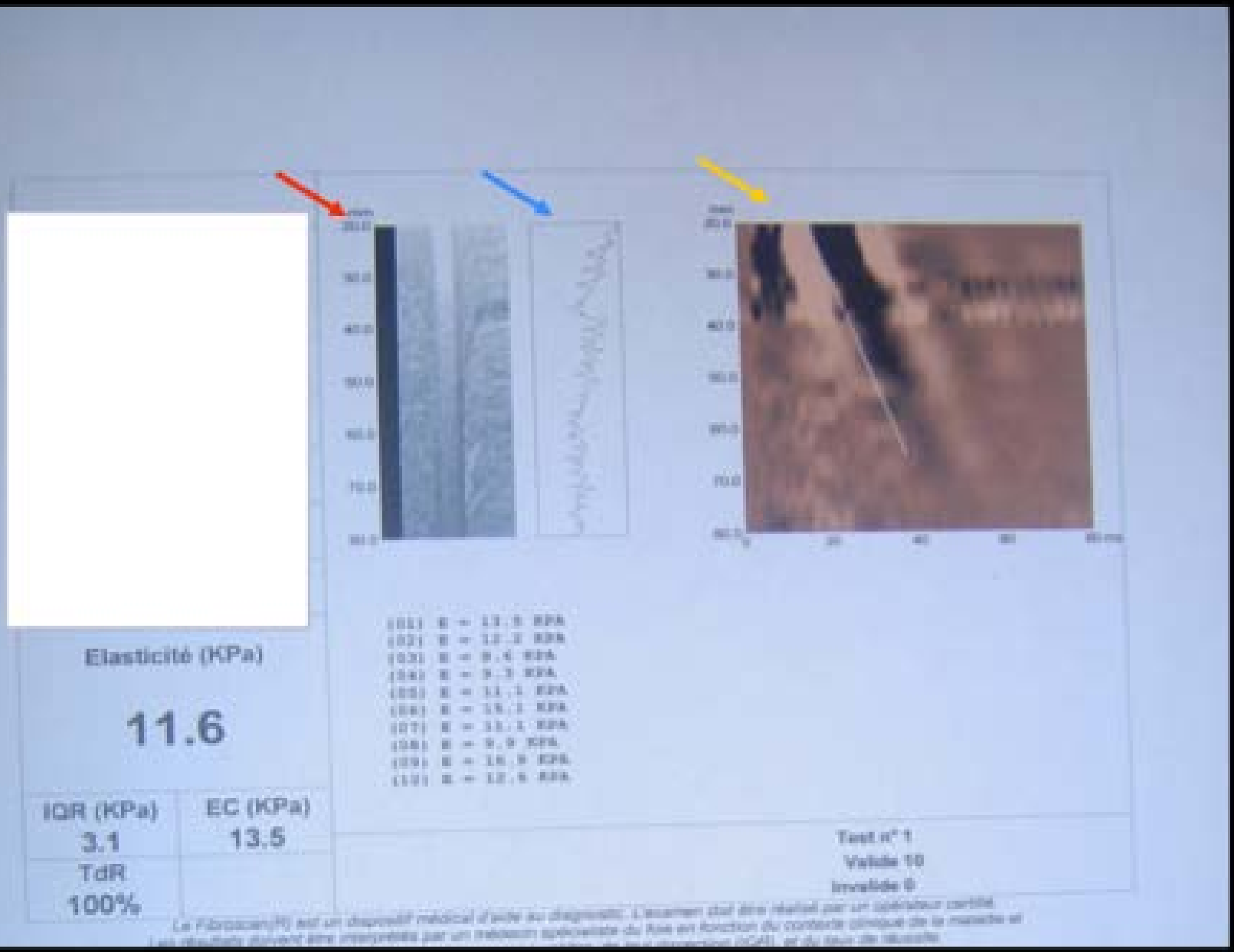


Fig. 1.—Anatomy of falciform ligament showing umbilical vein recess (Baumgarten recess) and its relation to paraumbilical vein.



