

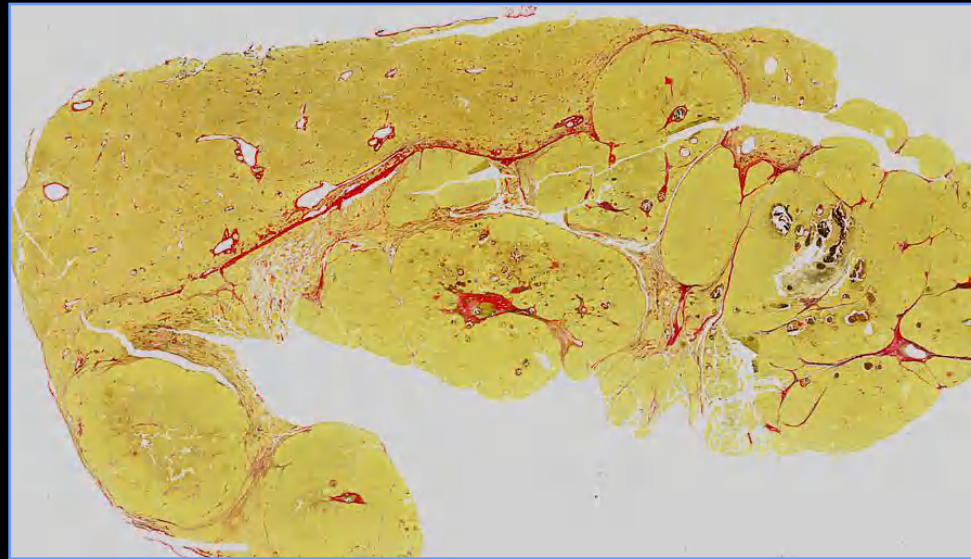
Tumeurs malignes

Tumeurs malignes

- **Tumeurs primitives (sur foie sain)**
 - CHC
 - Formes particulières
 - Carcinome fibro lamellaire
 - Hépatocholangiocarcinome
 - Cholangiocarcinome intrahépatique
 - Cystadénocarcinome biliaire
 - Hémangio endothéliome épithélioïde
 - Angiosarcome
 - Lymphome
 - Sarcomes embryonnaires
- **Tumeurs secondaires**
 - Métastases des cancers colo rectaux
 - Métastases des tumeurs endocrines

CHC sur foie sain

Macroscopie



20 % des cas en Occident

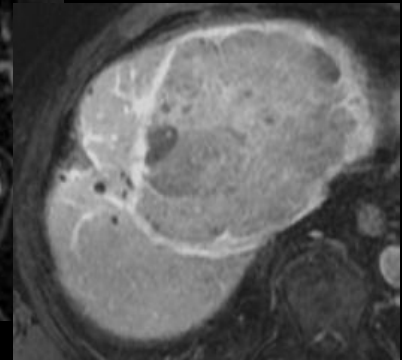
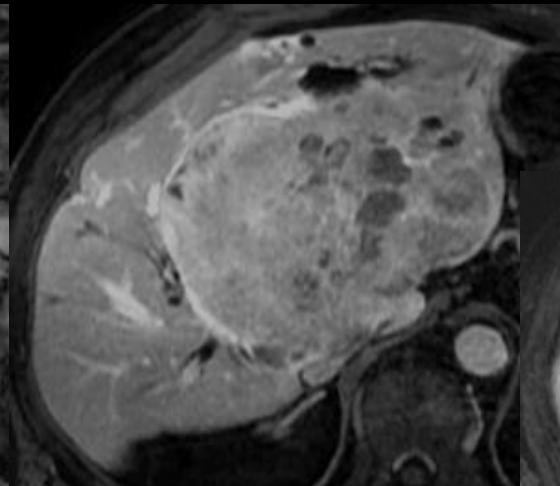
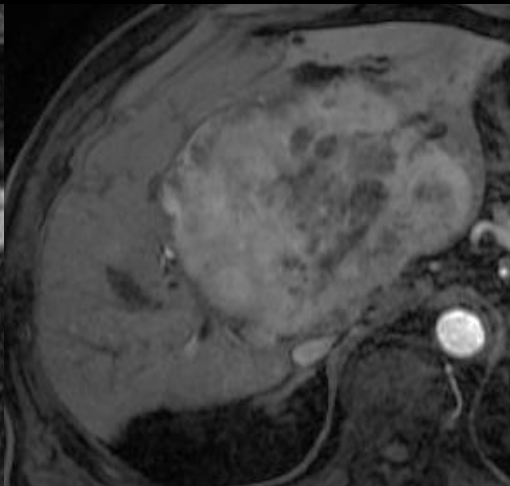
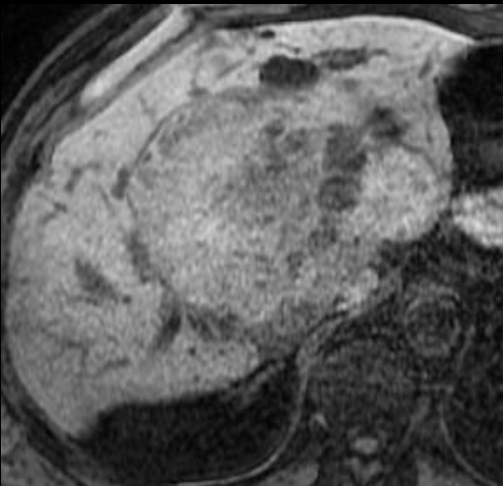
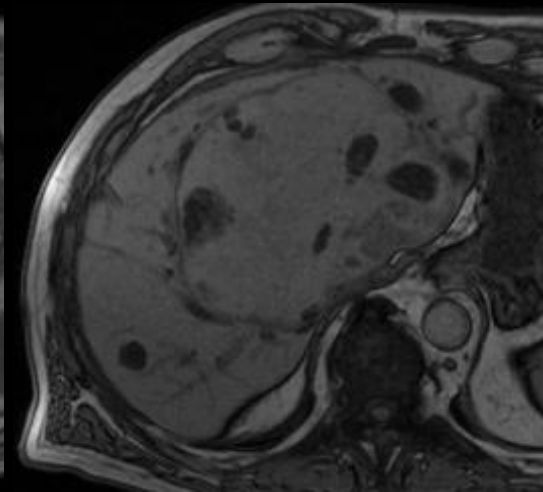
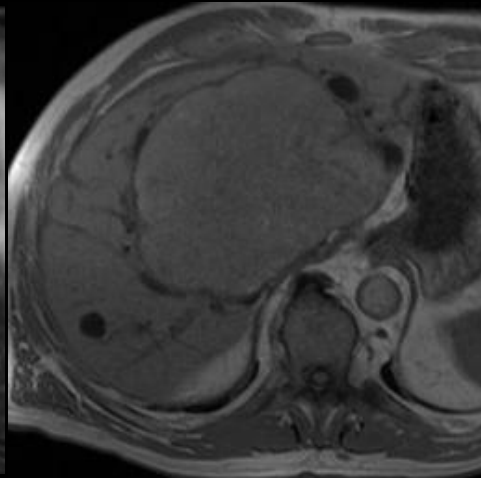
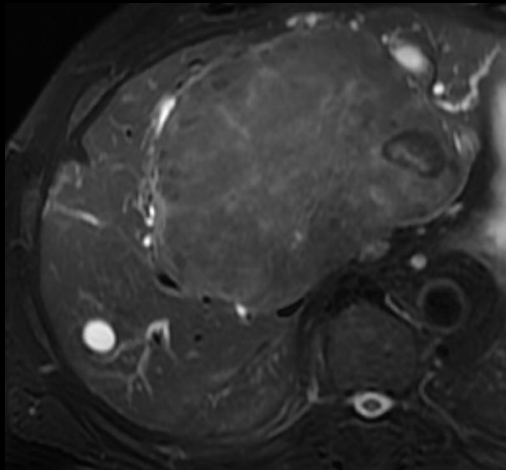
Facteurs favorisants: fongiques (alphatoxine B1) ou hormonaux, traitements par androgènes ou estrogènes

CHC sur foie sain

Homme, 80 ans

Bilan d'ADK rénal droit

Découverte lésion hépatique sur TDM

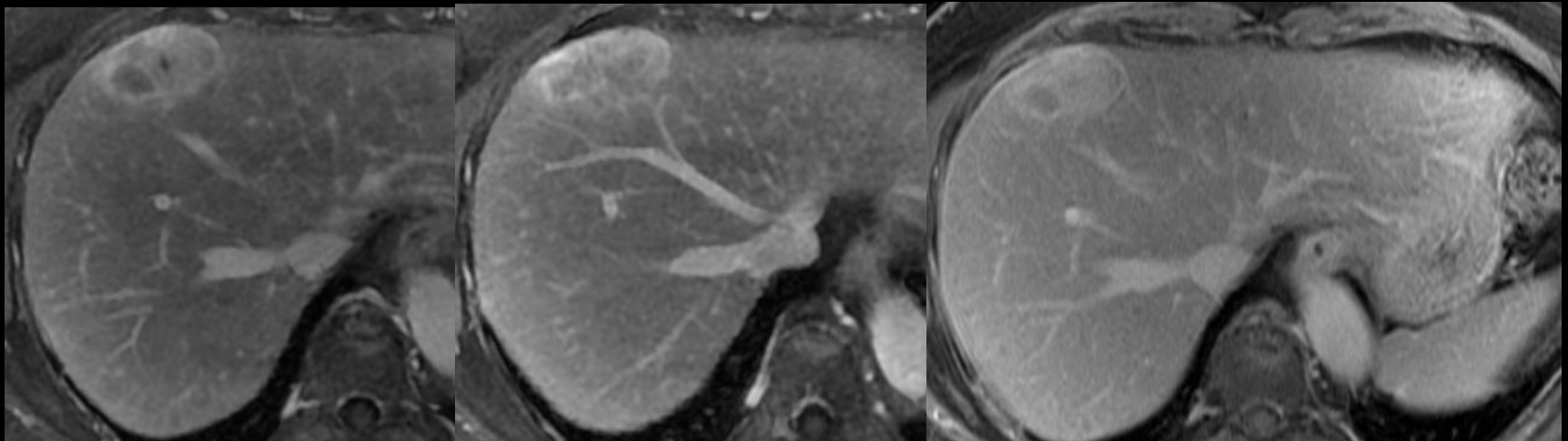
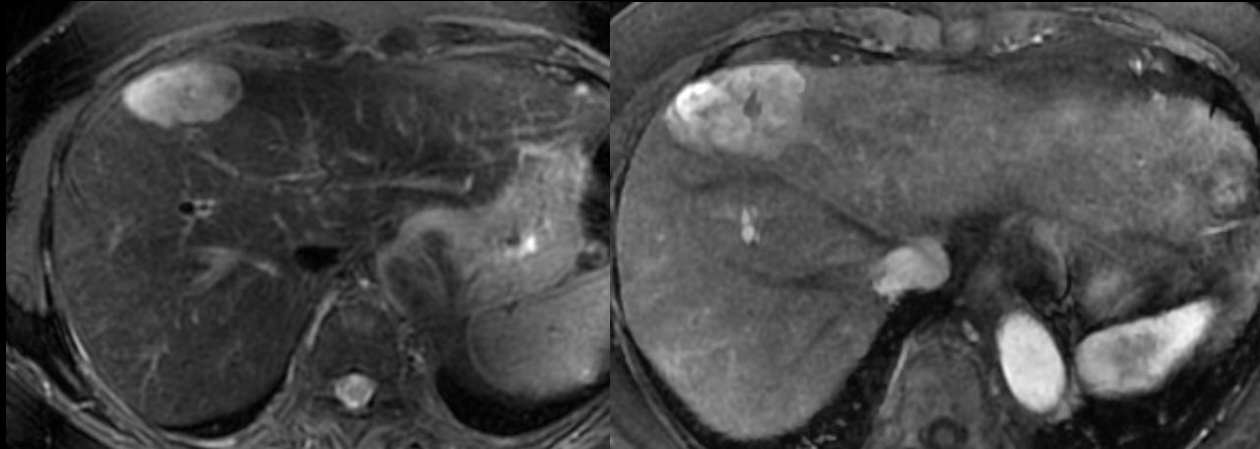


CHC sur foie sain

femme, 57 ans

Aucun antécédent

TDM TAP : lésion unique hépatique

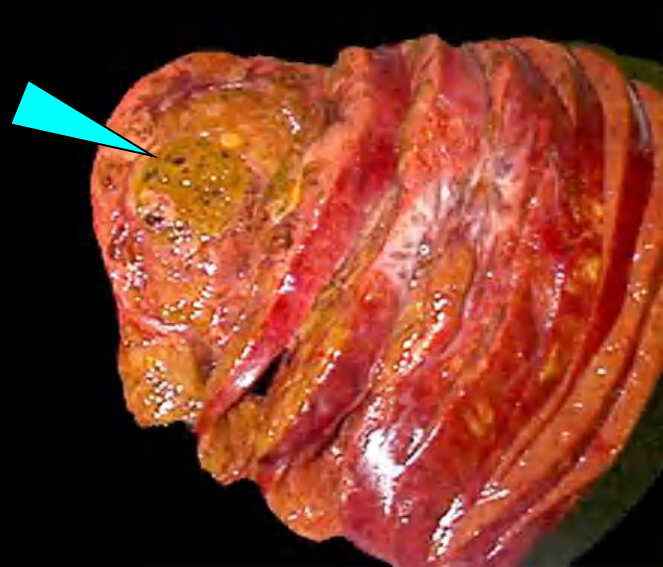




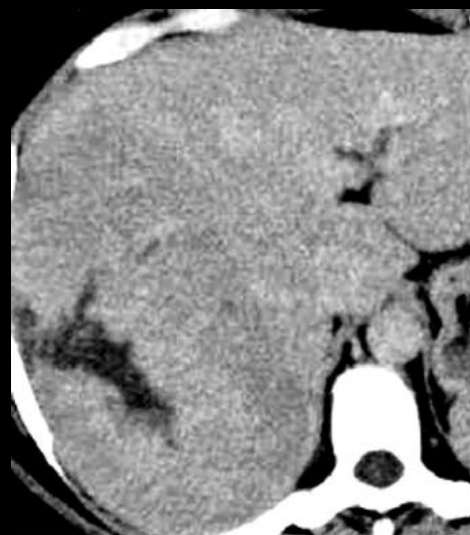
CT avant injection



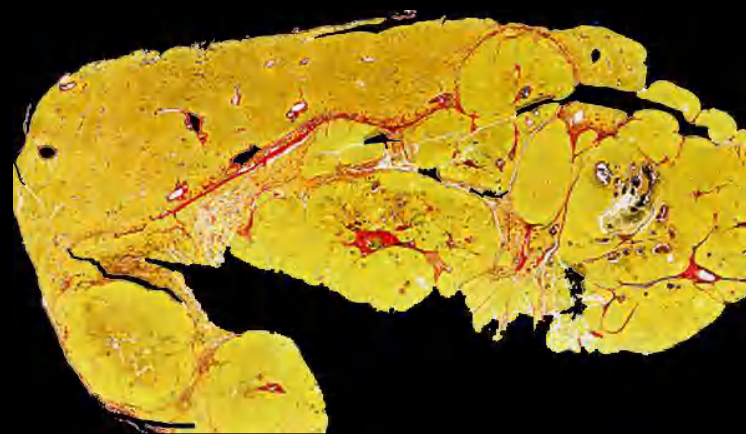
CT 40"



CT 70"



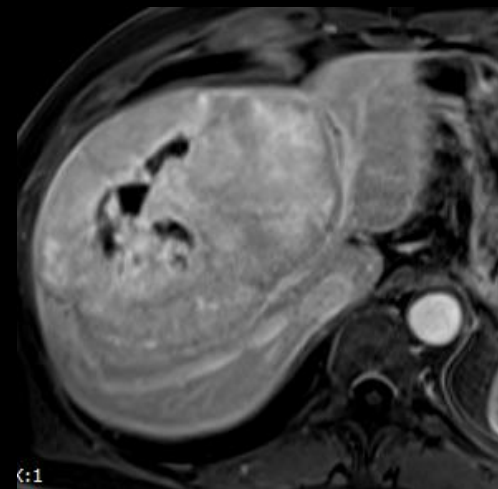
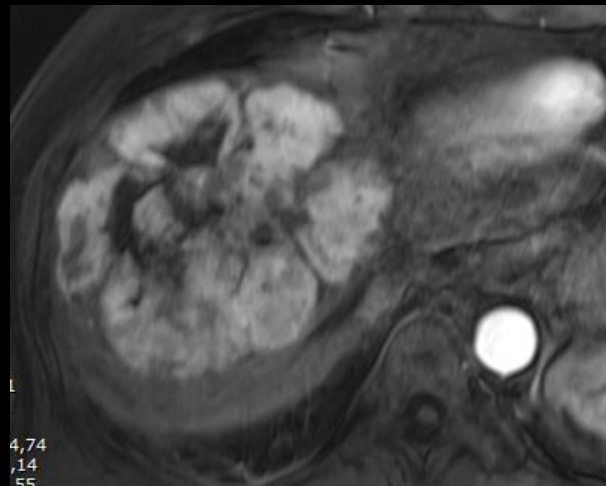
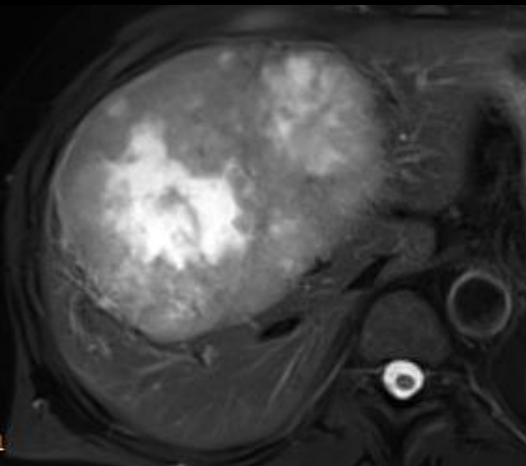
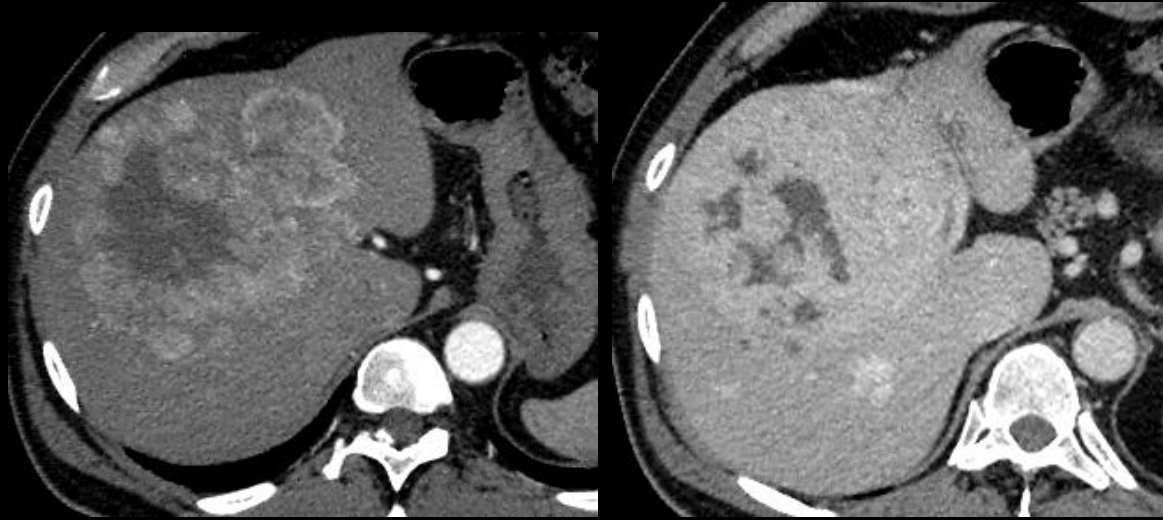
CT 7'

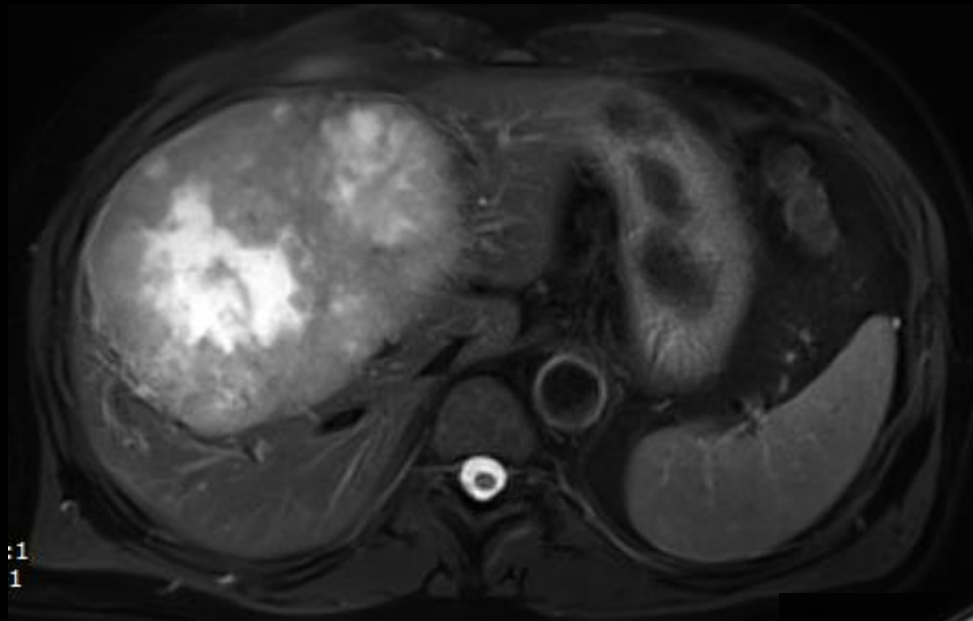


Rouge Sirius fibrose collagène

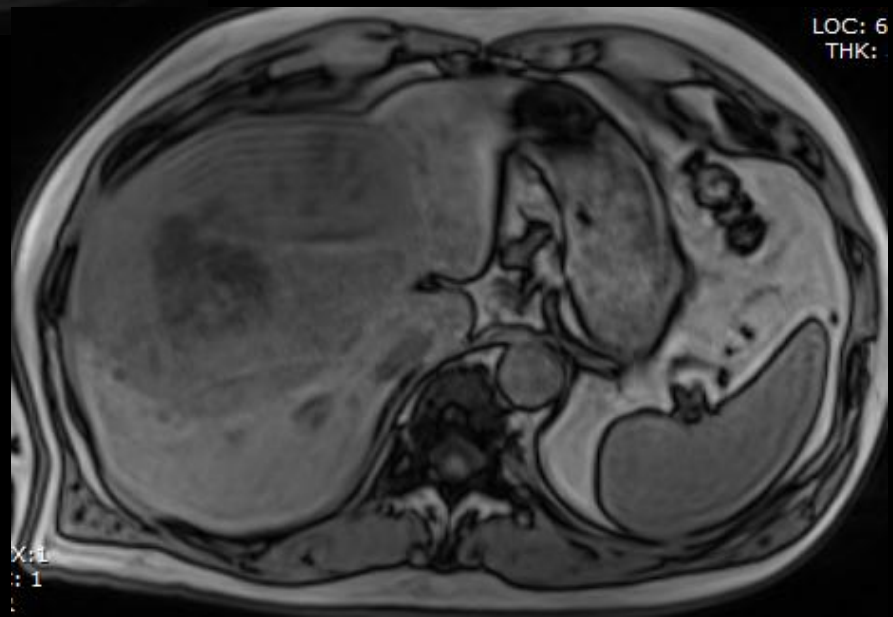
CHC sur foie sain

Homme de 55 ans. Perturbations modérées du bilan biologique hépatique. Aucun ATCD,





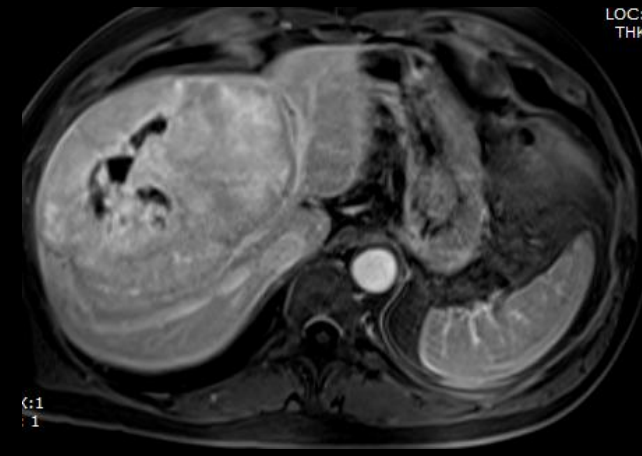
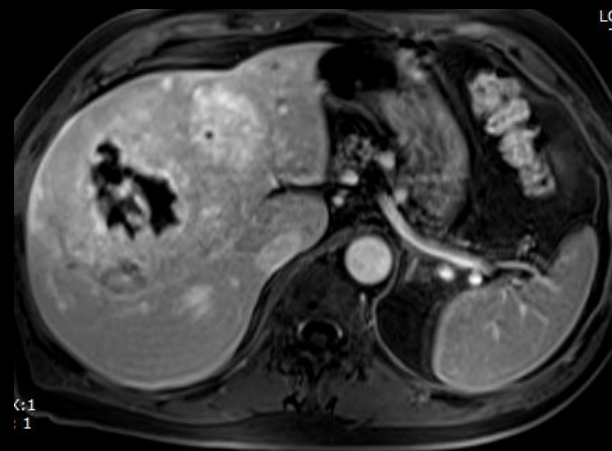
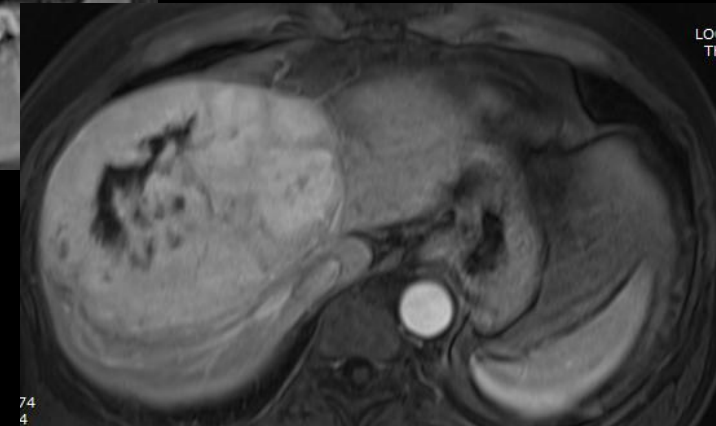
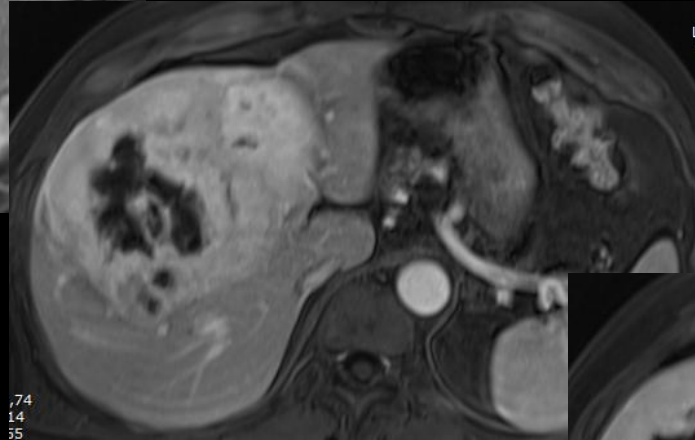
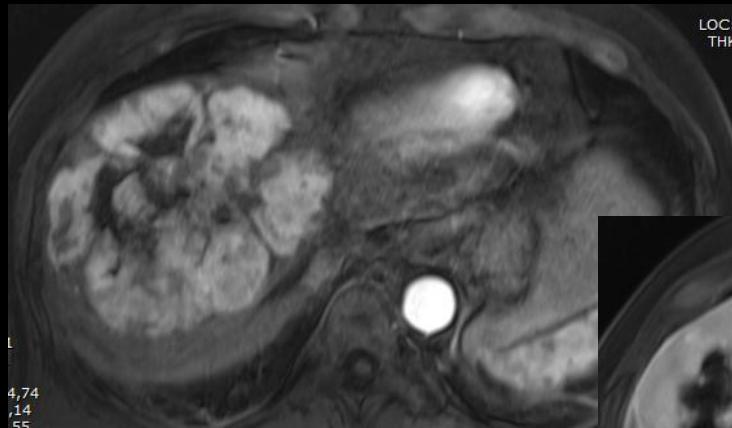
:1
1



LOC: 6
THK:

X:1
:1
:1

CHC atypique

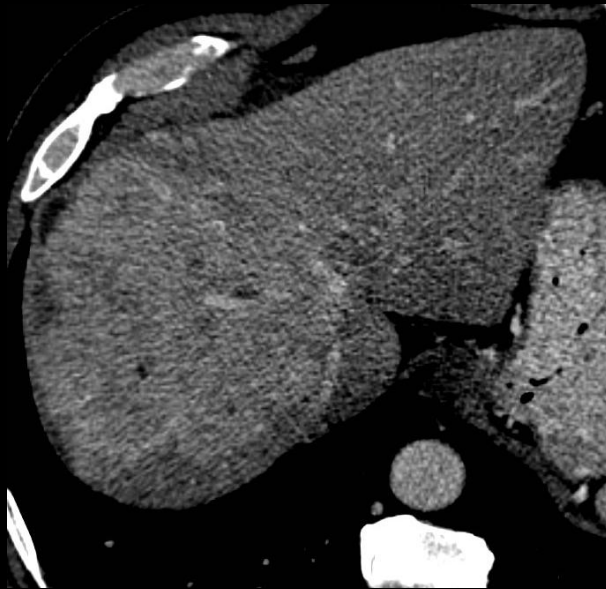
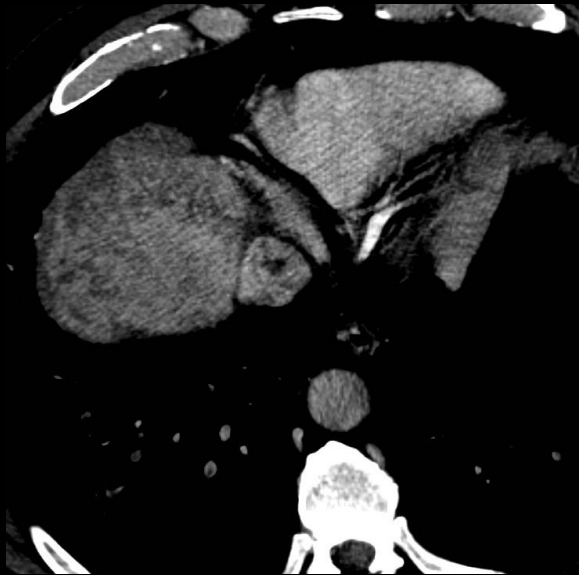
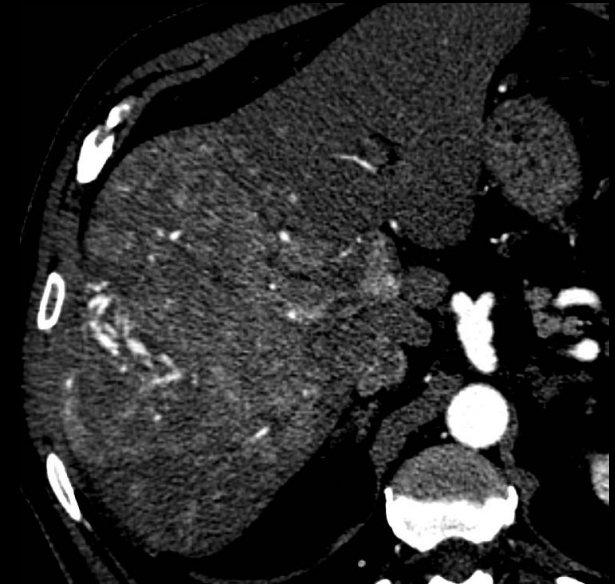


Quelle attitude proposez-vous ?

CHC sur foie sain

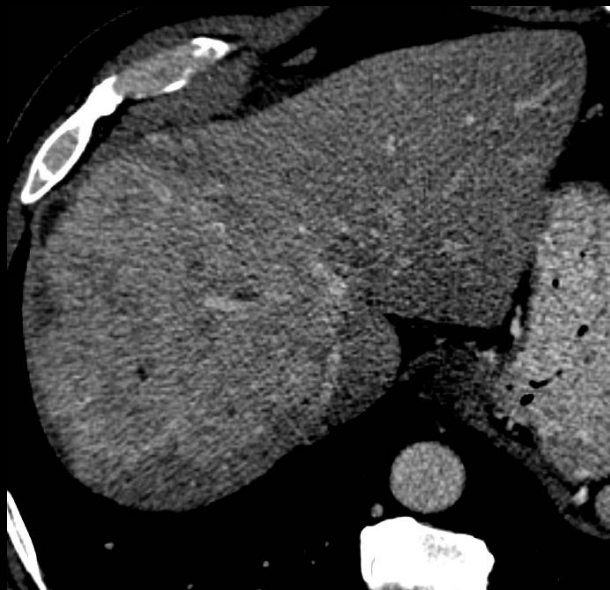
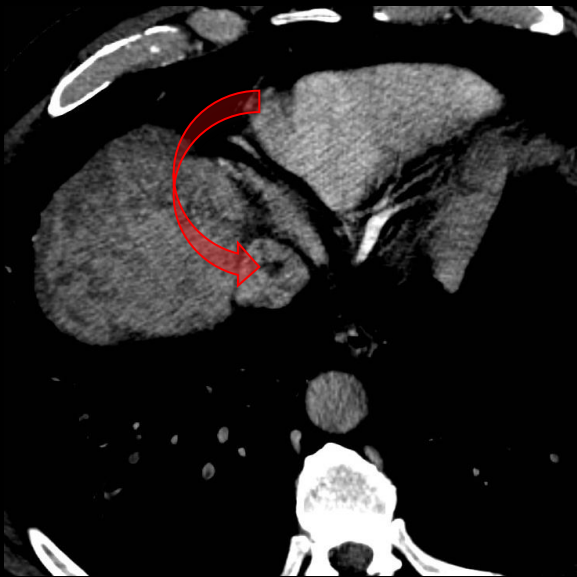
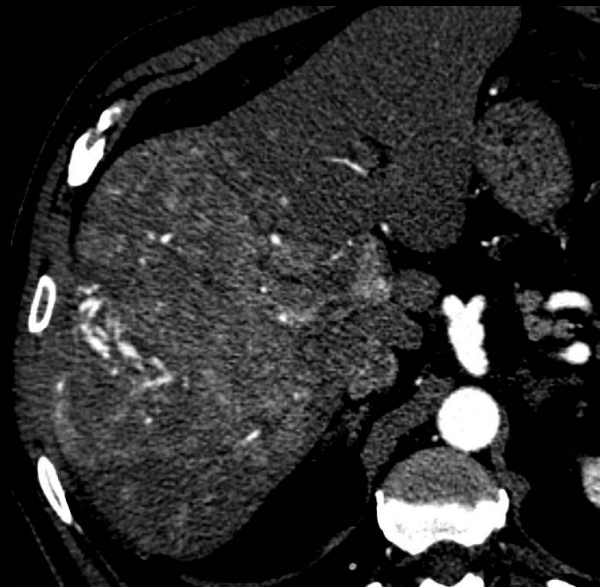
Patiente de 68 ans
Bilan de masse hépatique

37/1943

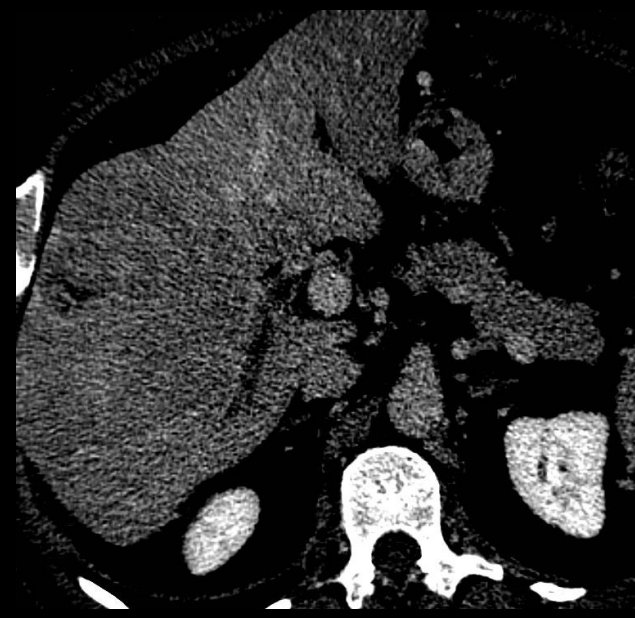
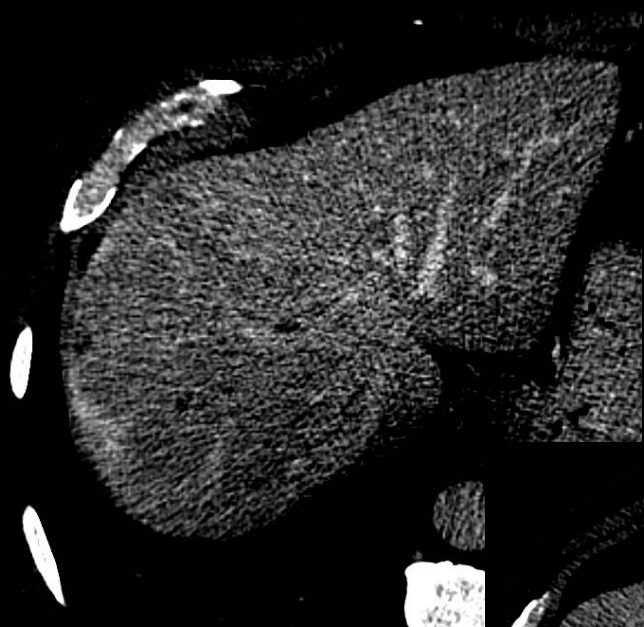


CHC sur foie sain

37/1943



CHC sur foie sain



CHC atypique



T2 FS

Lésion HT2 tissulaire

Lésion hétérogène

Rehaussement artériel modéré
hétérogène

Lavage à la phase de post équilibre ?

Tumeur maligne : OUI

Biopsie : non

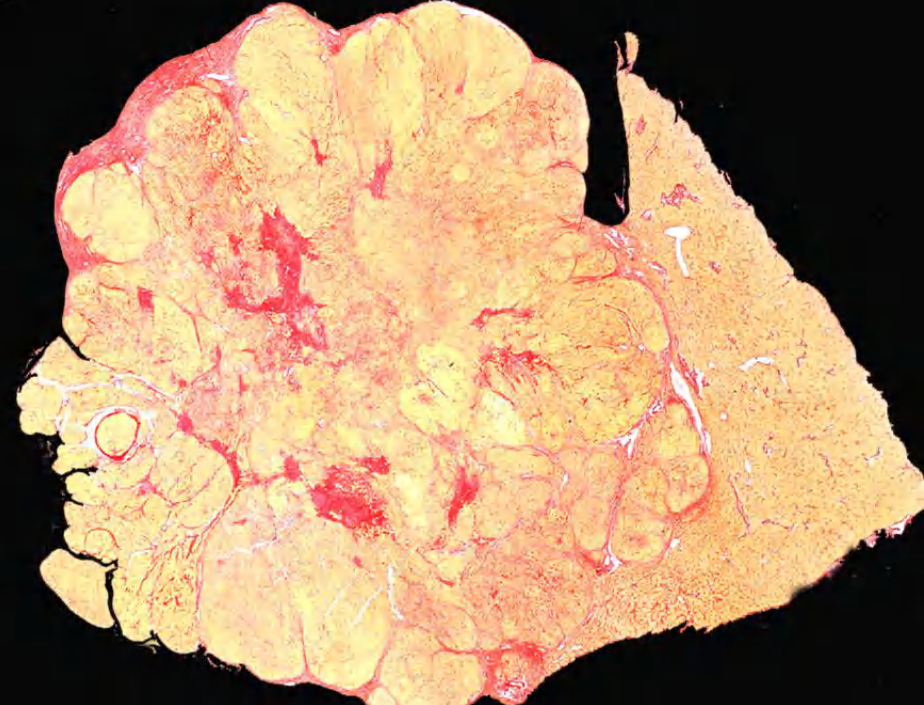
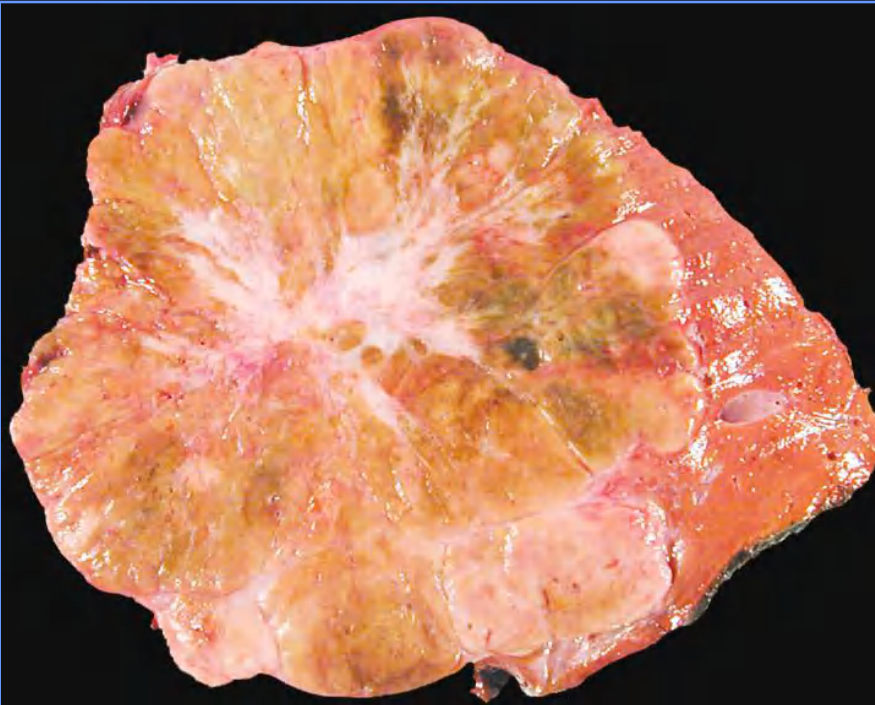
Chir d'emblée : OUI

Forme particulière CHC sur foie sain

Carcinome fibro lamellaire

Macroscopie

Calcifications centrales : 80%



Tumeur maligne hépatocellulaire non commune dont les caractéristiques cliniques histologiques diffèrent du CHC

Larges cellules éosinophiles disposées en cordons séparées par tissu fibreux non encapsulée

Habituellement **croissance lente, pas de facteur de risque particulier, rarement sur foie cirrhotique, adultes jeunes, alphaFP normales**

Forme particulière CHC sur foie sain

Carcinome fibro lamellaire

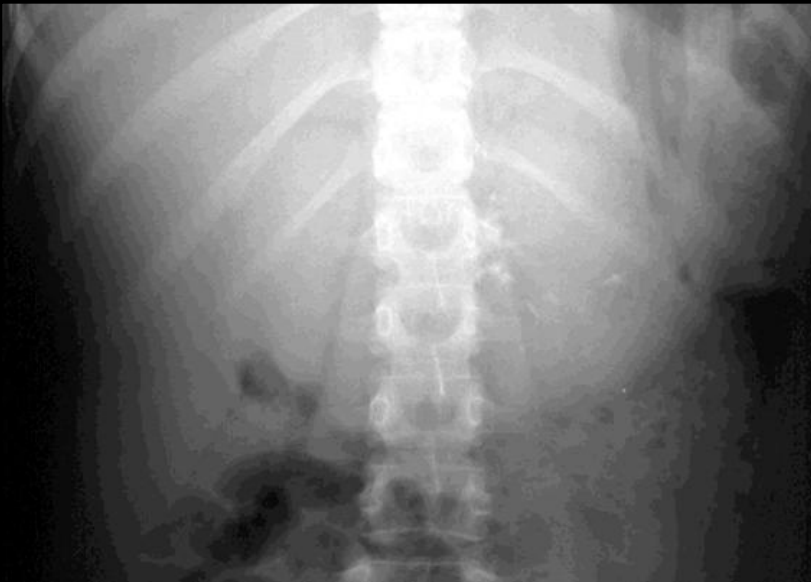
Calcifications centrales : 80%

Jeune fille 16 ans :

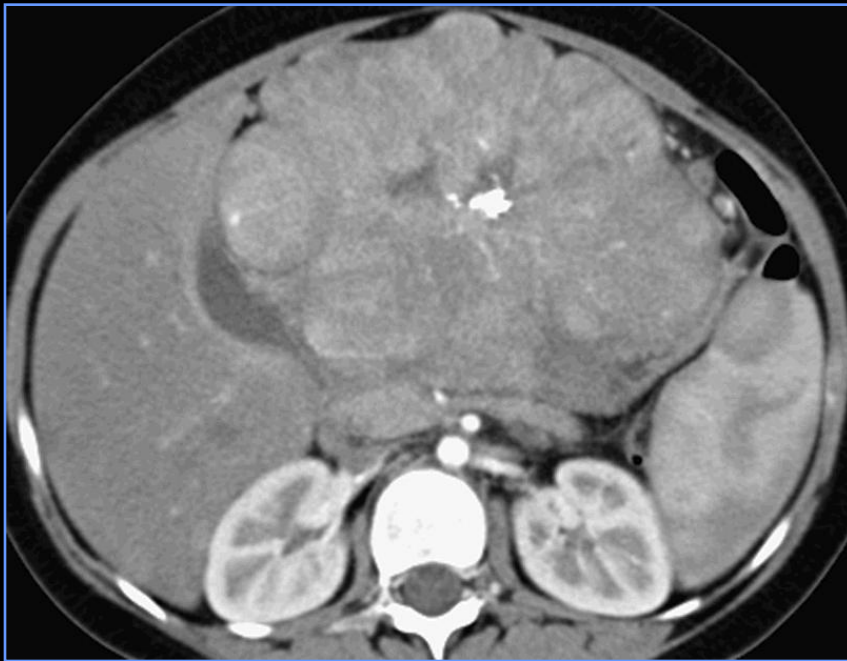
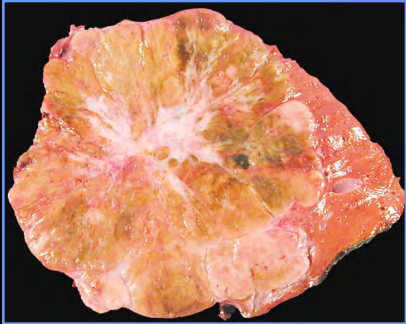
Douleurs épigastriques