Cavernome « classique »


FibroScan
A53978E
KICHOUH
24/01/07 10:05
00:02:58
15.3
FibroScan



Elasticité (KPa)

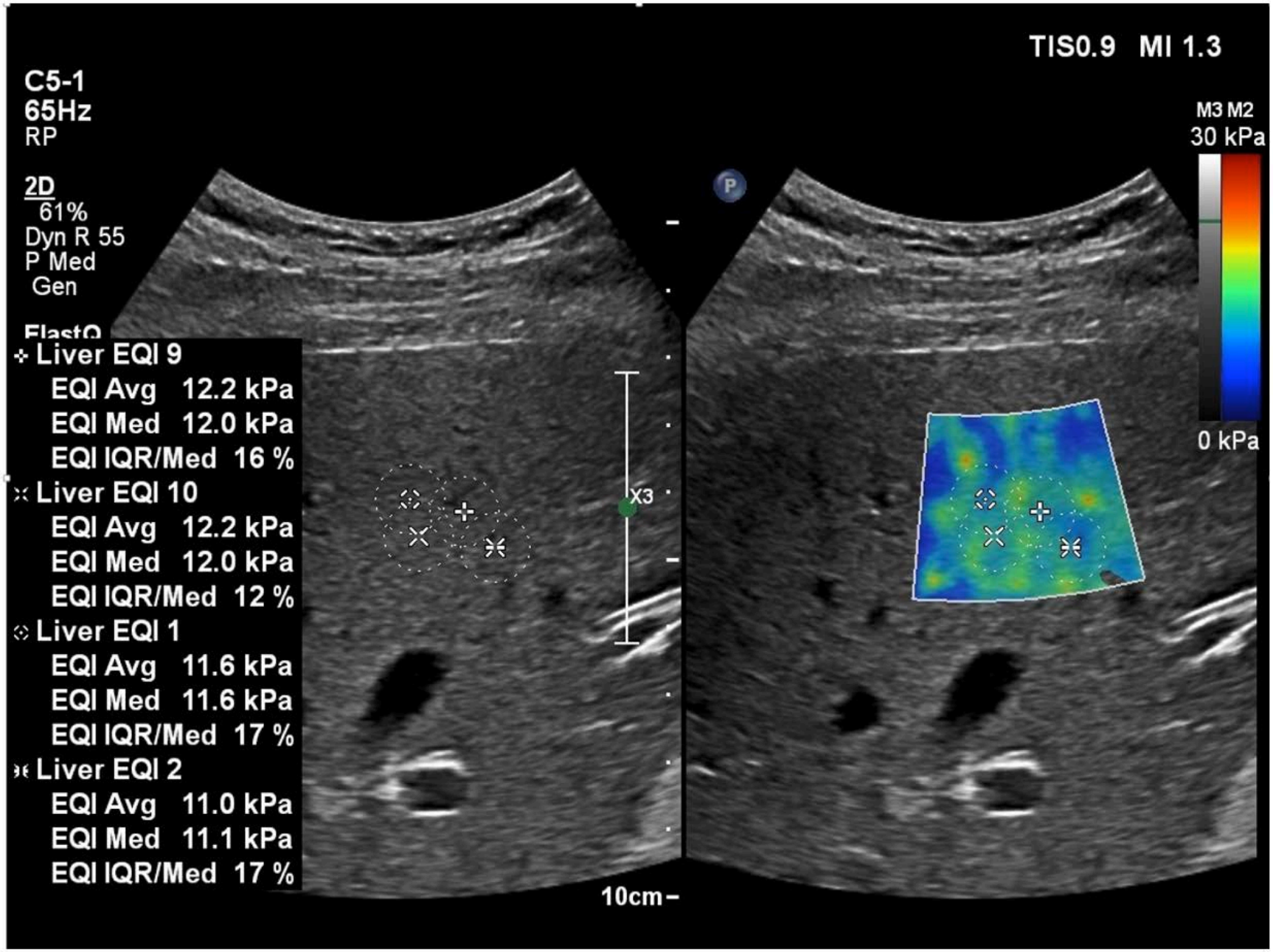
11.6

IQR (KPa)	EC (KPa)
3.1	13.5
TdR	
100%	

(01) E = 13.5 KPA
(02) E = 12.2 KPA
(03) E = 9.6 KPA
(04) E = 9.3 KPA
(05) E = 11.1 KPA
(06) E = 15.1 KPA
(07) E = 11.1 KPA
(08) E = 9.9 KPA
(09) E = 16.9 KPA
(10) E = 12.6 KPA