Voussure abdominale

Cytolyse et cholestase modérée



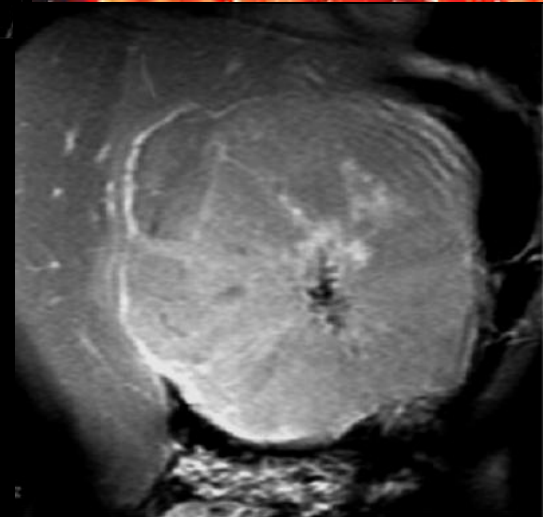
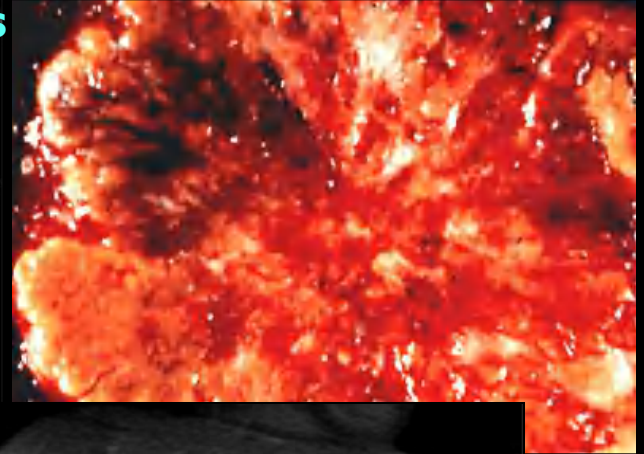
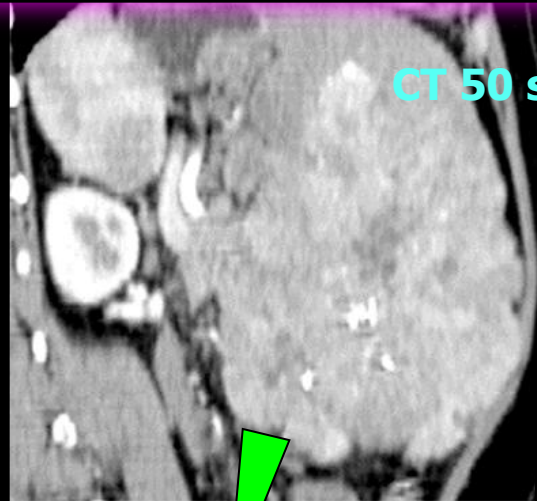
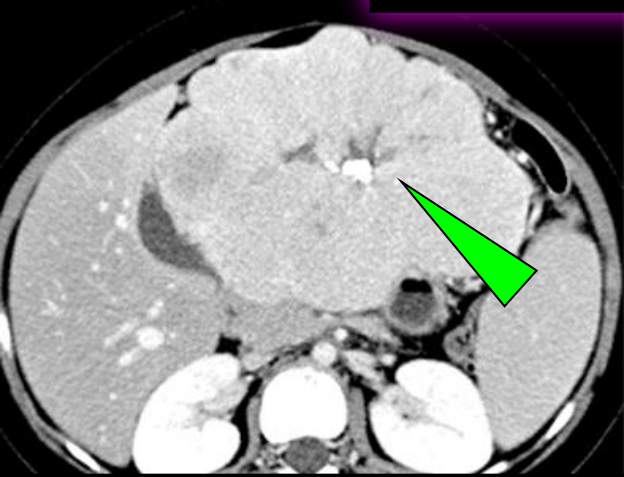
Forme particulière CHC sur foie sain Carcinome fibro lamellaire



McLarney et al. : Radiographics 1999, 19 : 453-71

CT 1' 30

Forme particulière CHC sur foie sain Carcinome fibro lamellaire



T1 Fat Sat 8'

T2 Fat Sat

diagnostic différentiel de l' HNF : l' hépatocarcinome fibro-lamellaire

Forme particulière CHC sur foie sain

Carcinome fibro lamellaire

Apport de l'IRM

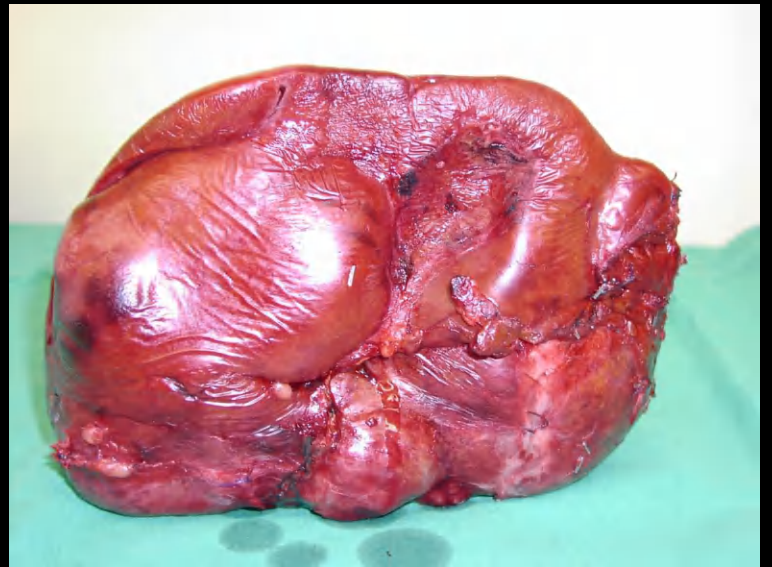
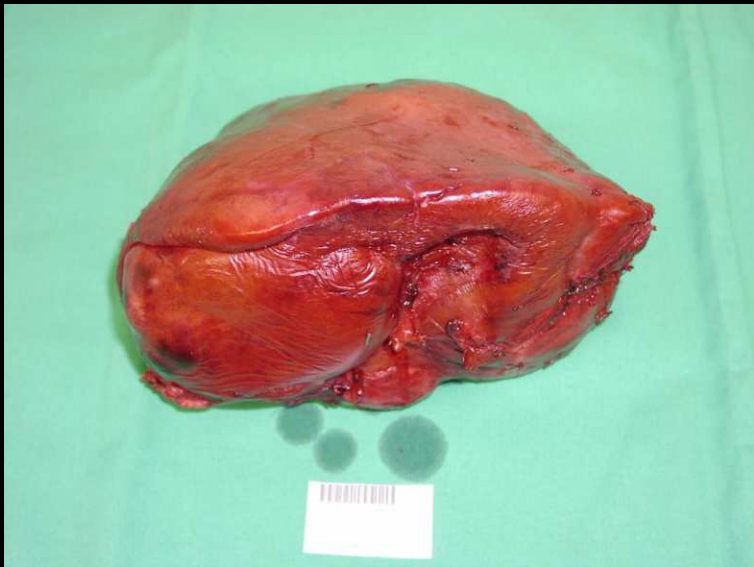
HNF

- Iso/faiblement hyperT2
- Zone centrale en hyper T2

Carcinome fibrolamellaire

- Hétérogène et hypersignal T2
- Zone centrale hypoT1 et hypoT2
- Pas de nécrose, pas d'hémorragie

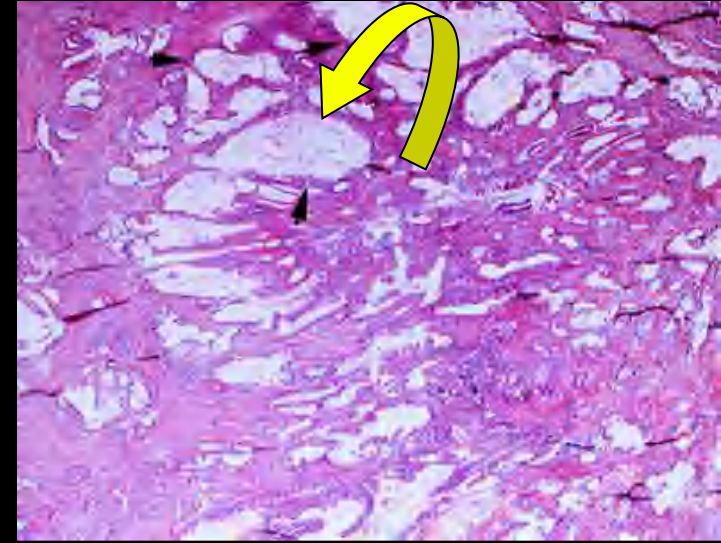
diagnostic différentiel de l' HNF : l' hépatocarcinome fibro-lamellaire



Carcinome fibro lamellaire



Cholangiocarcinome



présence de mucine



HES fibrose rose

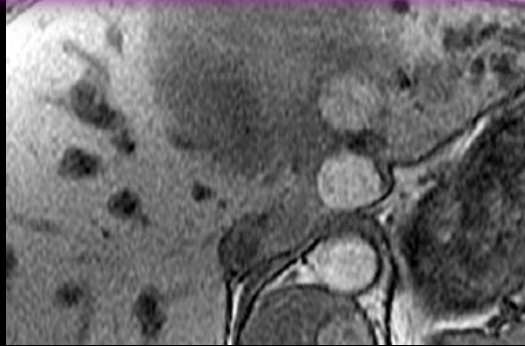


trichrome fibrose bleue

cholangiocarcinome « périphérique »

fibrose collagène (réaction desmoplastique+++)

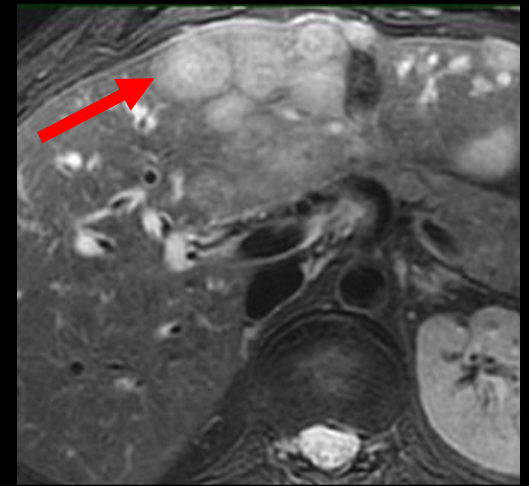
Cholangiocarcinome



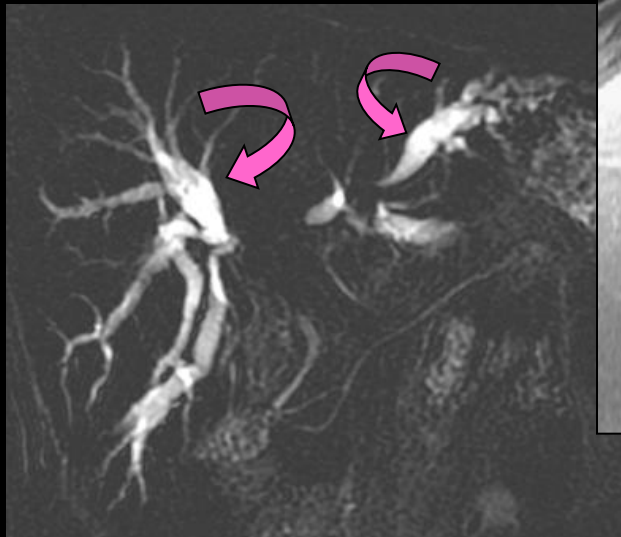
T1 sans injection



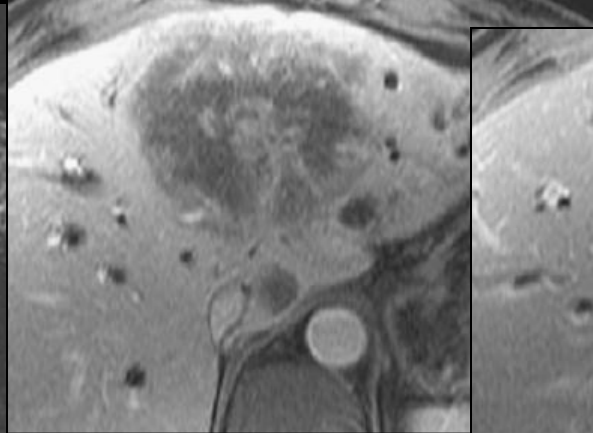
T2



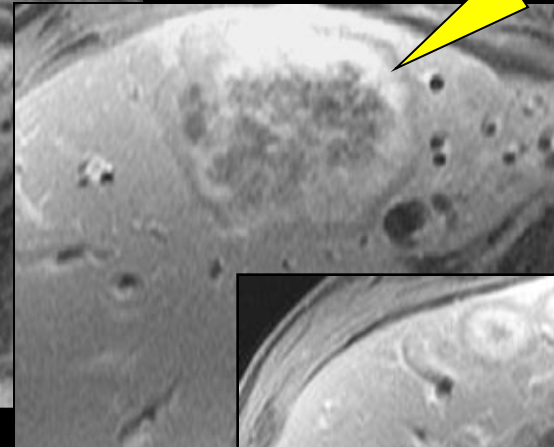
T2



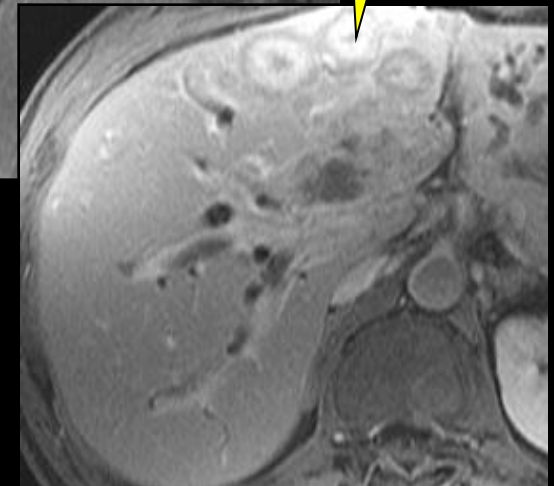
T2 TE long



T1 1'30''



T1 4'

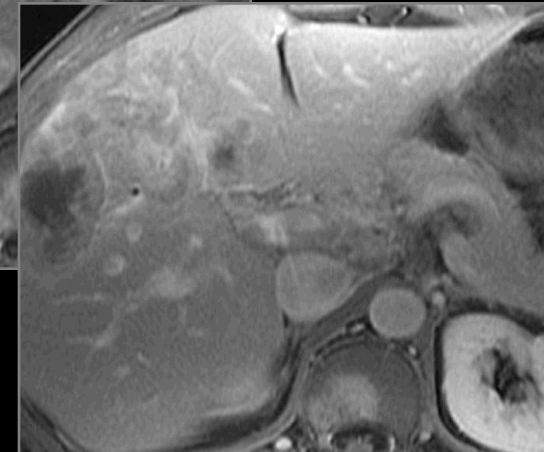
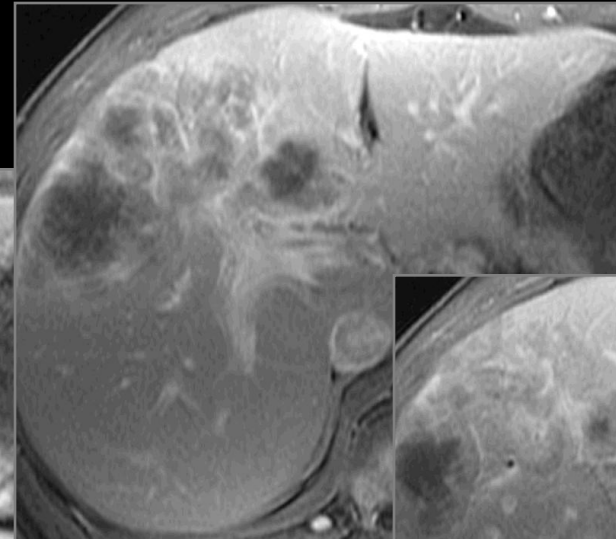
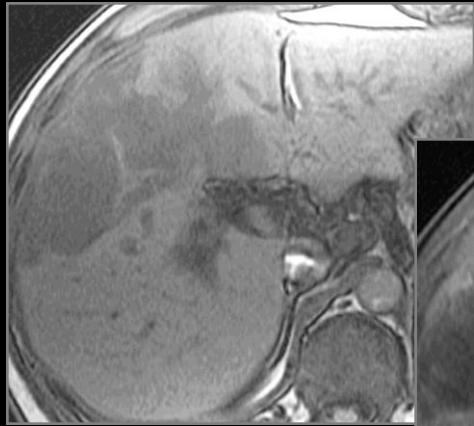


cholangiocarcinome intra-hépatique
multifocal ; retentissement biliaire+++

Cholangiocarcinome

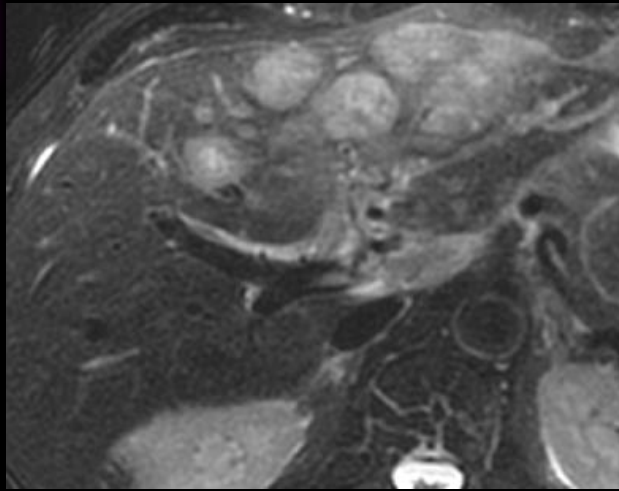
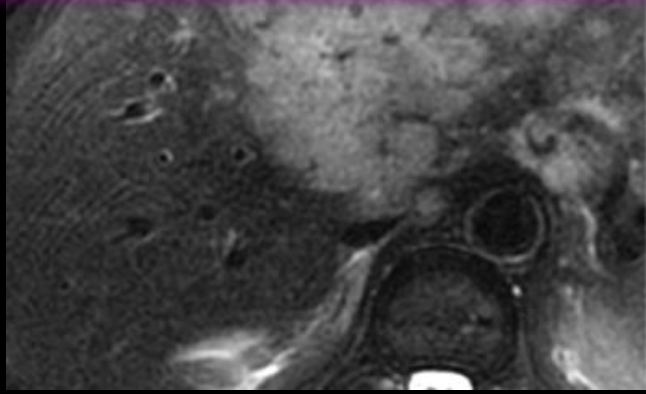
Homme 39 ans :

- Douleurs abdominales de l'hypochondre droit
- Fièvre 39°
- ATCD récent (J8) exérèse d'une dent de sagesse
- Echo abdo. : Masse hépatique

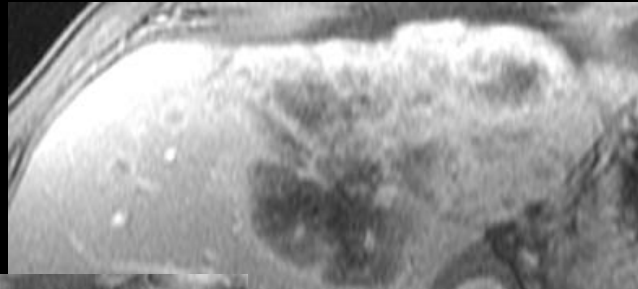
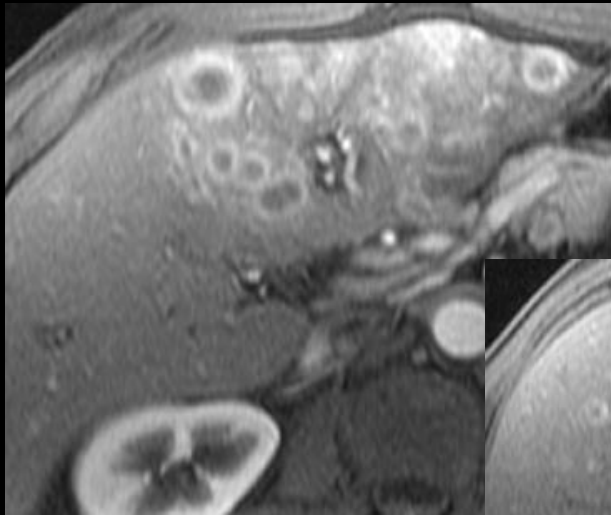


Cholangiocarcinome intrahépatique

Cholangiocarcinome



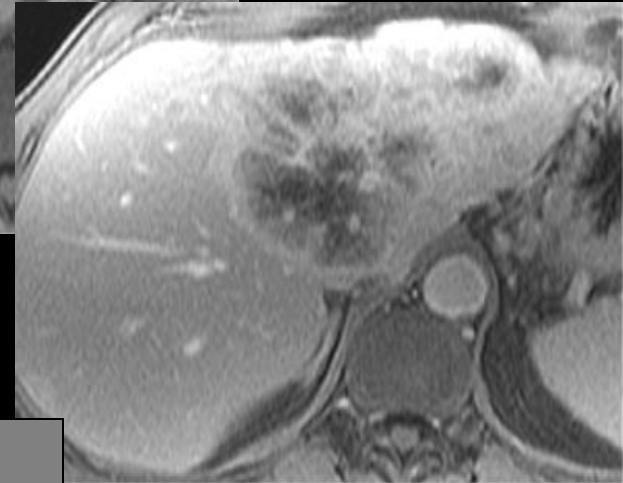
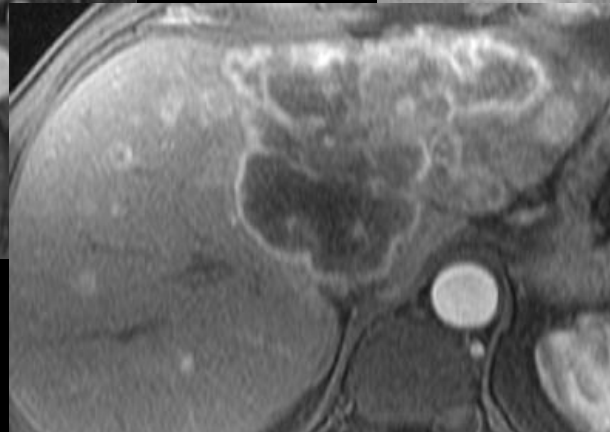
MR T2 FSE



MR 2'

MR 50"

MR 50"

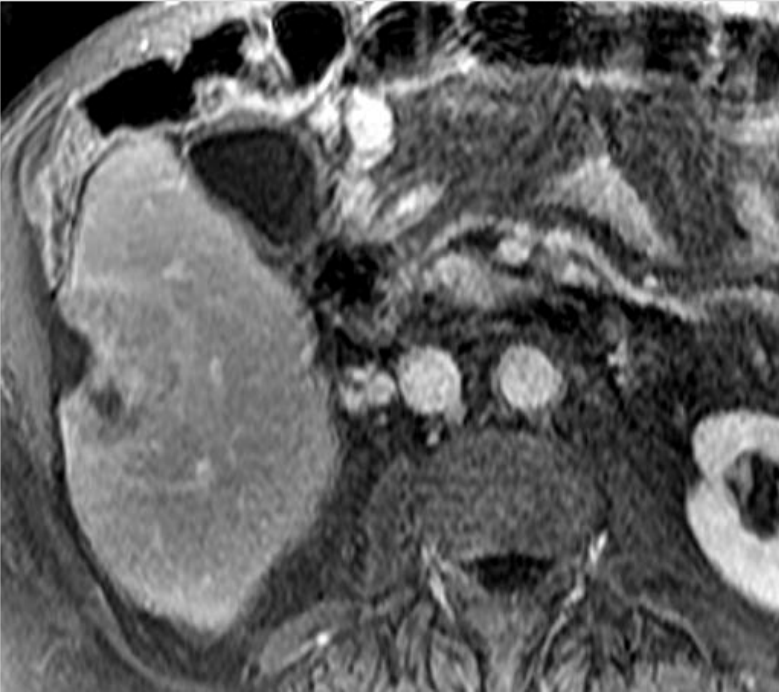
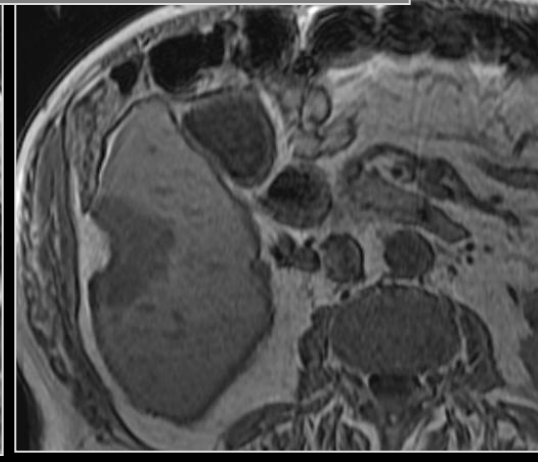
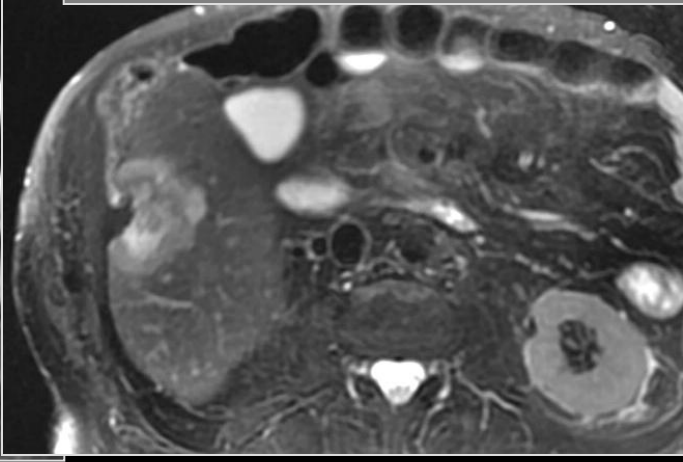
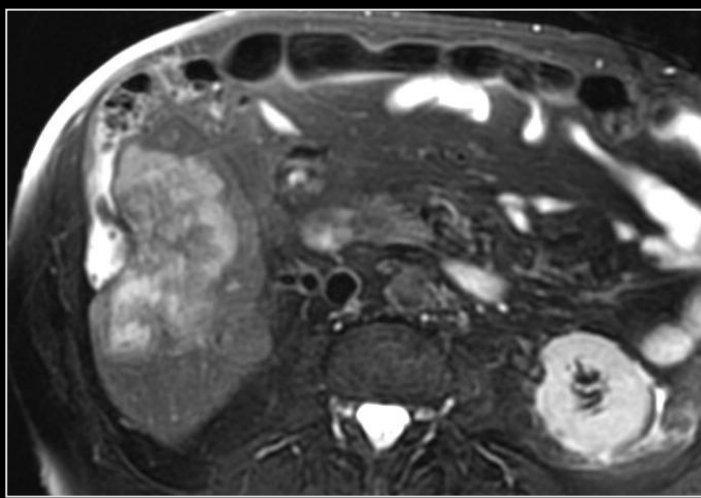


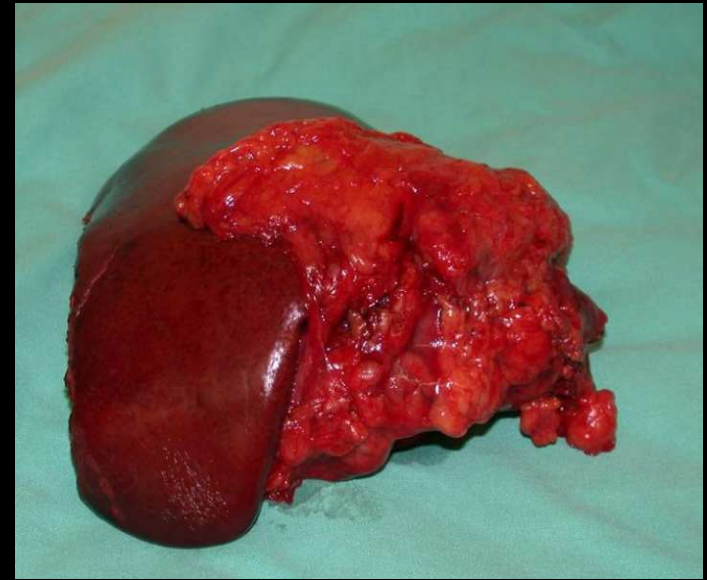
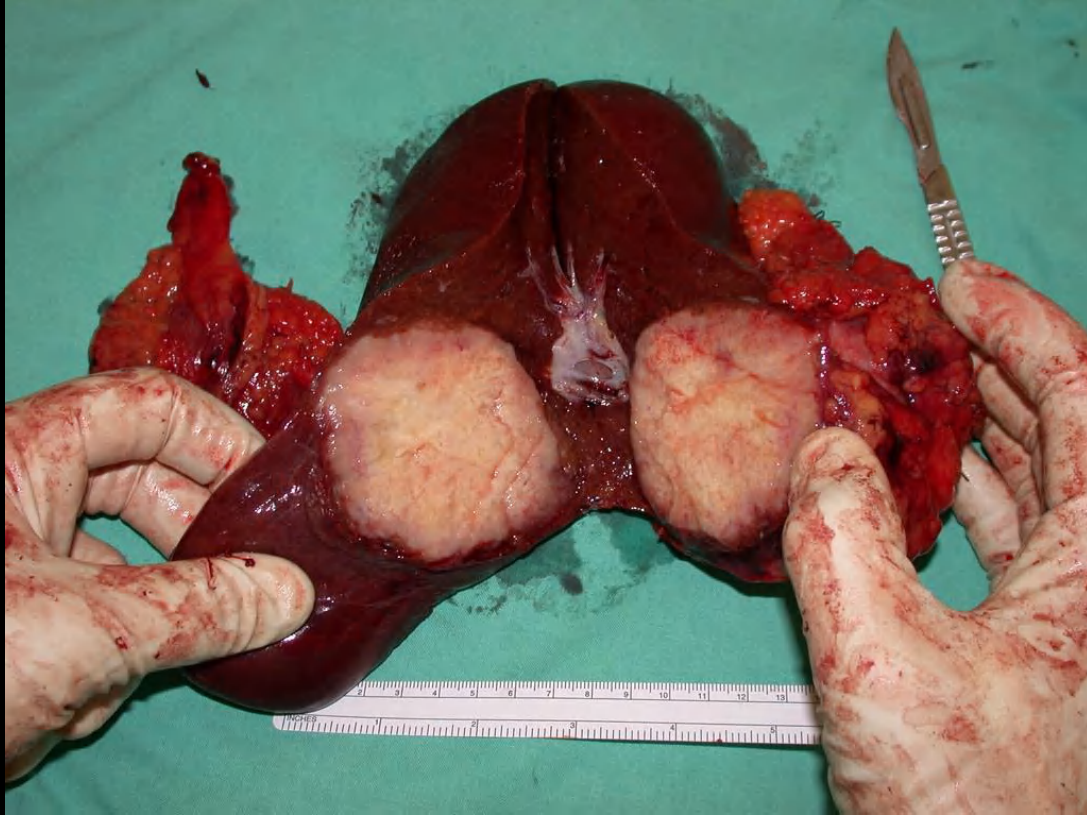
cholangiocarcinome intra-hépatique périphérique
multinodulaire

MR 7'

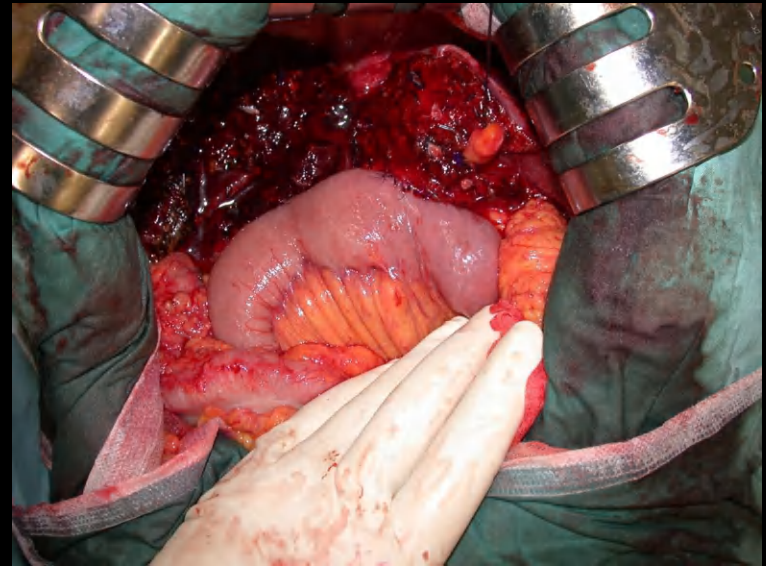
Cholangiocarcinome

Cholangiocarcinome intra hépatique
Rétraction capsulaire +++

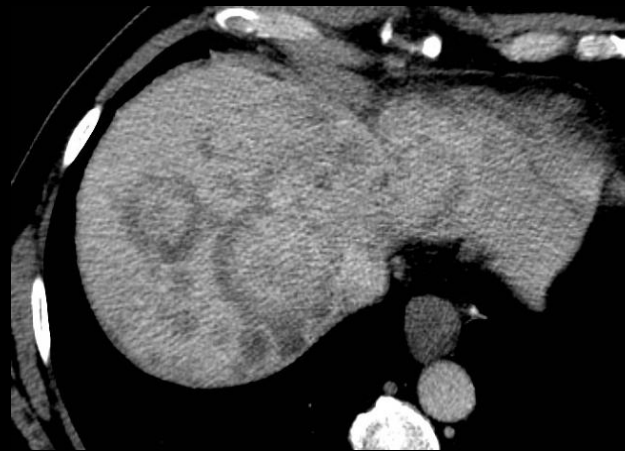




Cholangiocarcinome



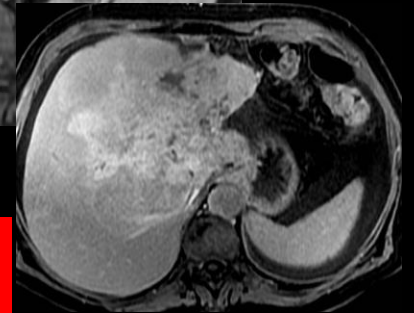
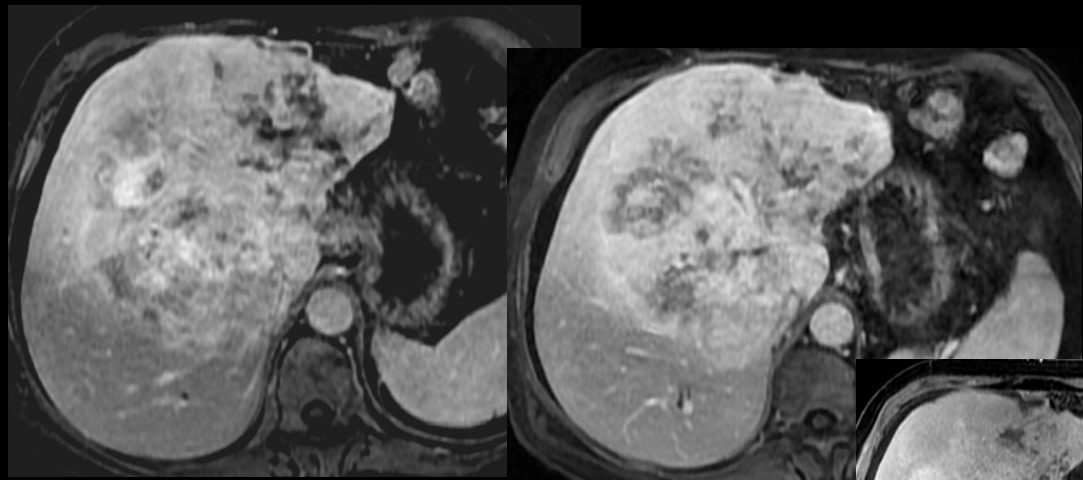
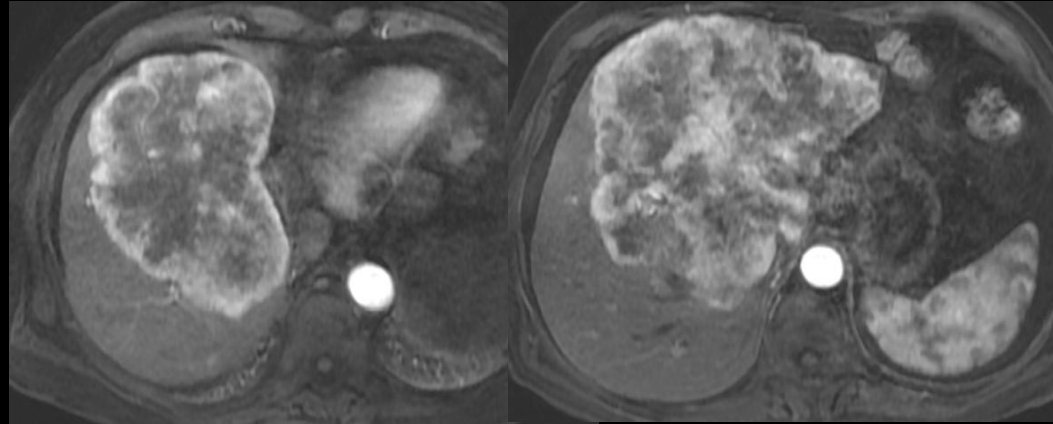
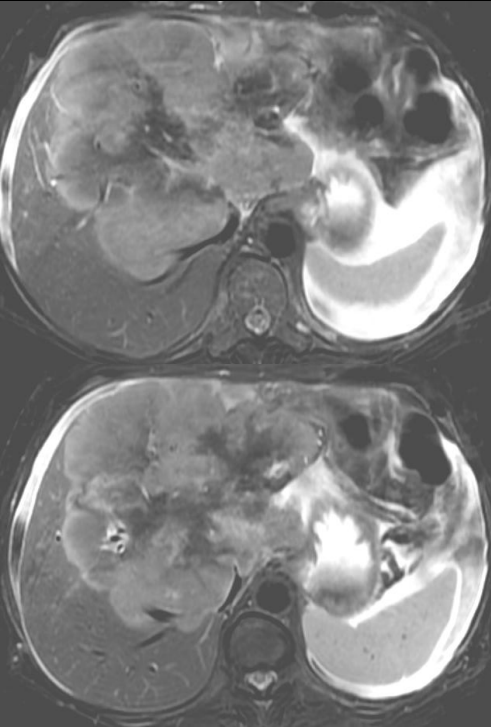
Cholangiocarcinome



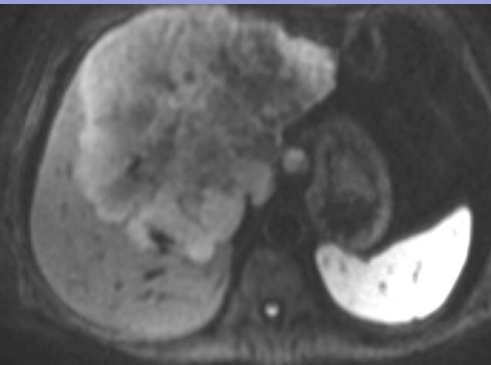
Temps tardifs

Maetani et al. AJR 2001
Manfredi et al. Semin Liver Dis 2004
Rimola et al. Hepatology 2009

Cholangiocarcinome



Diffusion



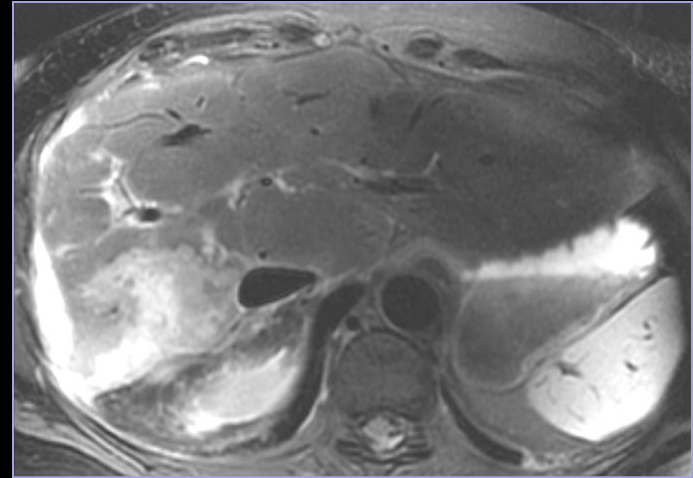
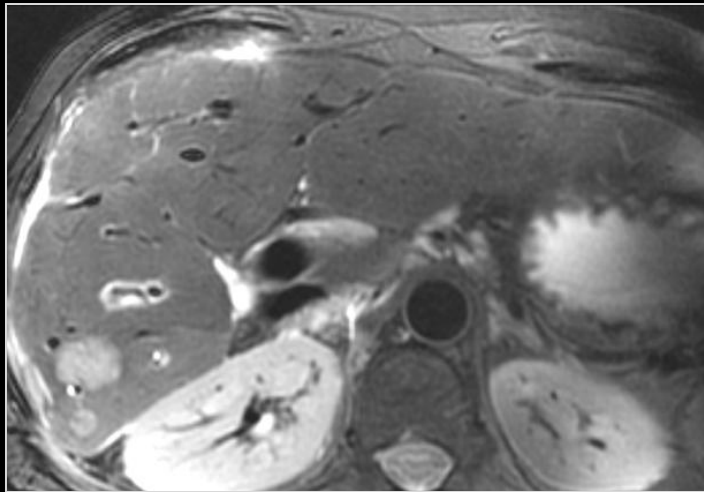
Temps tardifs

Cholangiocarcinome

Femme, 52 ans

Perturbations mineures du bilan biologique hépatique depuis 10 ans

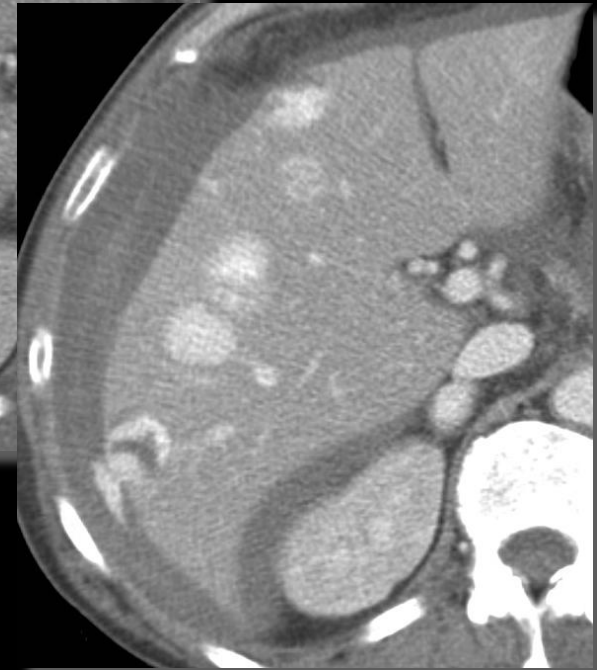
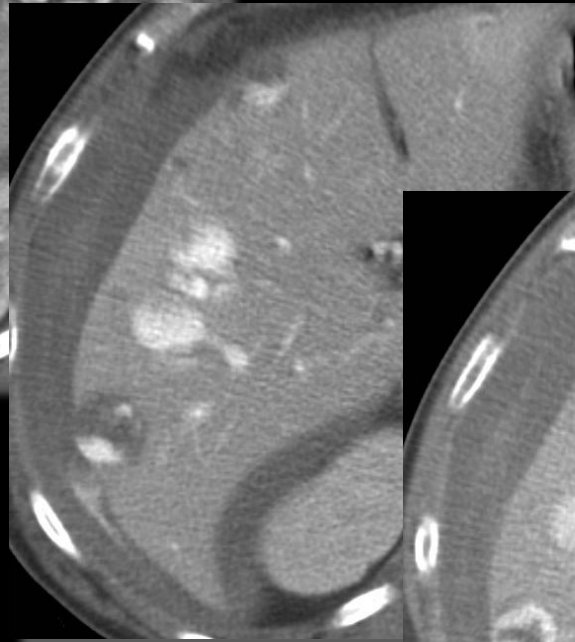
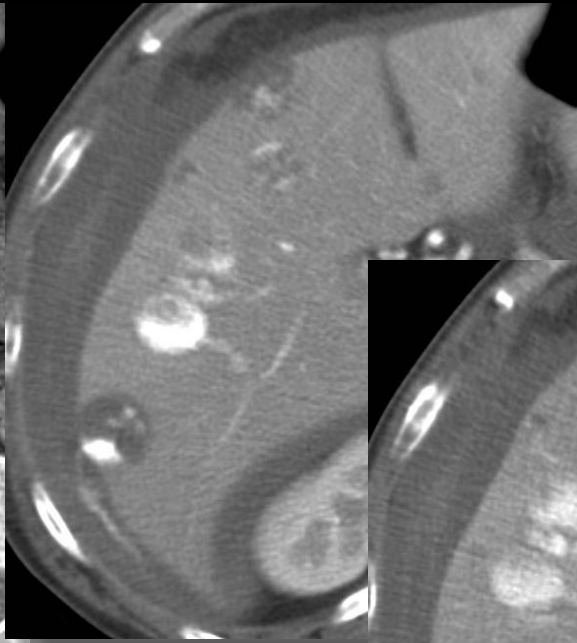
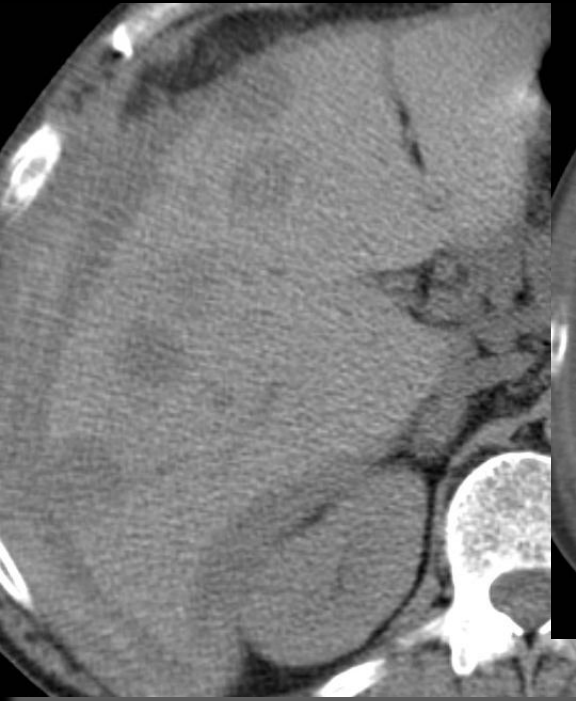
Découverte lésions focales hépatiques du foie droit



Facteur de risque

-Cholangite sclérosante primitive

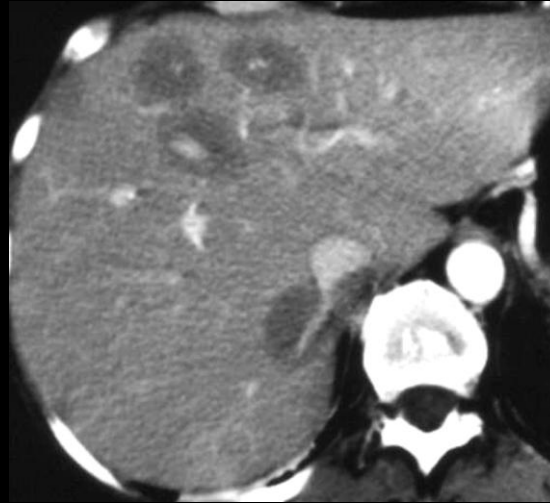
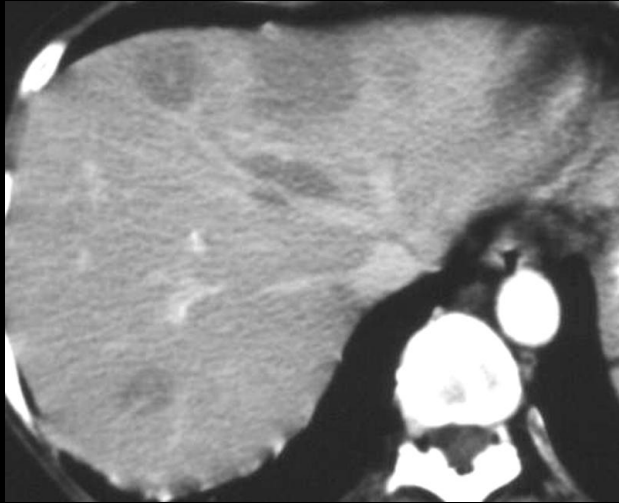
Tumeurs rares



Angiosarcome hépatique

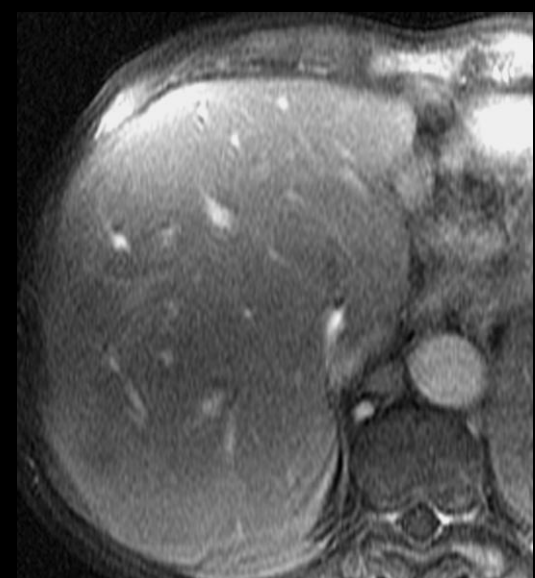
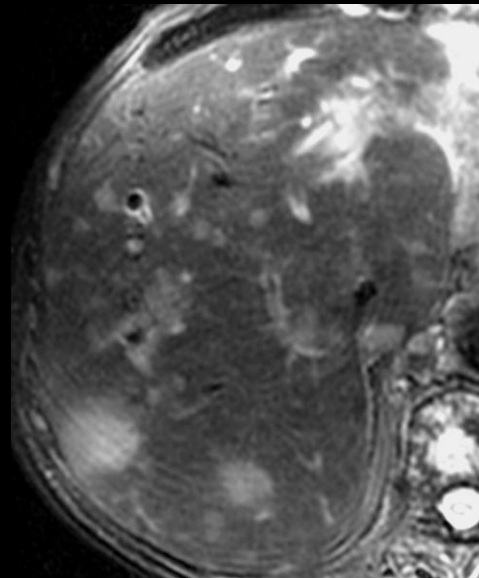
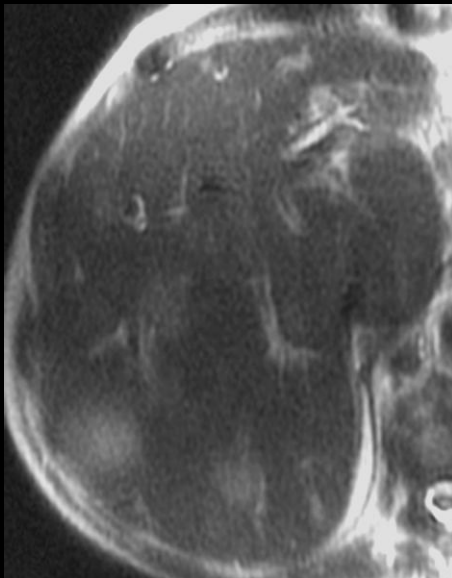
Tumeurs rares

Lymphome hépatique



Tumeur maligne : ??