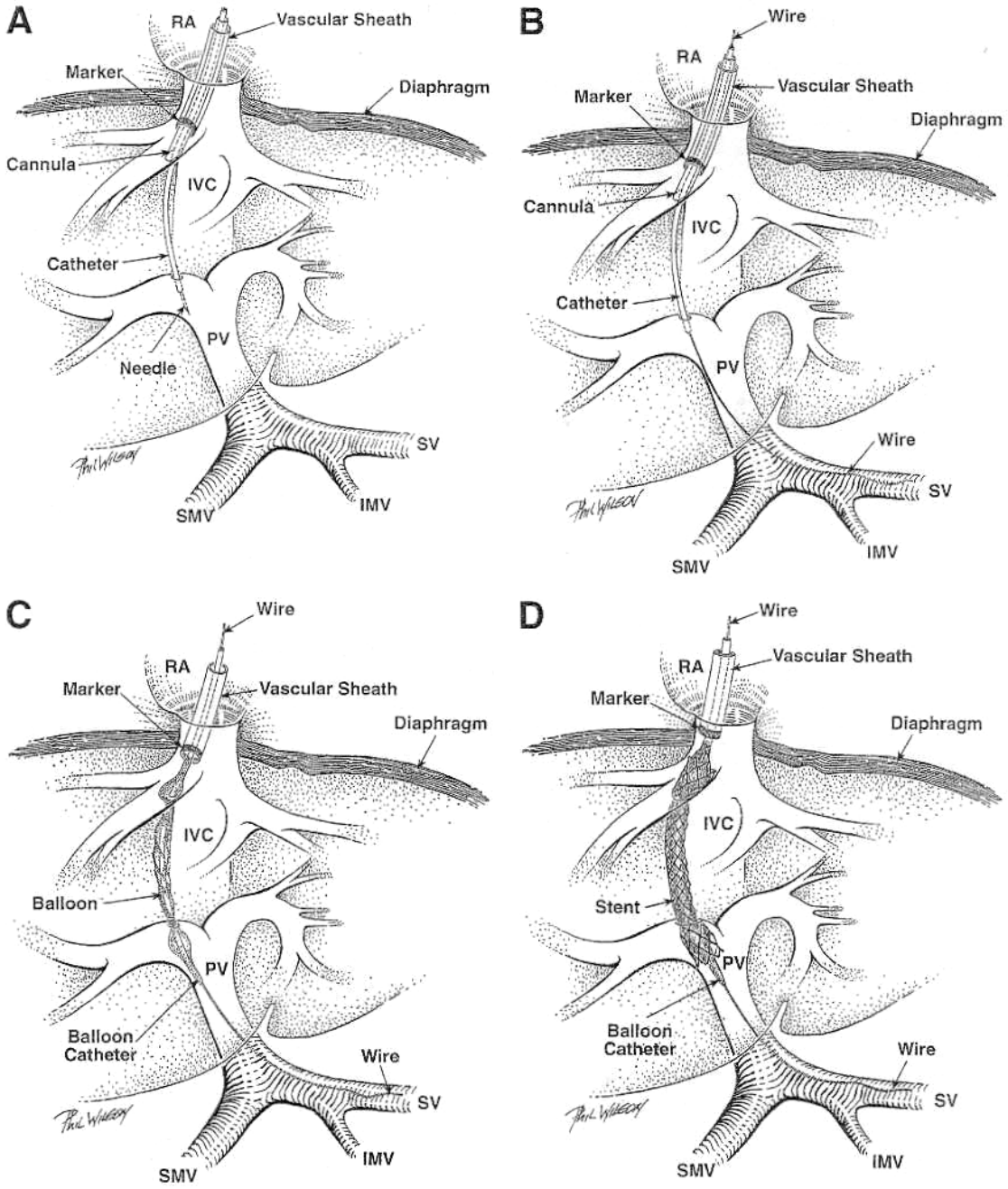
Test n° 1
Valide 10
Invalide 0

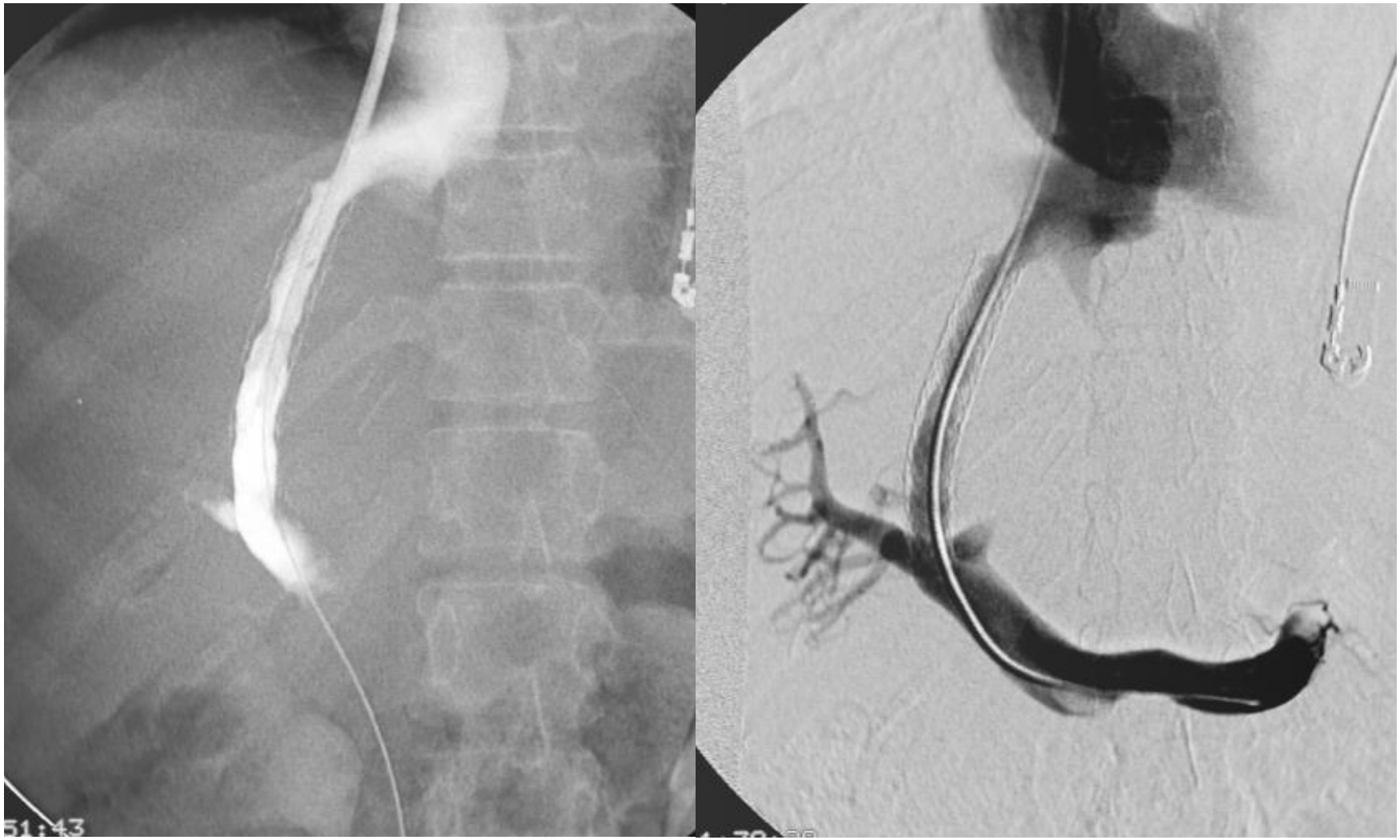
Le Fibroscan(R) est un dispositif médical d'aide au diagnostic. L'examen doit être réalisé par un opérateur certifié.
Les résultats doivent être interprétés par un médecin spécialisé du foie en fonction du contexte clinique de la maladie et
de leur dispersion (IQR), et du taux de réussite.