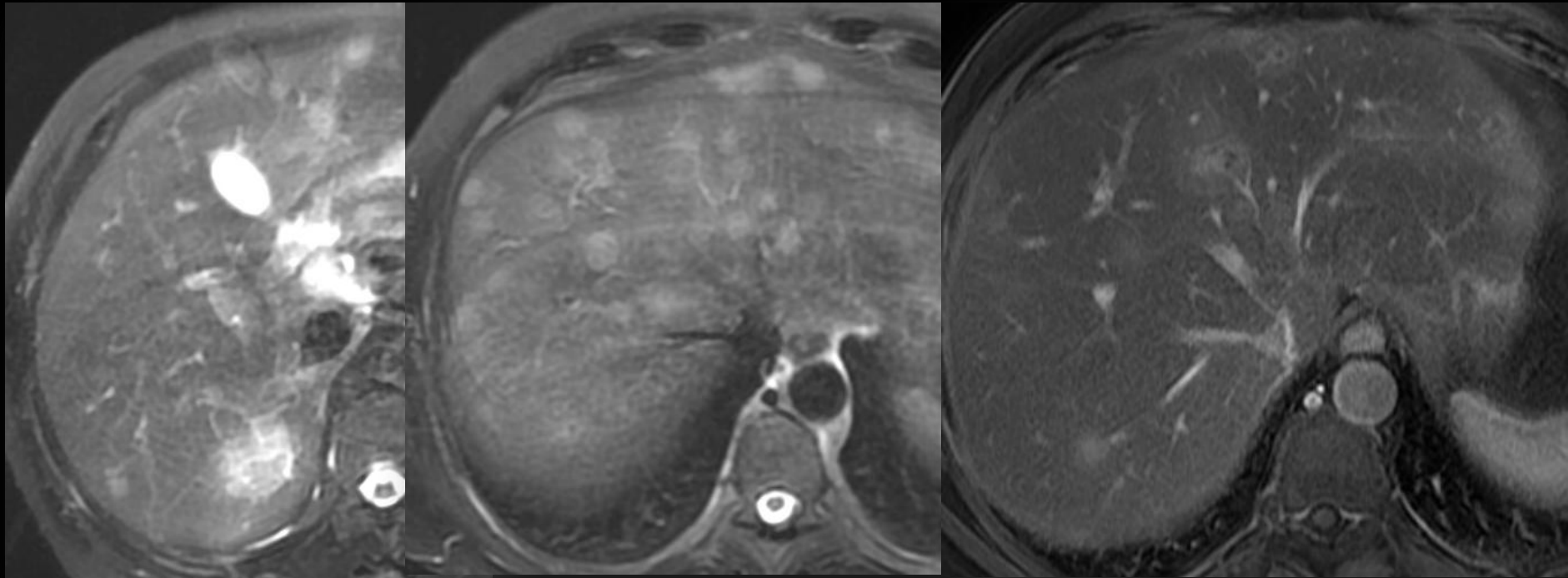
Biopsie : oui



Tumeurs rares

Ne jamais oublier contexte !!

SIDA



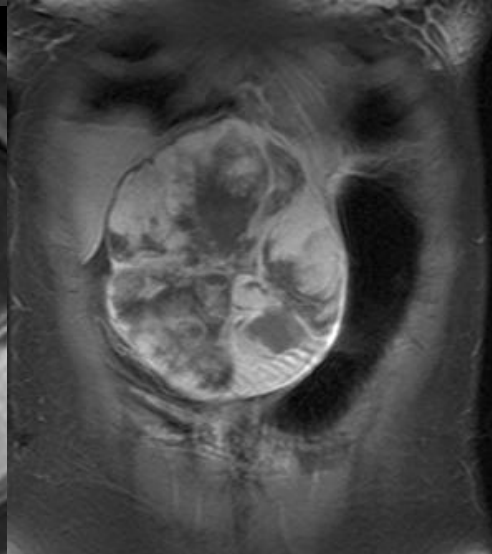
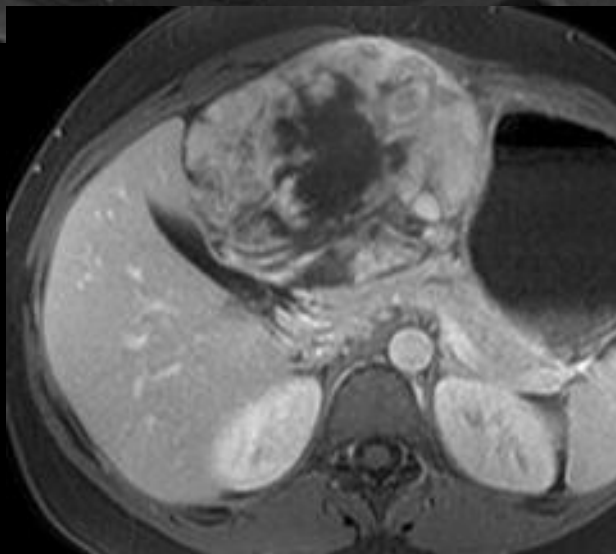
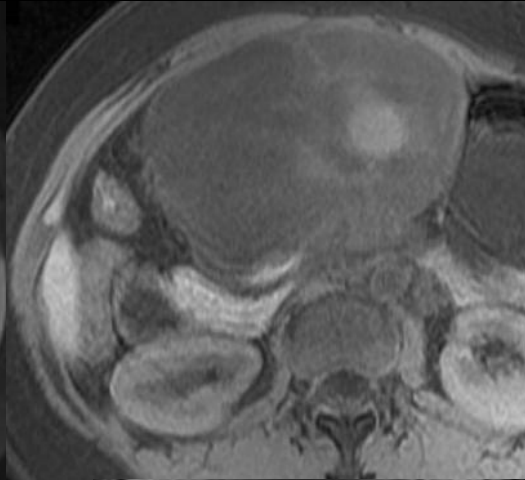
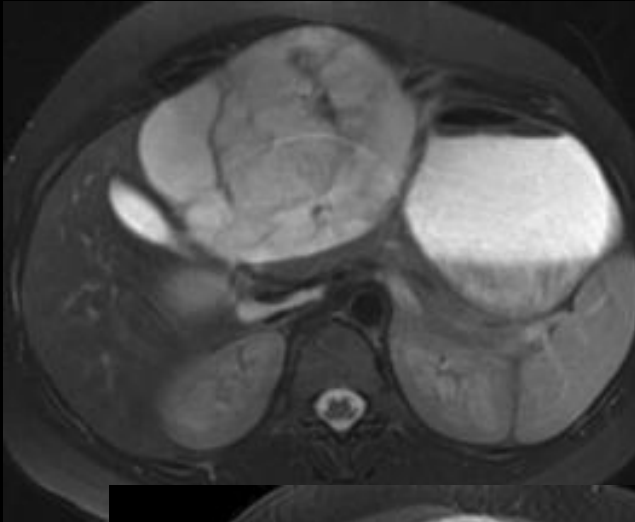
Lymphome hépatique

Tumeurs rares

Femme, 25 ans

Douleurs abdominales

Pas d'antécédent



Tumeur maligne : oui

Biopsie : non

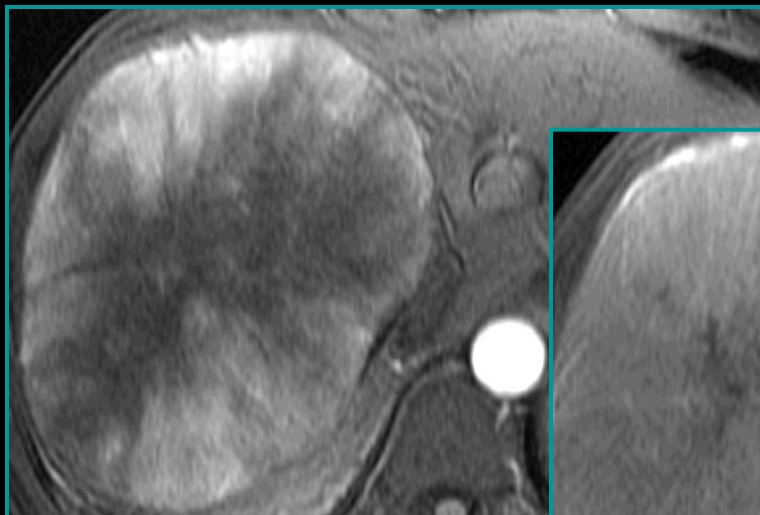
Chir d'emblée : OUI

- **Lésions malignes secondaires**
 - Métastases hypervascularisées
 - Métastases de CCR
 - Métastases des tumeurs endocrines

Métastases hypervascularisées : rein, sein, thyroïde, T endocrine



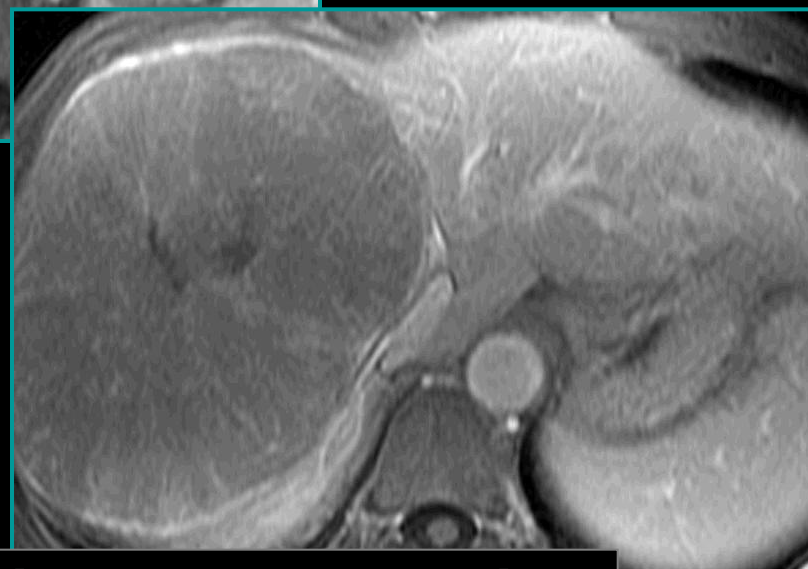
T2



Dynamiques
ap.injection

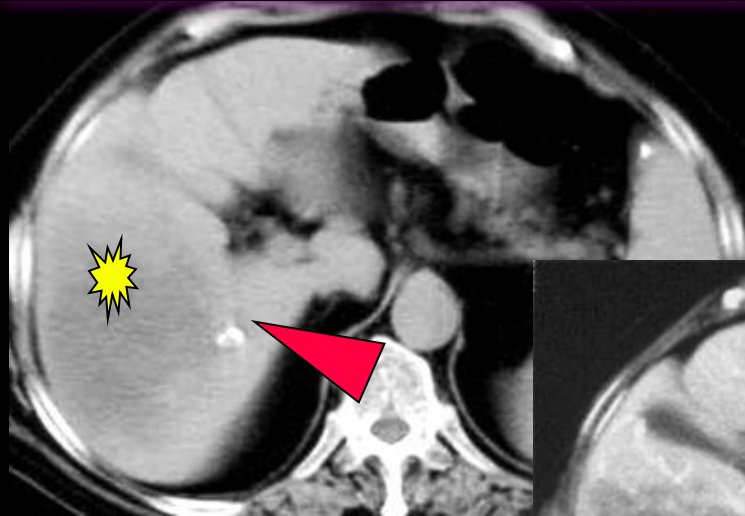


Tardives

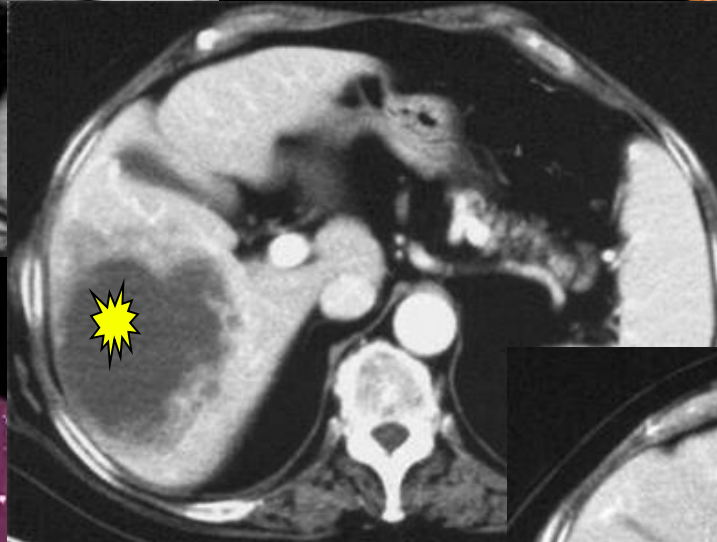


Métastases cancer rénal

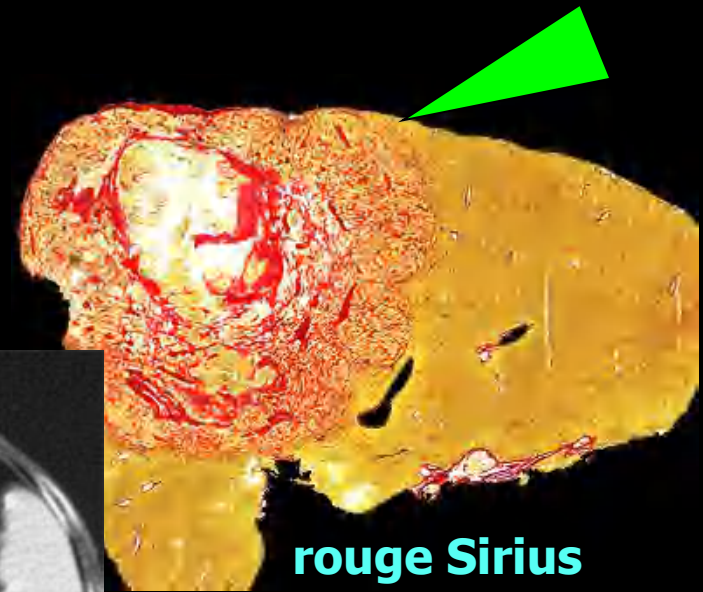
Métastases colo-rectales



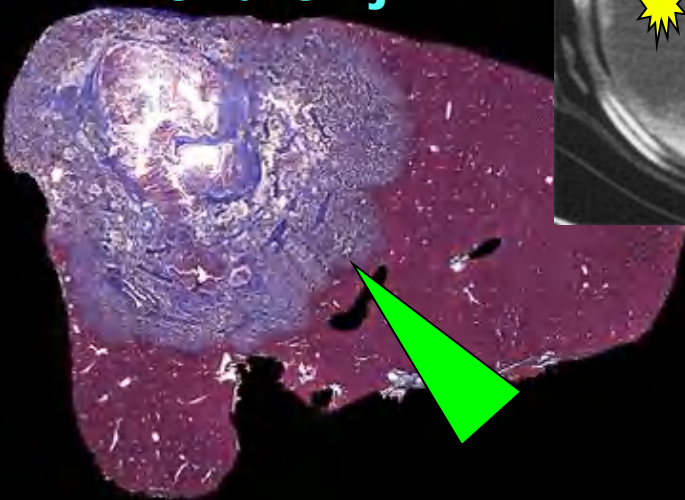
CT avt inj



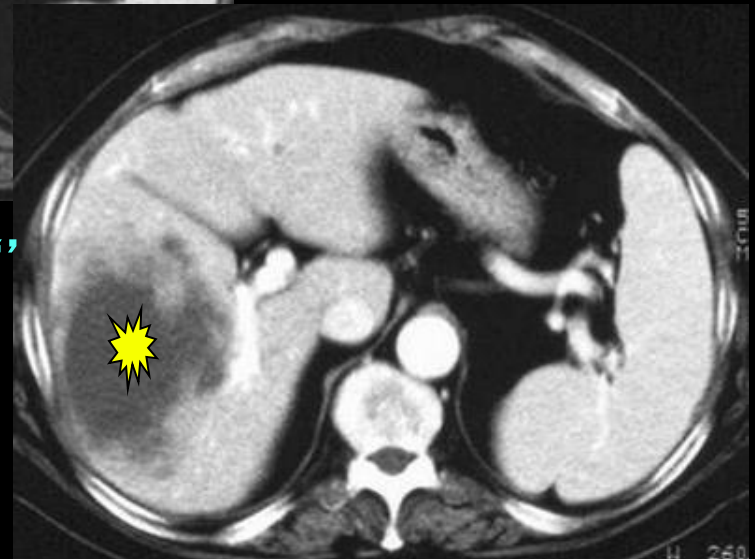
CT 70''



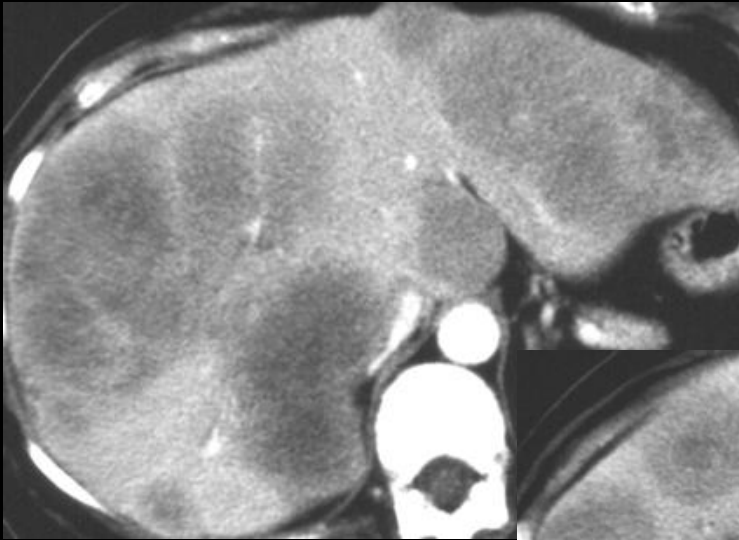
rouge Sirius
collagène



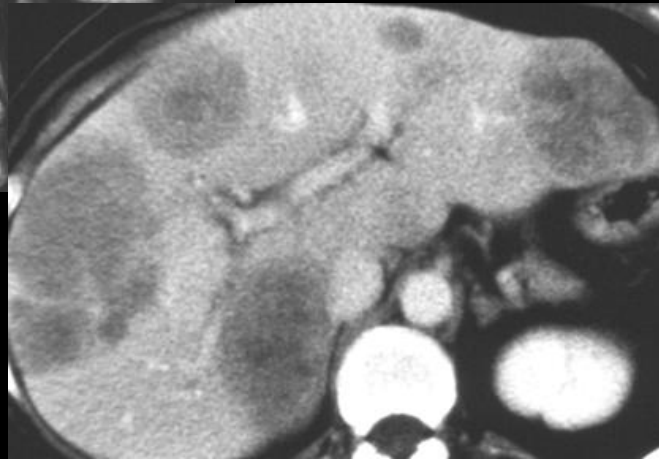
trichrome de Masson collagène bleu



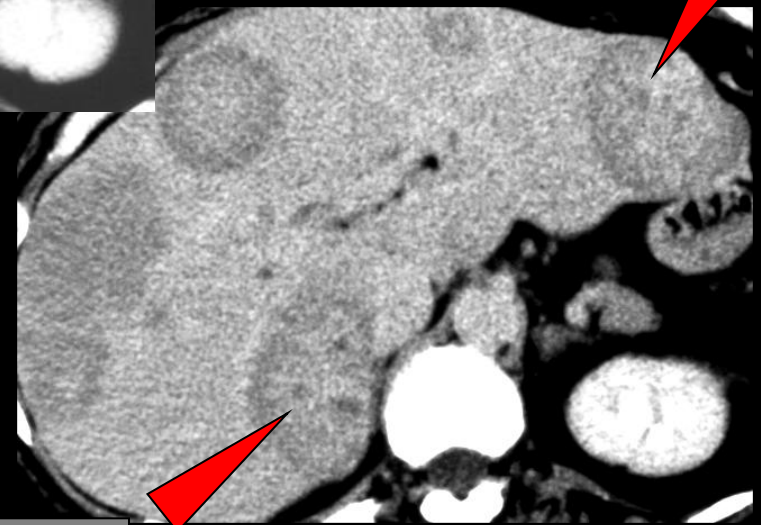
Métastases colo-rectales



CT 50"

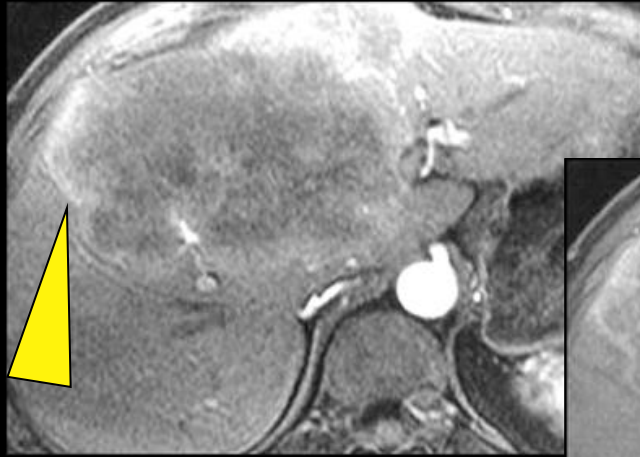


CT 70"

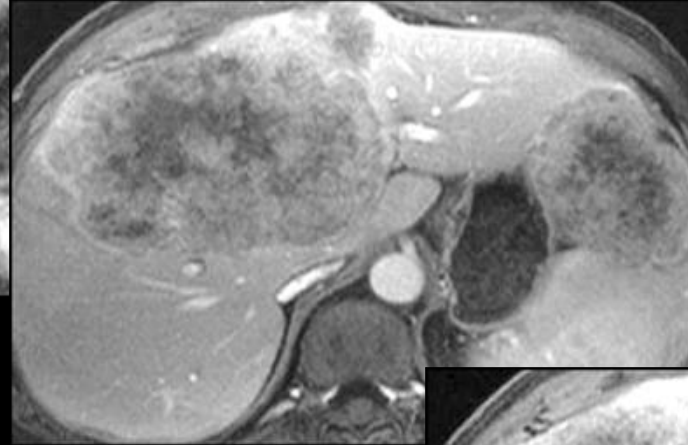


CT 20'

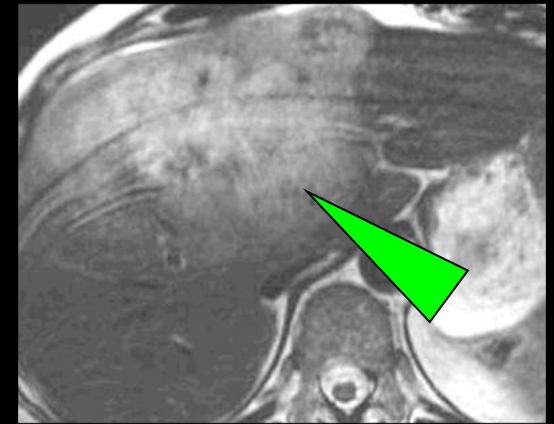
métastases d'un adénocarcinome colique
Contingent fibreux intralésionnel



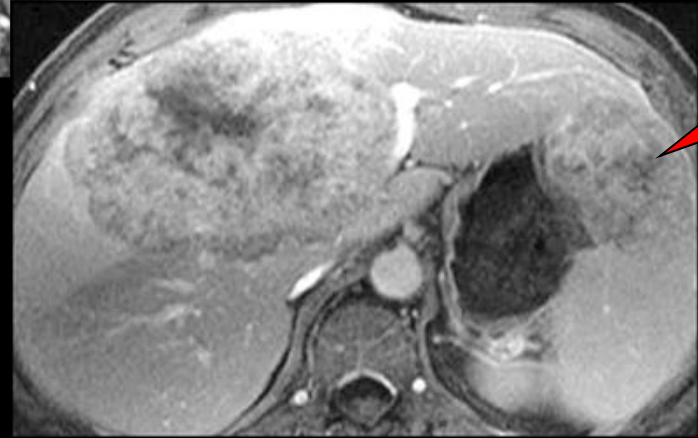
T1 45"



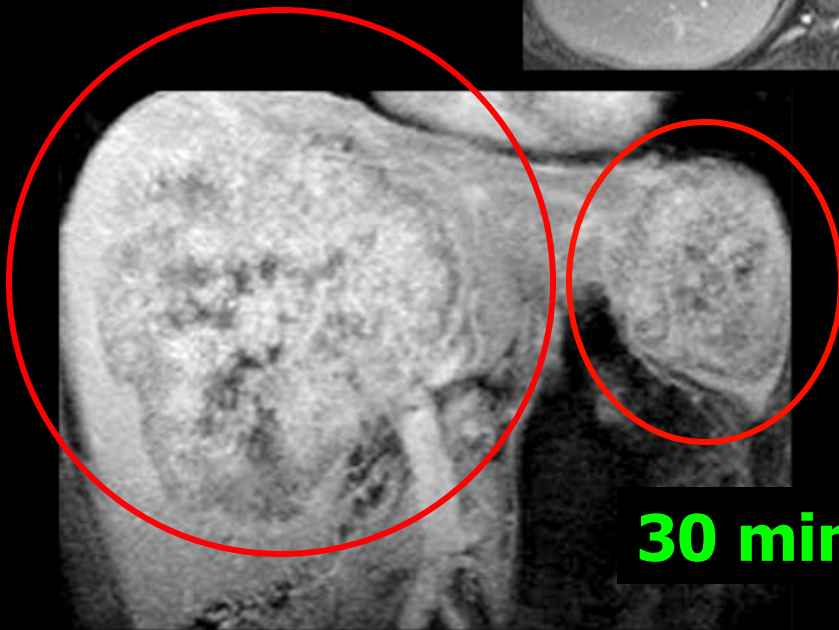
T1 70"



T2



T1 3'

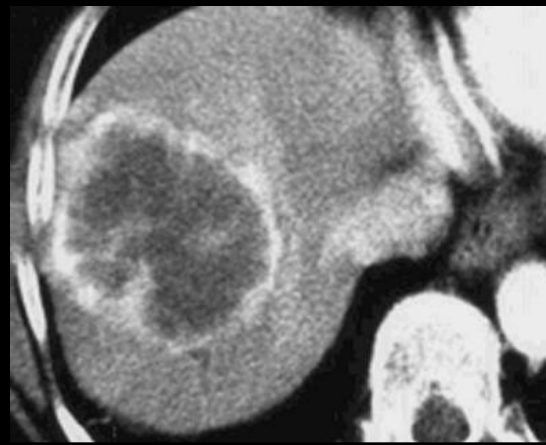


30 min après IV

**métastases d'un adénocarcinome colique
Contingent fibreux intralésionnel**



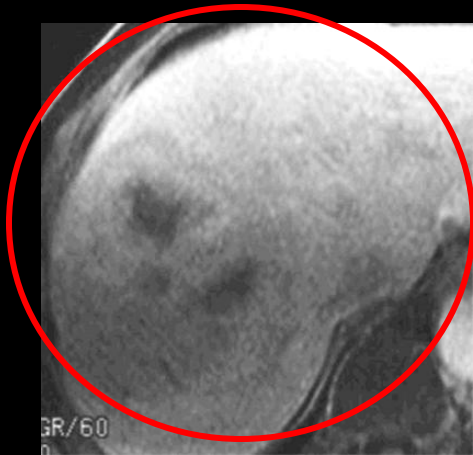
T1 45''



T1 60''



T1 2'



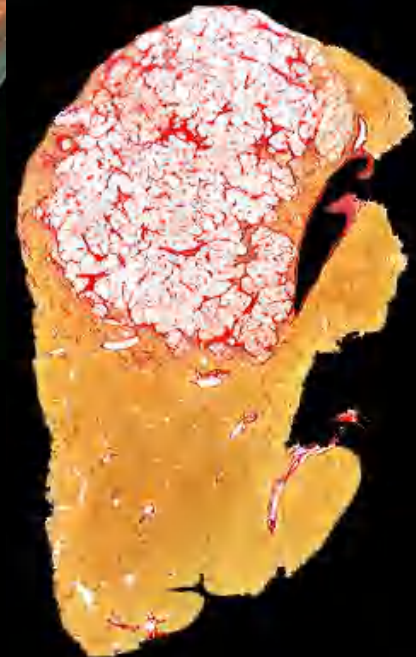
T1 20'



T1 20'



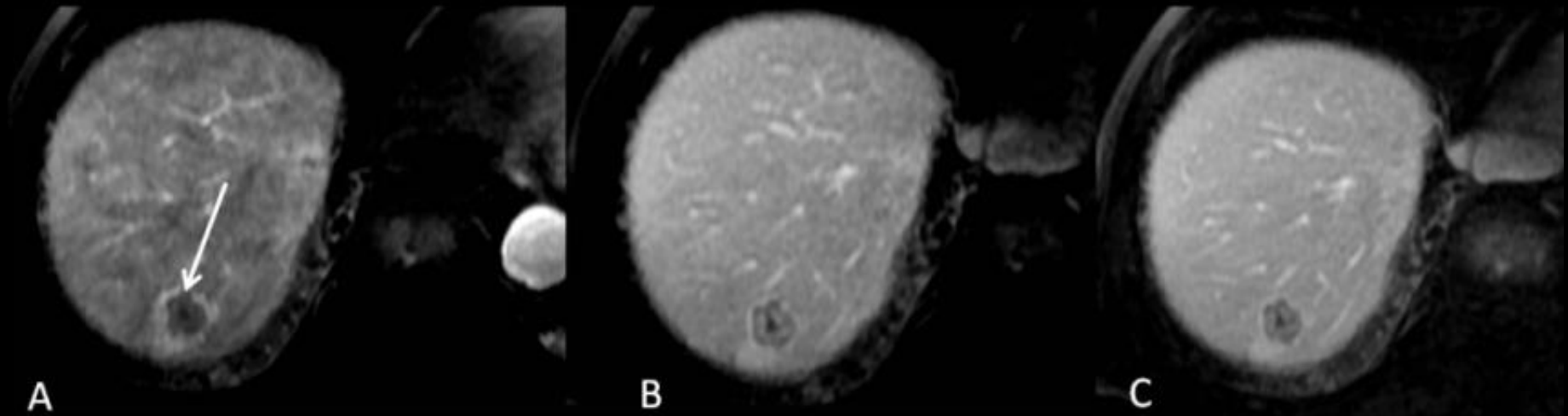
rouge Sirius

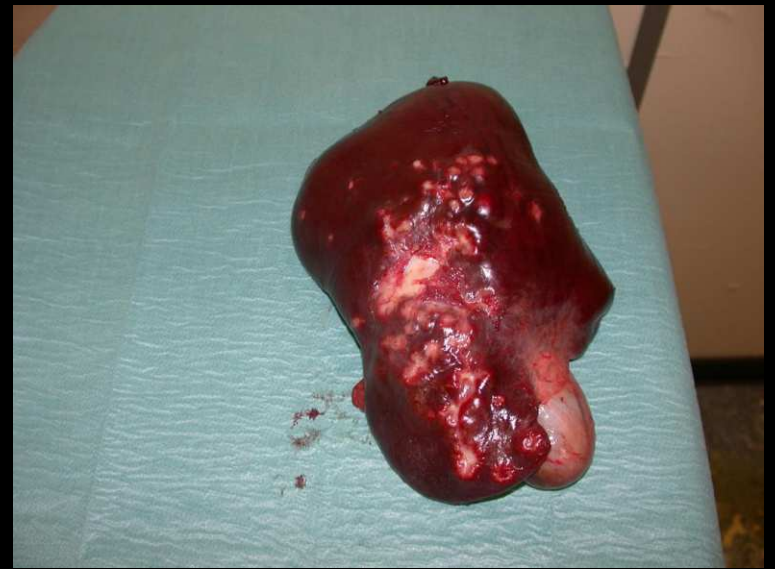
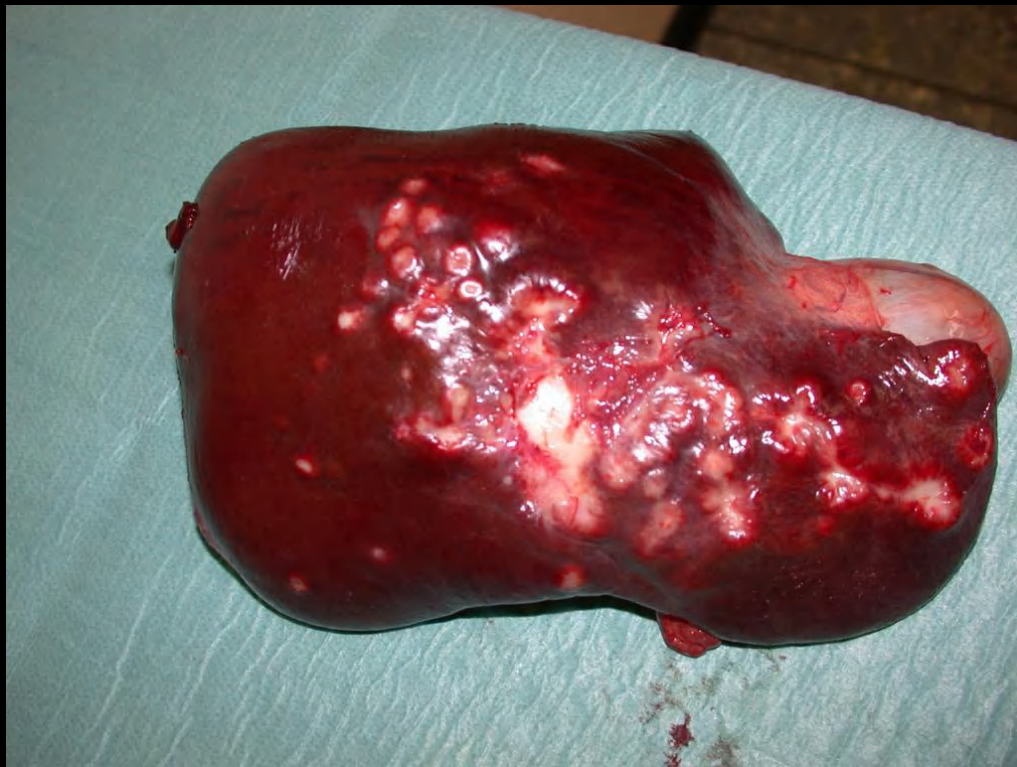


**métastase d'un adénocarcinome colique
et anomalie transitoire de la perfusion (THAD=transcient
hepatic attenuation differences)**

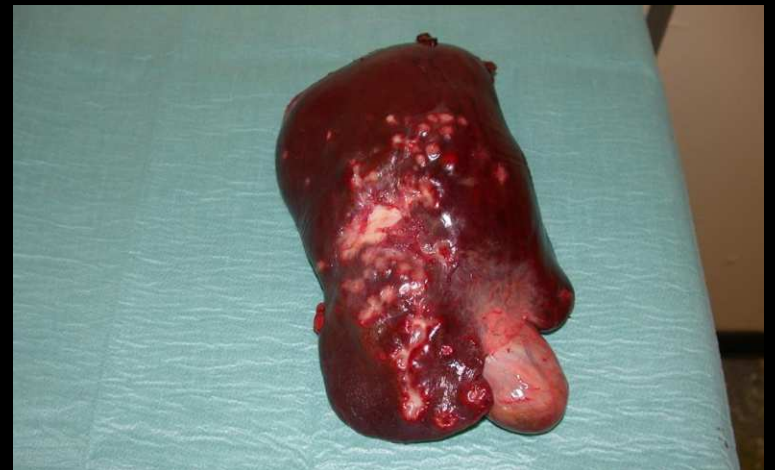
métastase d'un adénocarcinome colique

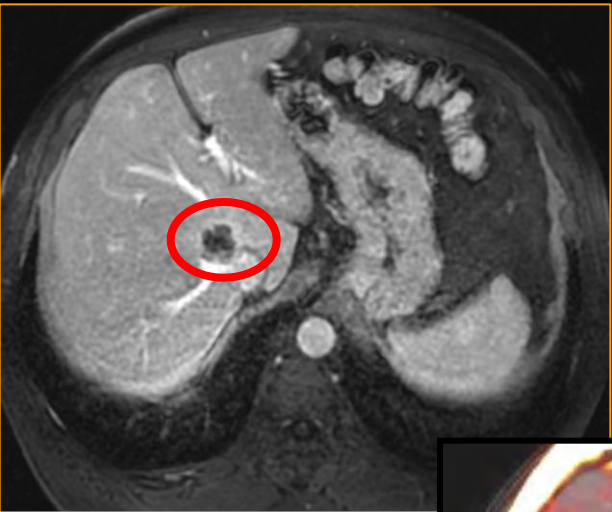
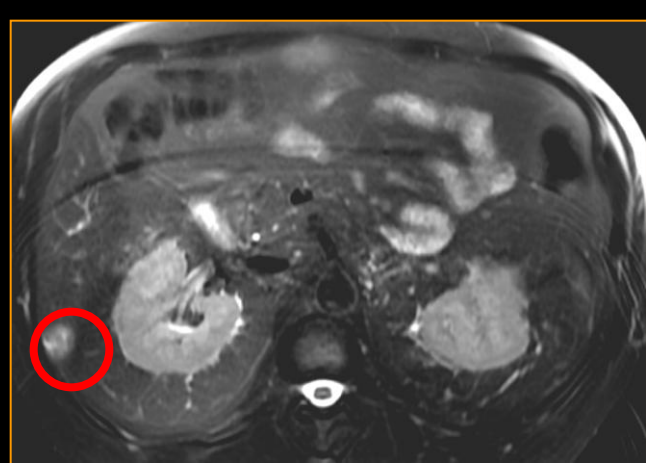
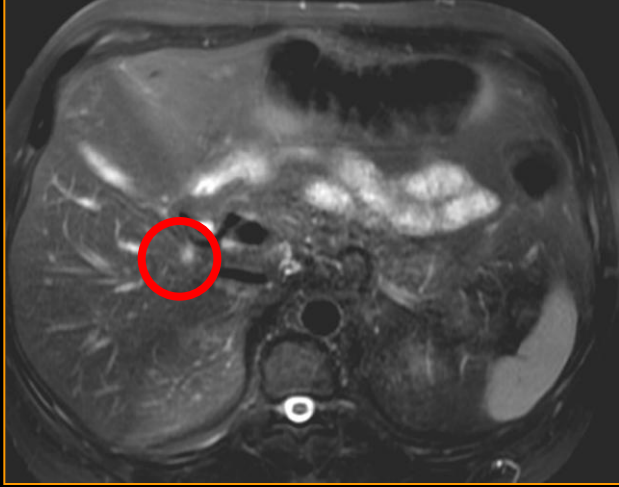
Avant chimiothérapie :



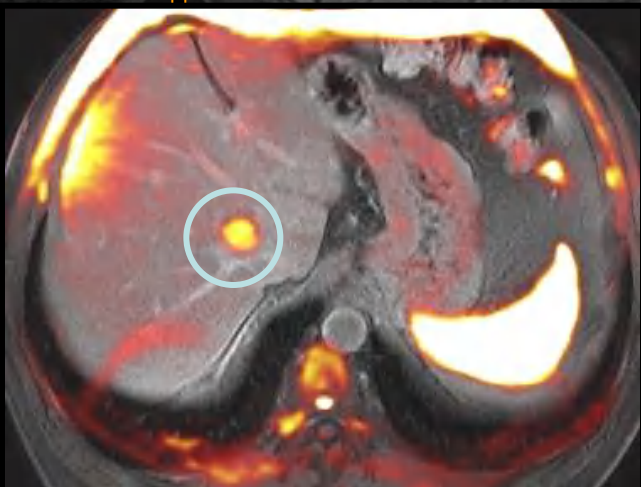
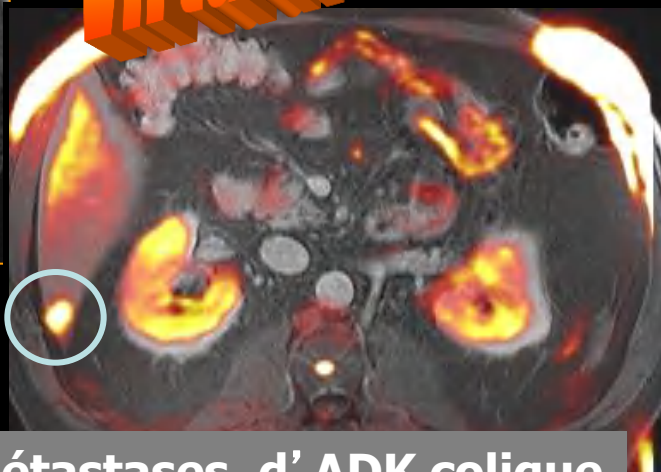


Métastases colo-rectales

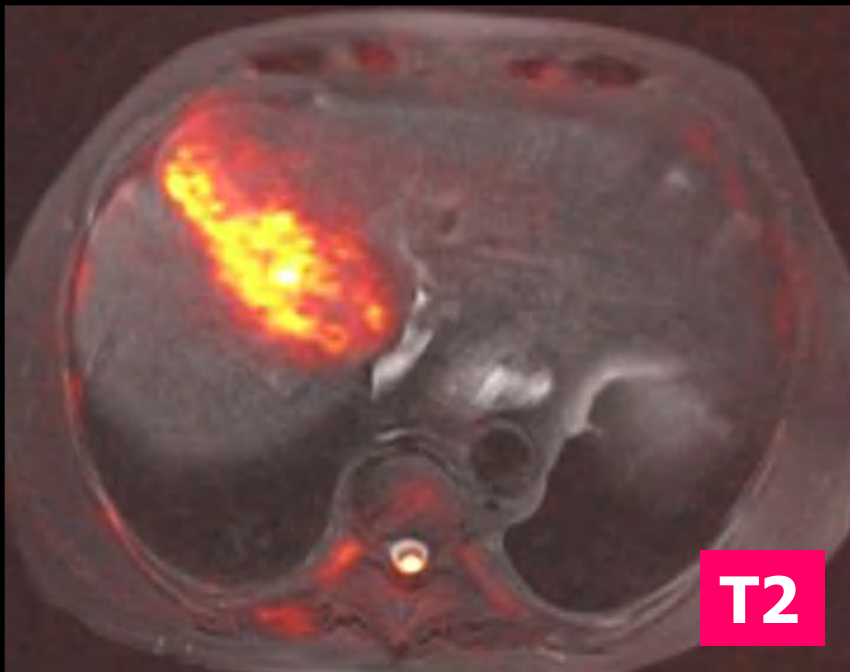




Virtual PET MRI



Métastases d'ADK colique : séquence de diffusion est indispensable



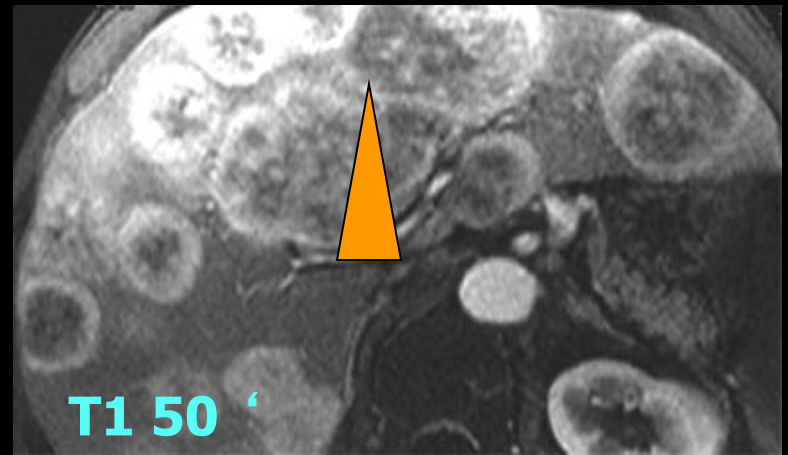
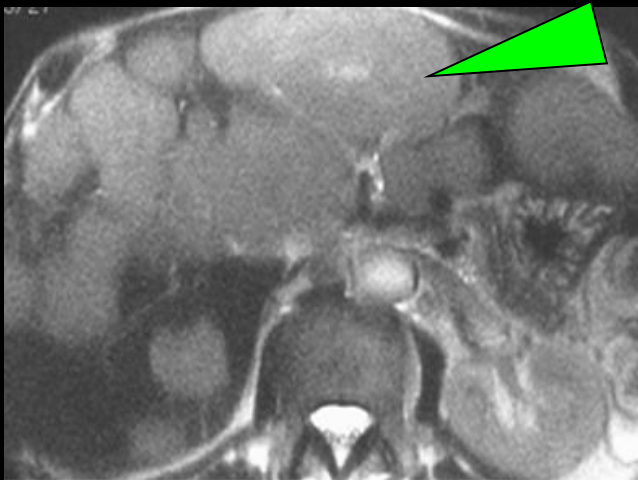
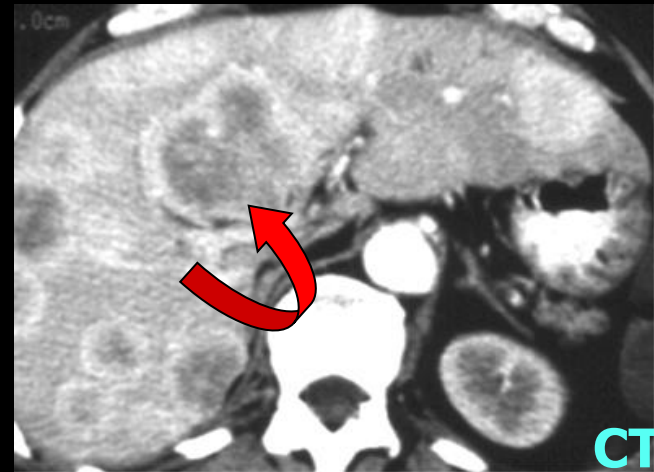
Virtual PET-MRI