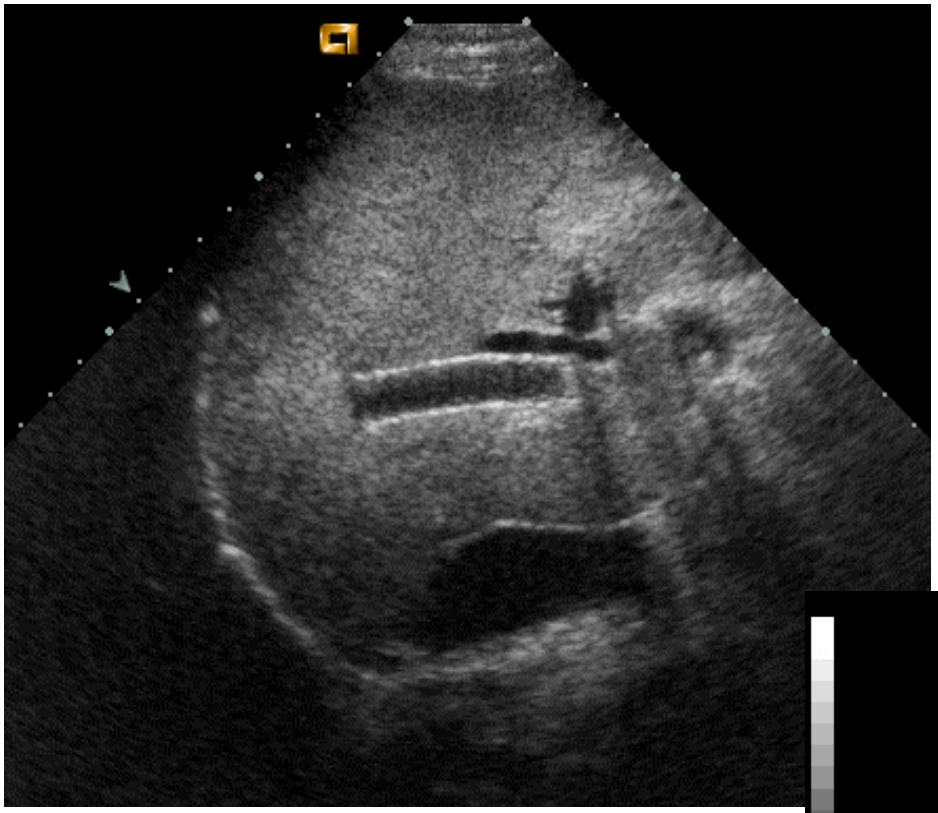

TIS0.9 MI 1.3
C5-1
65Hz
RP
2D
61%
Dyn R 55
P Med
Gen
ElastQ
Liver EQI 9
EQI Avg 12.2 kPa
EQI Med 12.0 kPa
EQI IQR/Med 16 %
Liver EQI 10
EQI Avg 12.2 kPa
EQI Med 12.0 kPa
EQI IQR/Med 12 %
Liver EQI 1
EQI Avg 11.6 kPa
EQI Med 11.6 kPa
EQI IQR/Med 17 %
Liver EQI 2
EQI Avg 11.0 kPa
EQI Med 11.1 kPa
EQI IQR/Med 17 %
M3 M2
30 kPa
0 kPa
X3
10cm

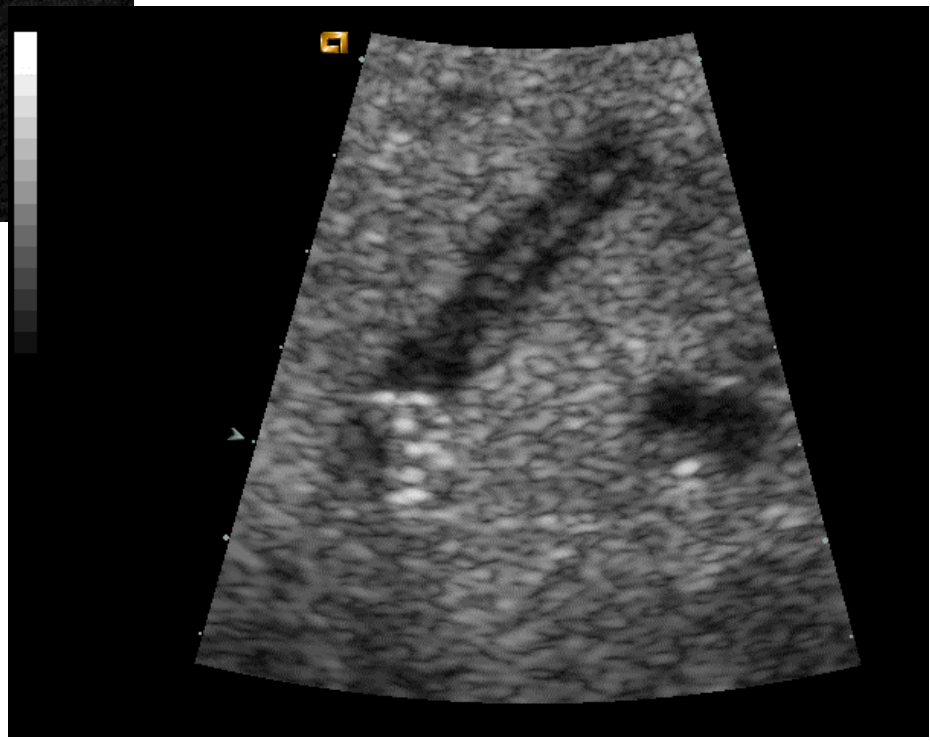
Shunts porto-caves intra-hépatiques par voie transjugulaire (TIPS)