Métastases des cancers colo rectaux

- **Prise en charge des MH CCR : Spécificités**
 - Seul traitement curatif : chirurgie +++
 - Encadrée par un protocole de chimio
 - Métastases résécables d'emblée
 - Potentiellement résécables
 - Jamais résécables
 - Qd lésions secondaires hépatiques
 - Faire un bilan d'imagerie précis +++ avant tte décision thérapeutique +++
 - IRM ++++ avec séquence de diffusion +++++
 - TDM TAP
 - Après chimio : refaire imagerie , en pré op et ce quelle que soit l'option choisie

CT avt inj Métastases des tumeurs endocrines

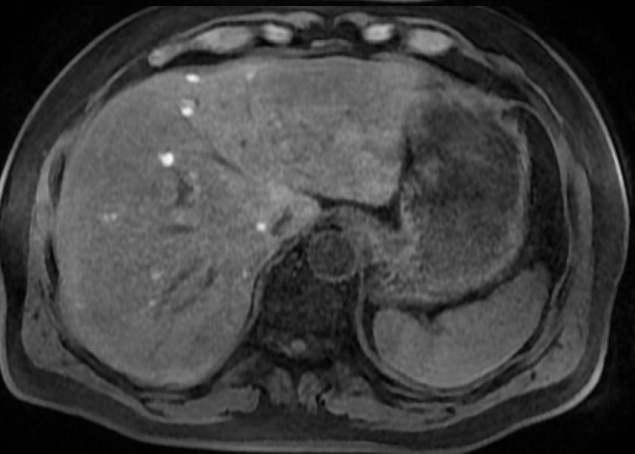
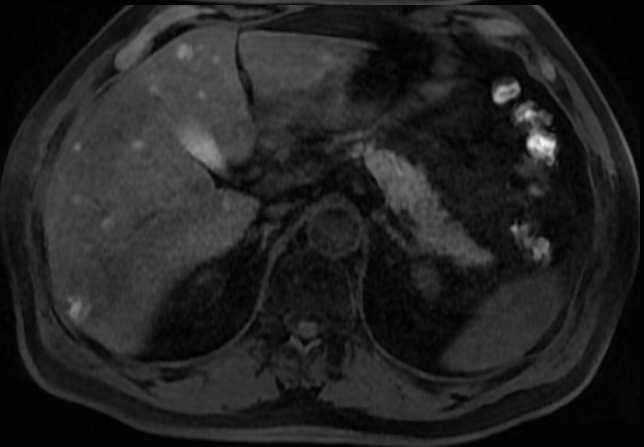
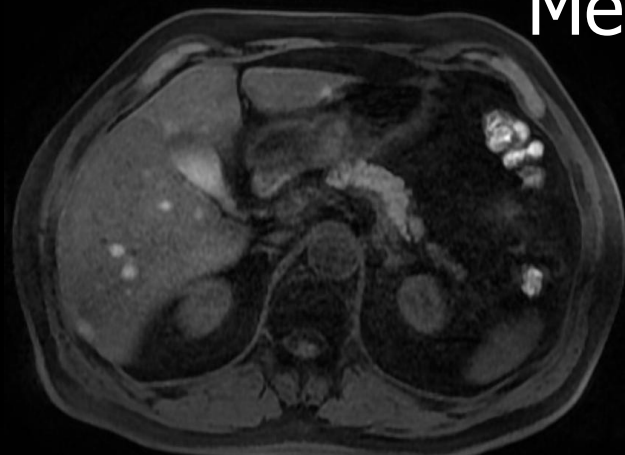


T2

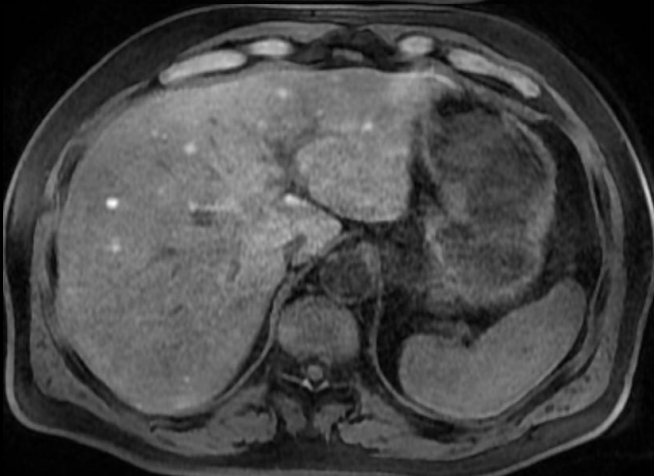
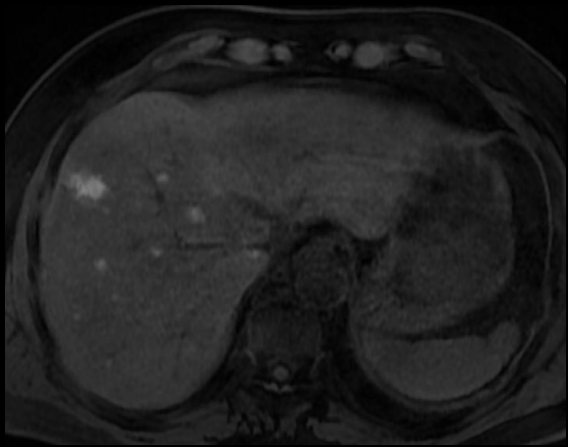
T1 50

Métastases de tumeur endocrine

Métastases de mélanome



Possible hypersignal T1 spontané lié à la présence de mélanine.



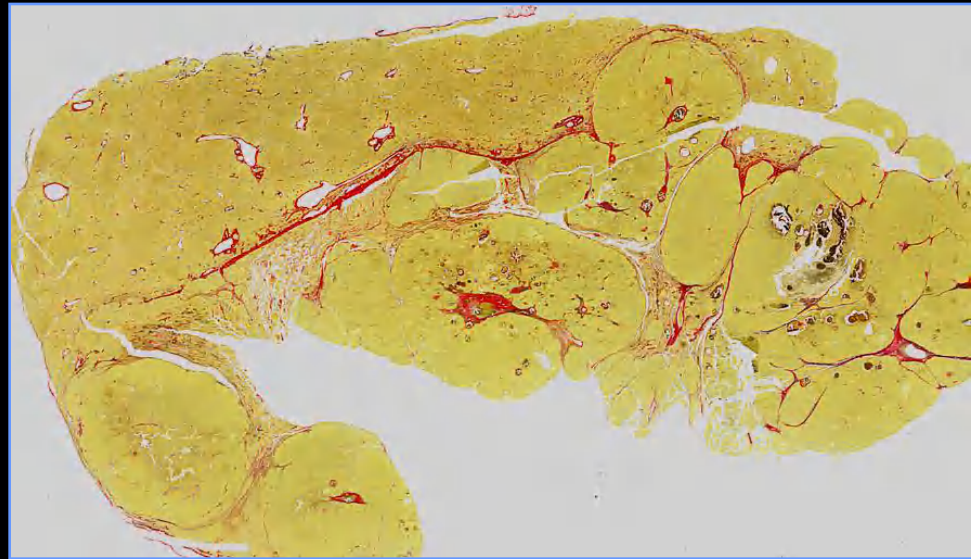
Tumeurs malignes

Tumeurs malignes

- **Tumeurs primitives (sur foie sain)**
 - CHC
 - Formes particulières
 - Carcinome fibro lamellaire
 - Hépatocholangiocarcinome
 - Cholangiocarcinome intrahépatique
 - Cystadénocarcinome biliaire
 - Hémangio endothéliome épithélioïde
 - Angiosarcome
 - Lymphome
 - Sarcomes embryonnaires
- **Tumeurs secondaires**
 - Métastases des cancers colo rectaux
 - Métastases des tumeurs endocrines

CHC sur foie sain

Macroscopie



20 % des cas en Occident

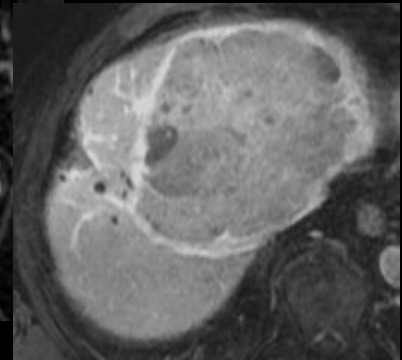
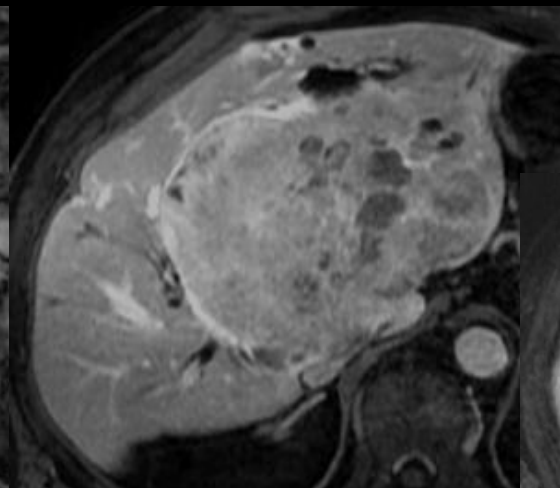
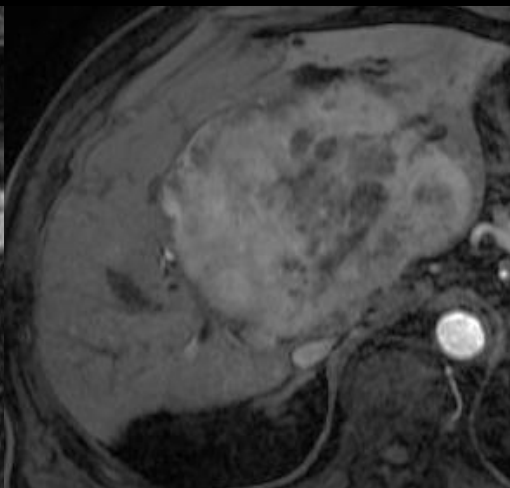
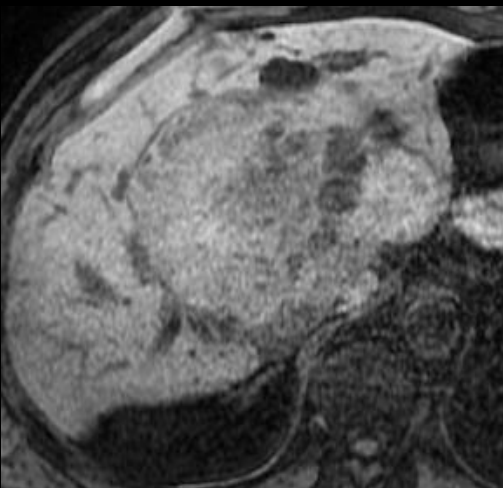
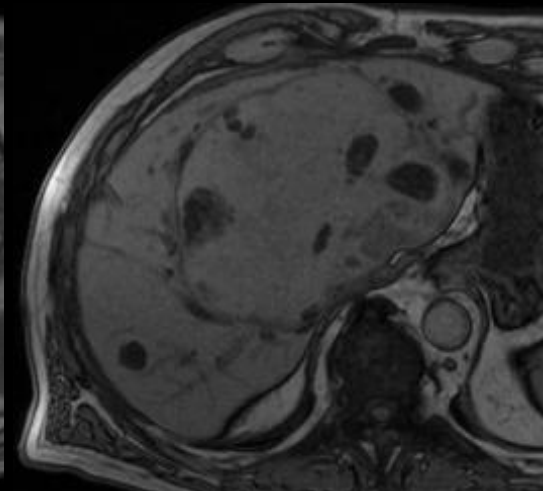
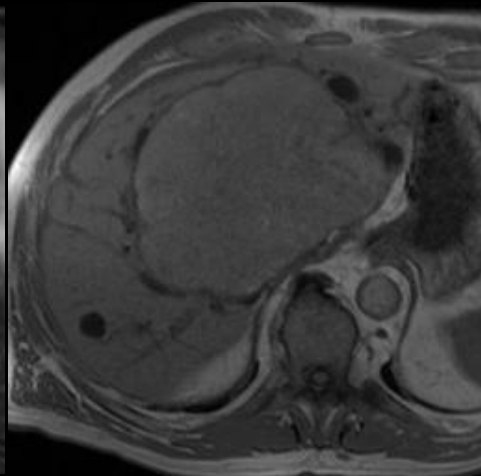
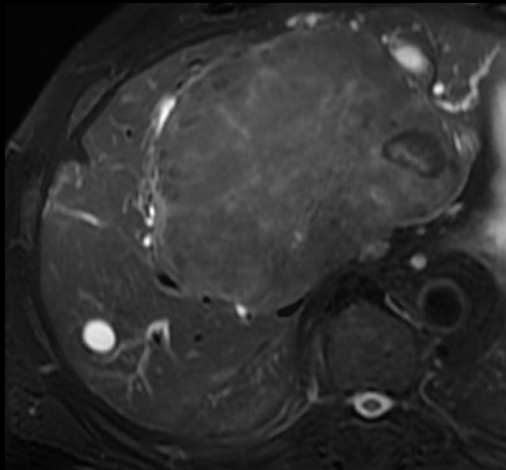
Facteurs favorisants: fongiques (alphatoxine B1) ou hormonaux, traitements par androgènes ou estrogènes

CHC sur foie sain

Homme, 80 ans

Bilan d'ADK rénal droit

Découverte lésion hépatique sur TDM

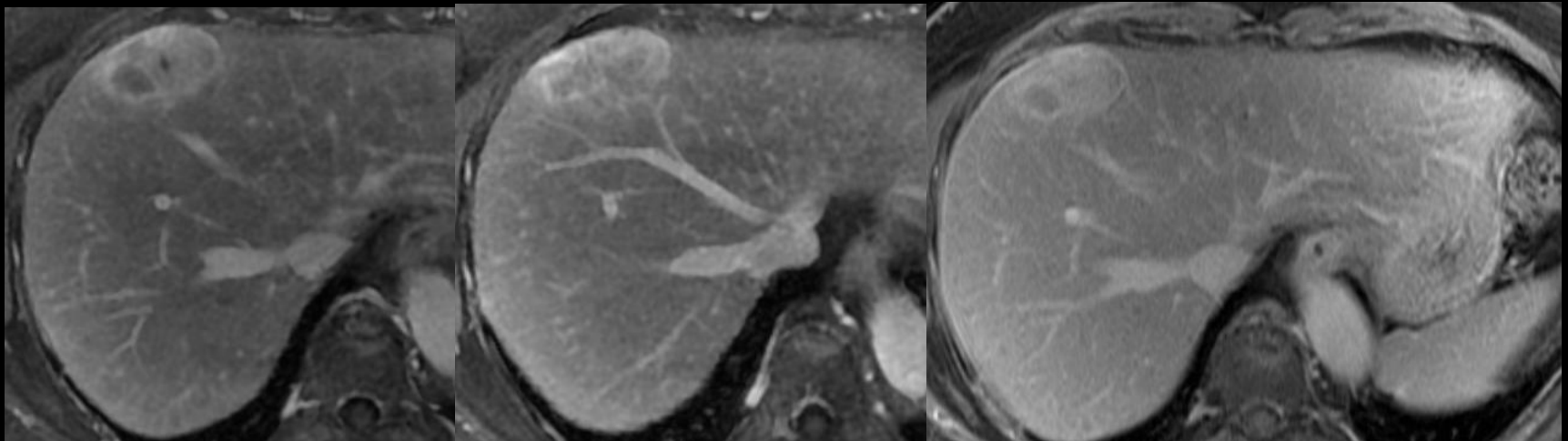
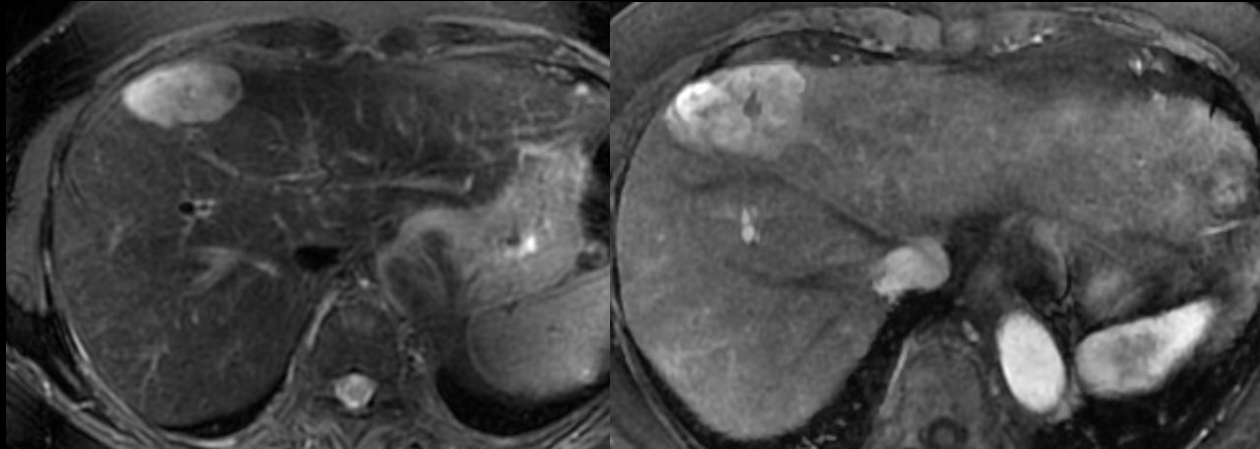


CHC sur foie sain

femme, 57 ans

Aucun antécédent

TDM TAP : lésion unique hépatique

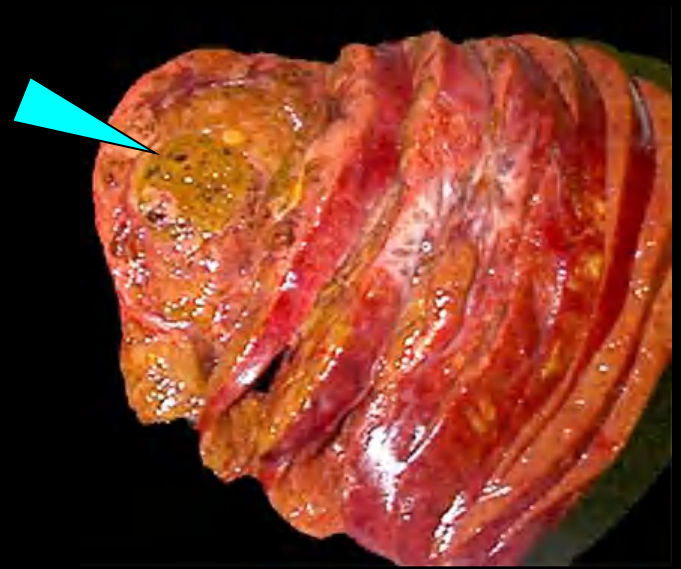




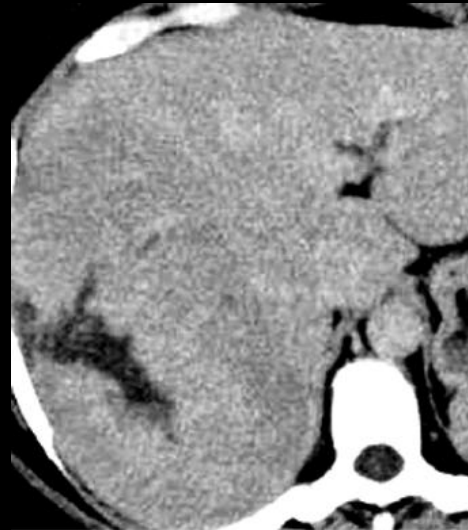
CT avant injection



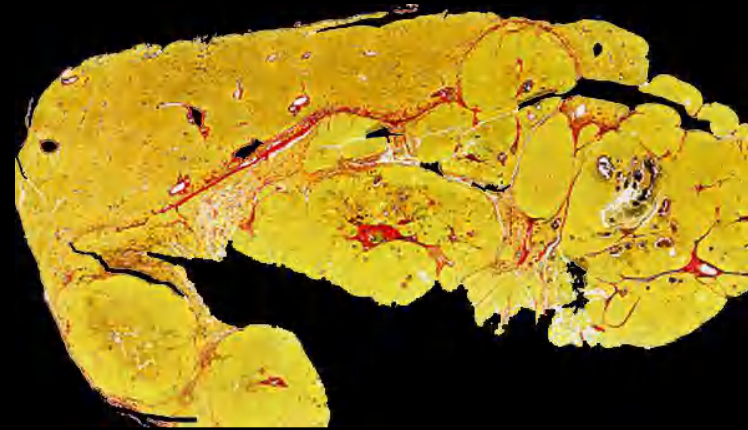
CT 40"



CT 70"



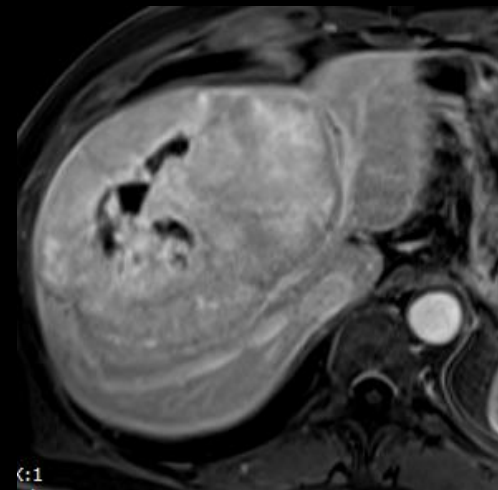
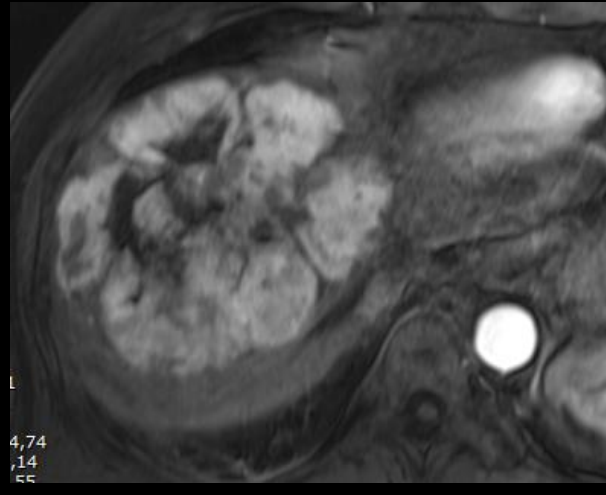
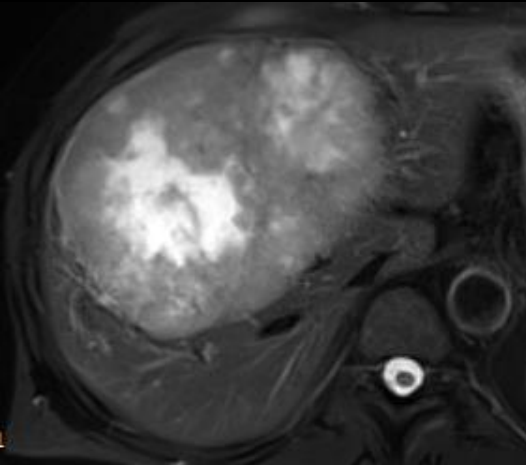
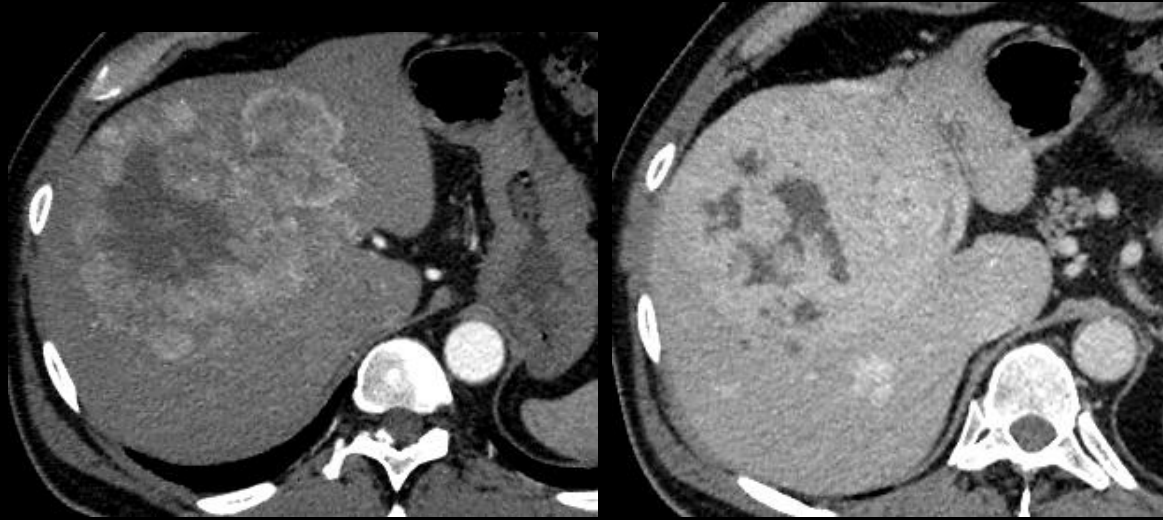
CT 7'