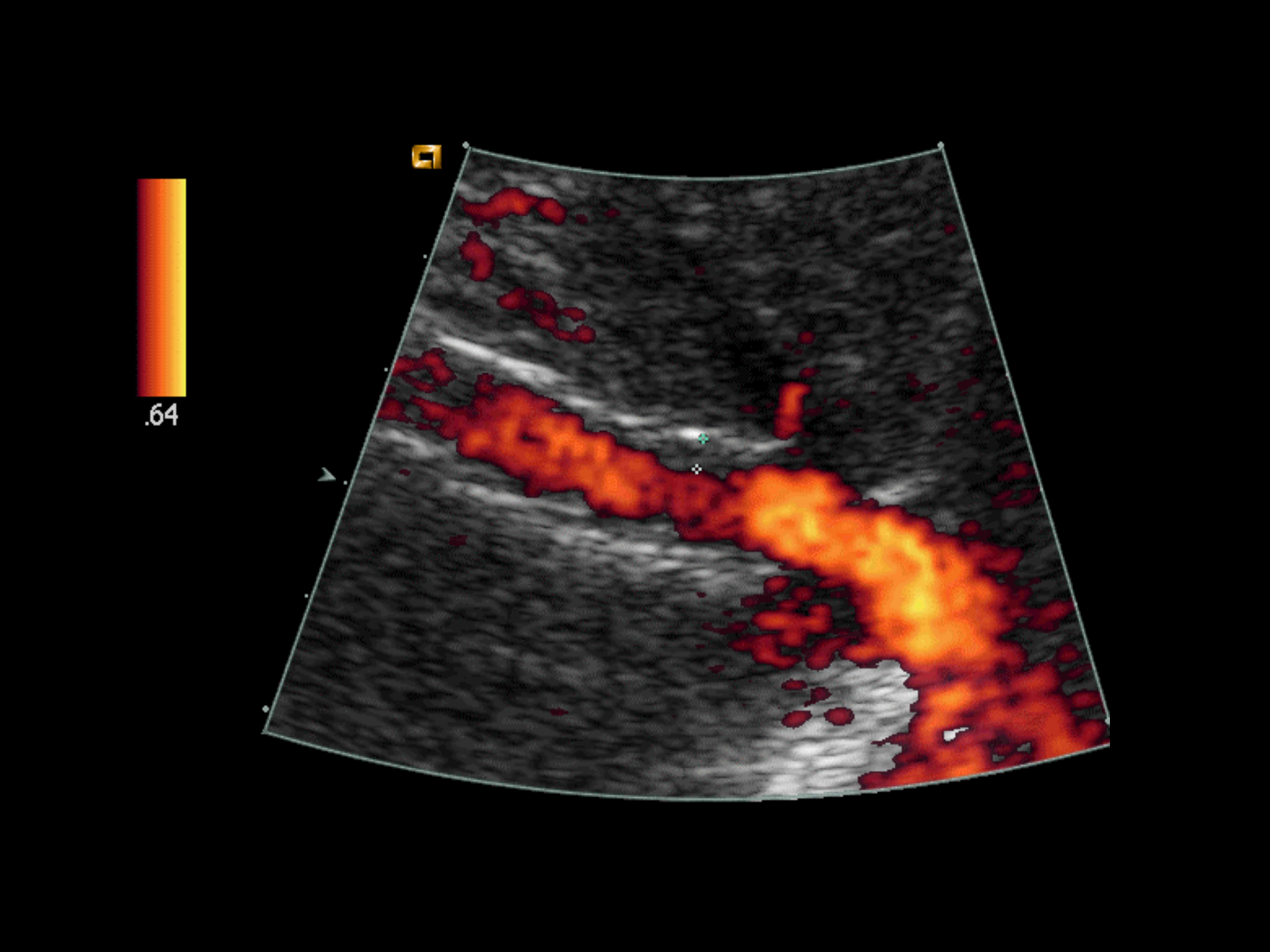
- Indications:
  - Ascites médico-résistantes
  - Hémorragies par rupture de VO récidivantes
  - Budd-Chiari


A
RA
Vascular Sheath
Marker
Diaphragm
Cannula
IVC
Catheter
PV
Needle
SV
SMV
IMV
B
Wire
RA
Vascular Sheath
Marker
Diaphragm
Cannula
IVC
Catheter
PV
Wire
SV
SMV
IMV
C
Wire
RA
Marker
Vascular Sheath
Diaphragm
IVC
Balloon
PV
Balloon
Catheter
Wire
SV
SMV
IMV
D
Wire
RA
Vascular Sheath
Marker
Diaphragm
IVC
Stent
PV
Balloon
Catheter
Wire
SV
SMV
IMV





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