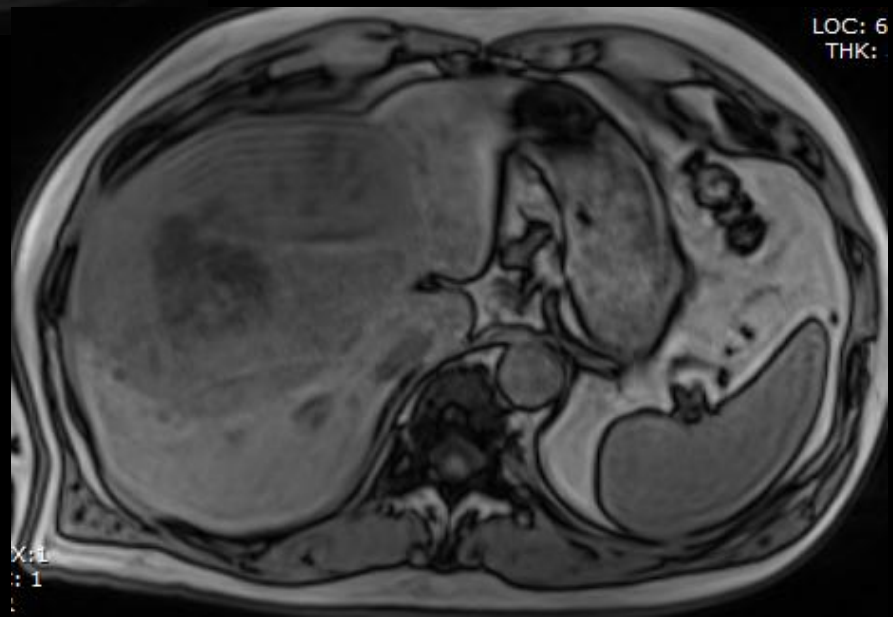
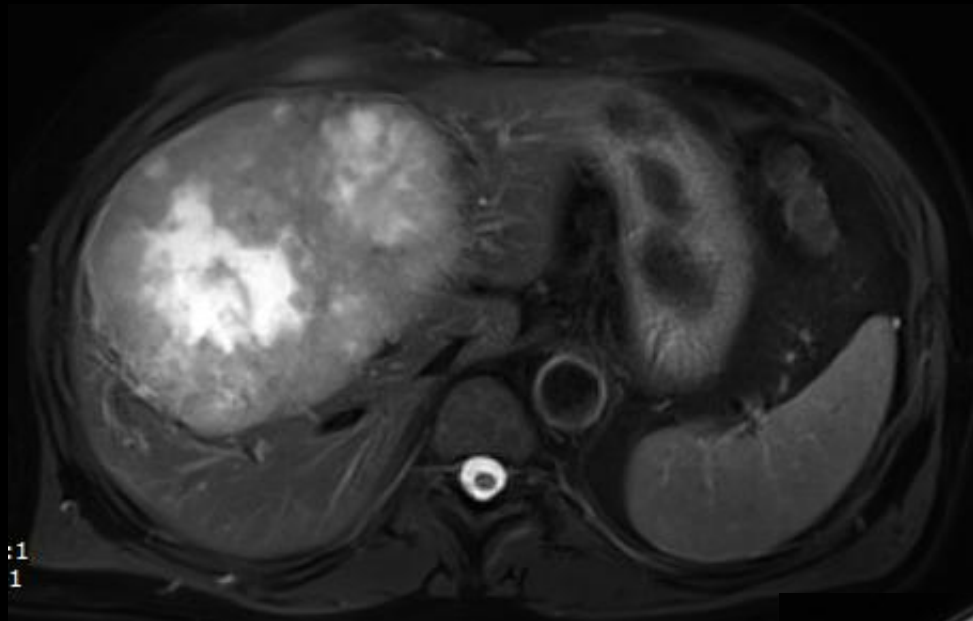


Rouge Sirius fibrose collagène

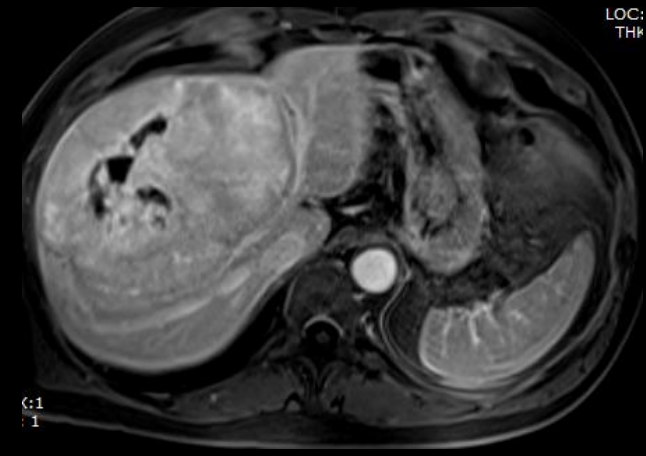
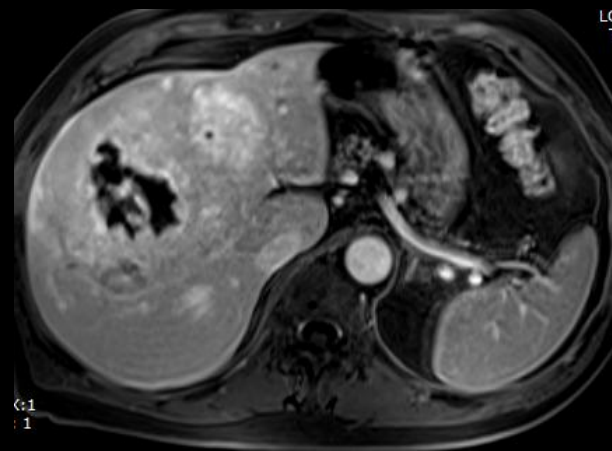
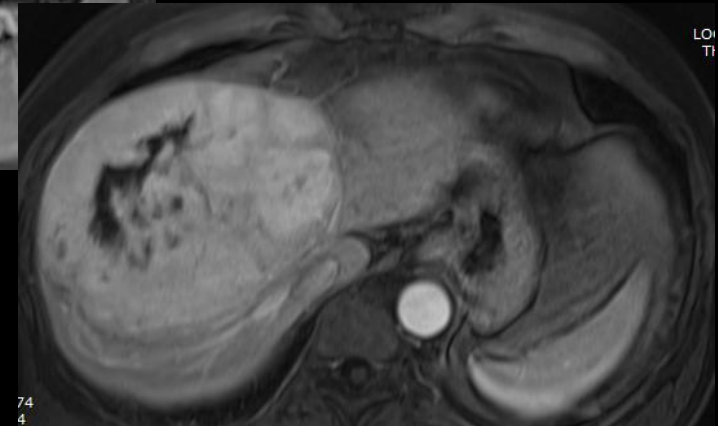
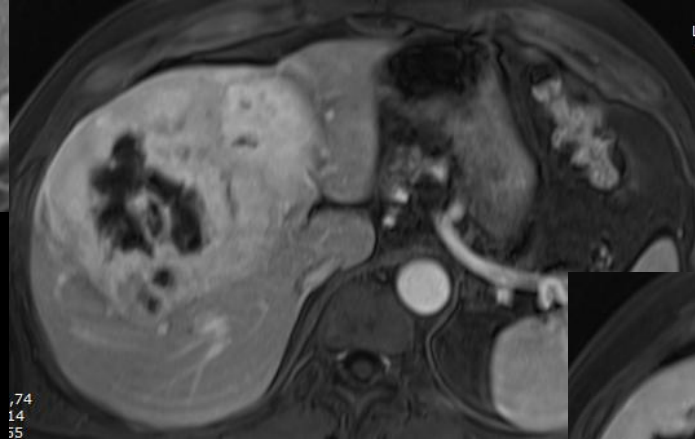
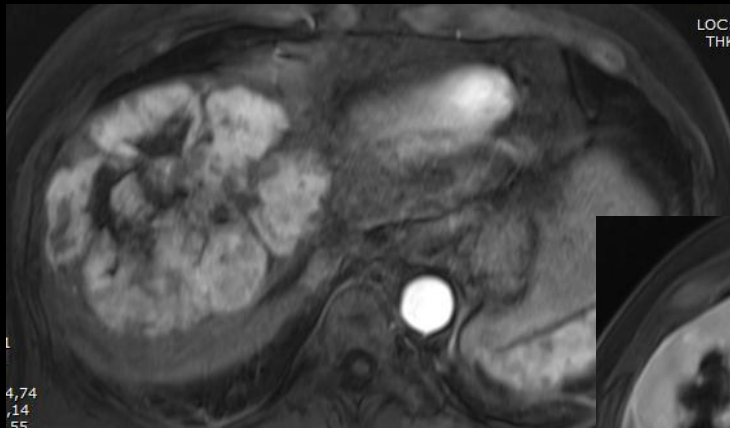
CHC sur foie sain

Homme de 55 ans. Perturbations modérées du bilan biologique hépatique. Aucun ATCD,





CHC atypique

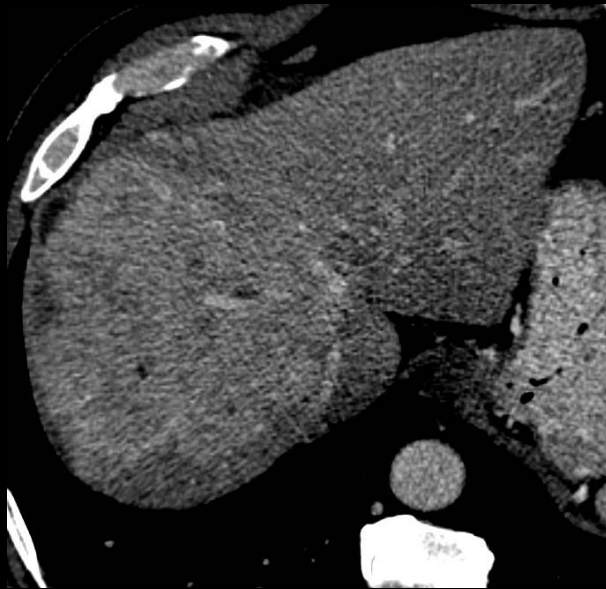
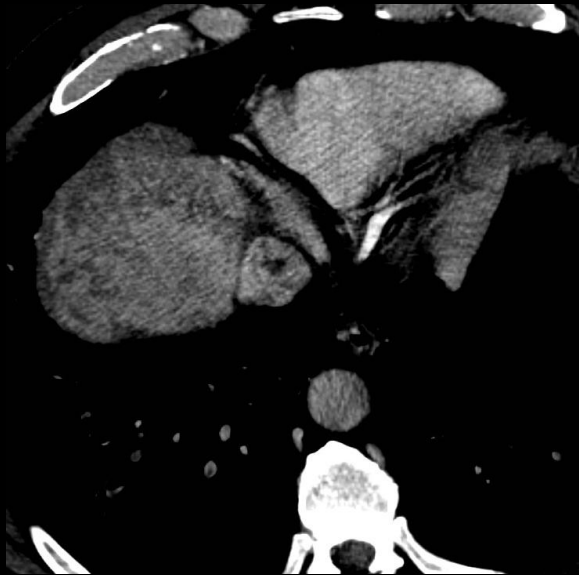
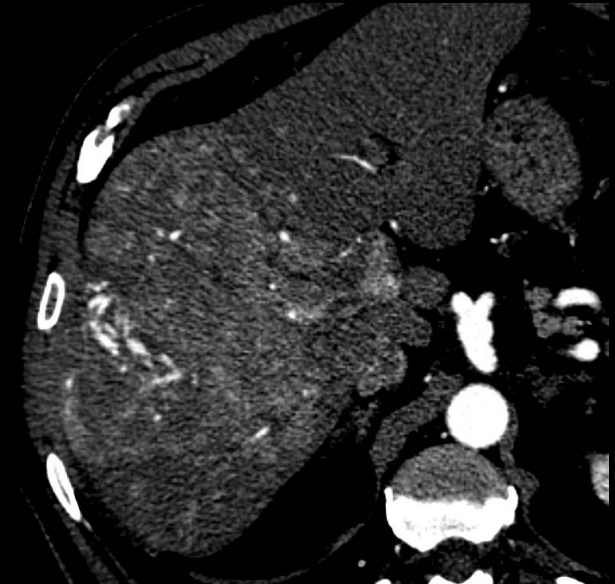
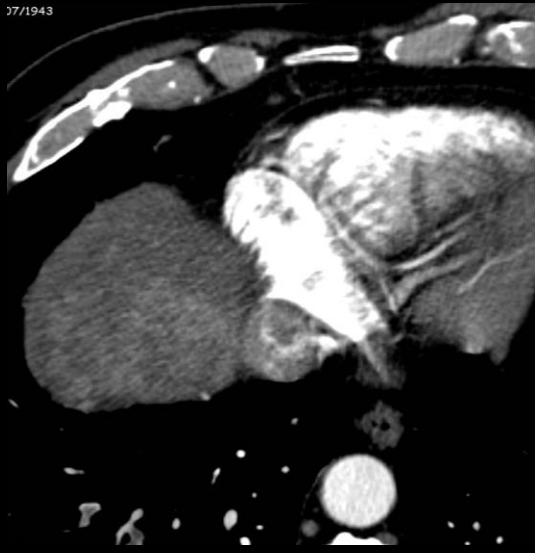


Quelle attitude proposez-vous ?

CHC sur foie sain

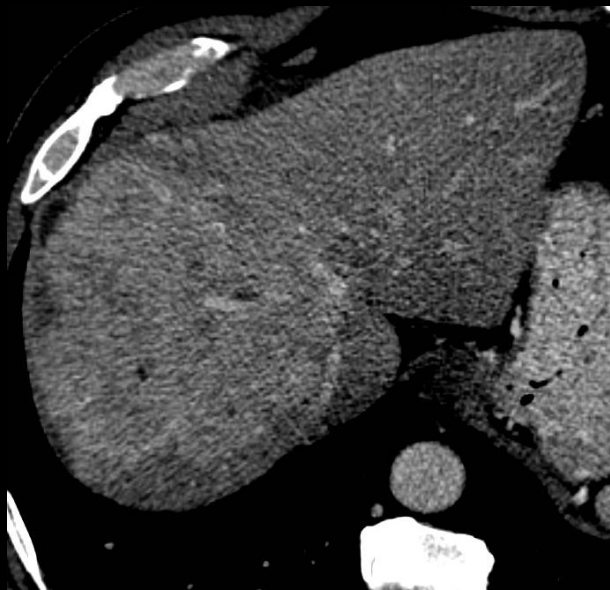
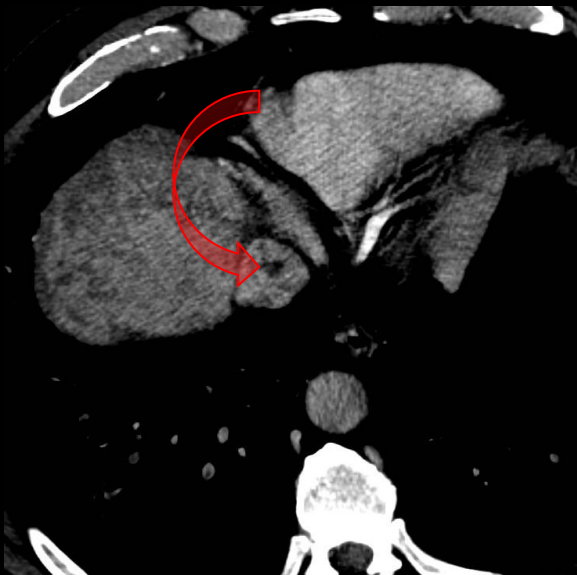
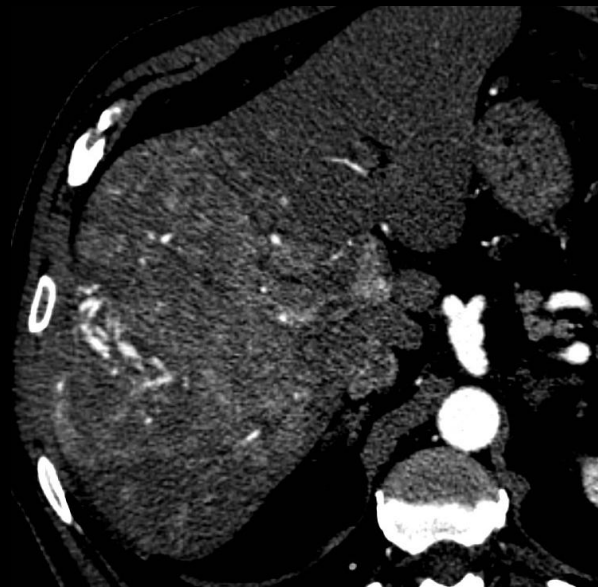
Patiente de 68 ans
Bilan de masse hépatique

37/1943

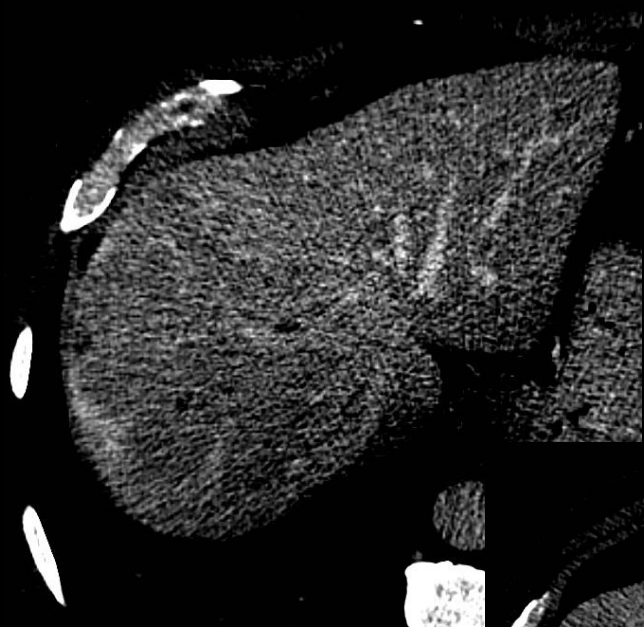


CHC sur foie sain

37/1943



CHC sur foie sain



CHC atypique



T2 FS

Lésion HT2 tissulaire

Lésion hétérogène

Rehaussement artériel modéré
hétérogène

Lavage à la phase de post équilibre ?

Tumeur maligne : OUI

Biopsie : non

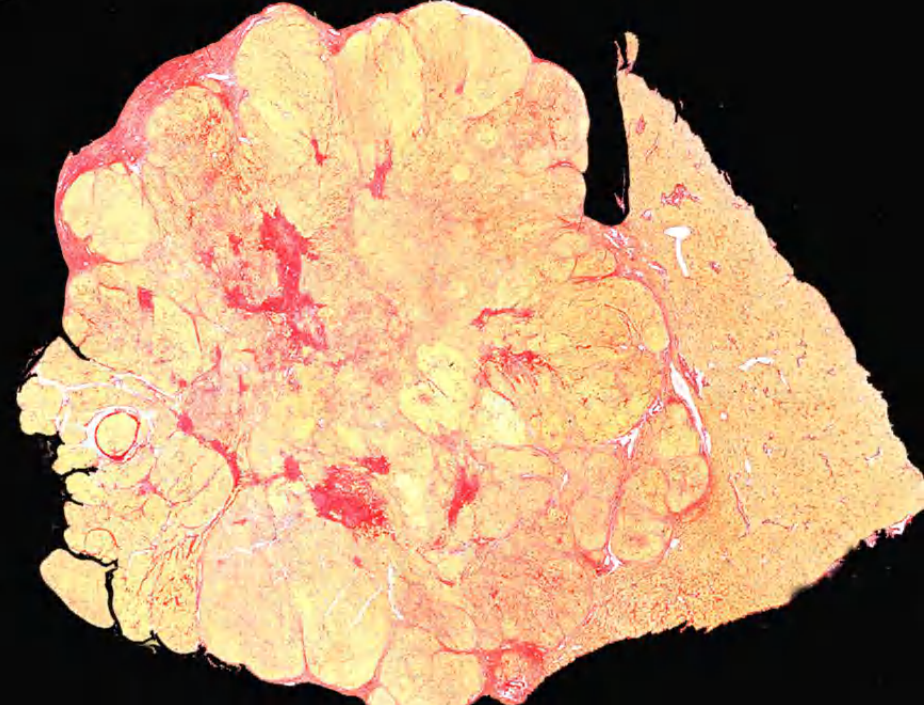
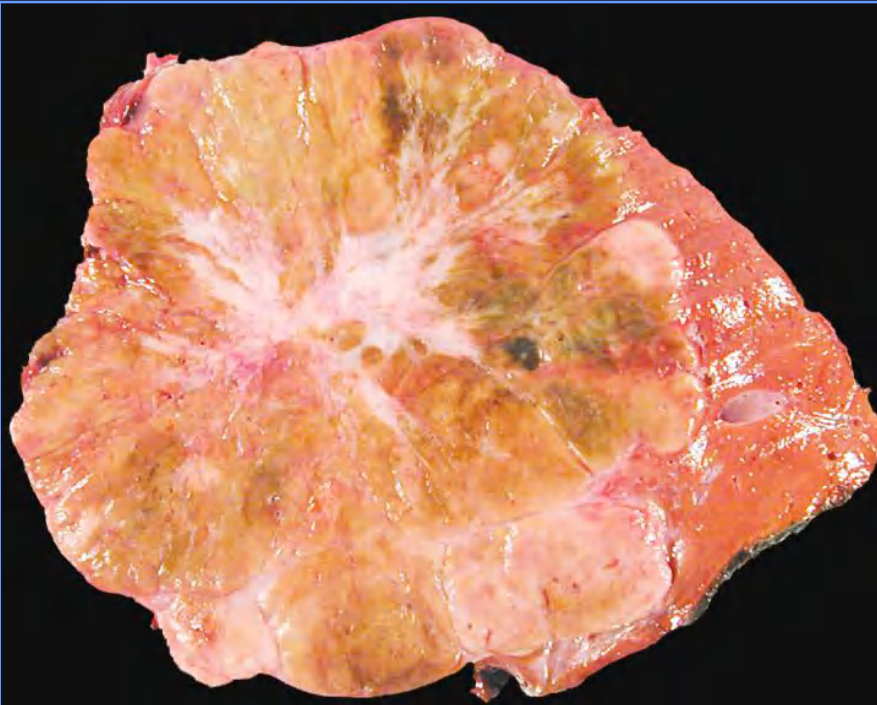
Chir d'emblée : OUI

Forme particulière CHC sur foie sain

Carcinome fibro lamellaire

Macroscopie

Calcifications centrales : 80%



Tumeur maligne hépatocellulaire non commune dont les caractéristiques cliniques histologiques diffèrent du CHC

Larges cellules éosinophiles disposées en cordons séparées par tissu fibreux non encapsulée

Habituellement **croissance lente, pas de facteur de risque particulier, rarement sur foie cirrhotique, adultes jeunes, alphaFP normales**

Forme particulière CHC sur foie sain

Carcinome fibro lamellaire

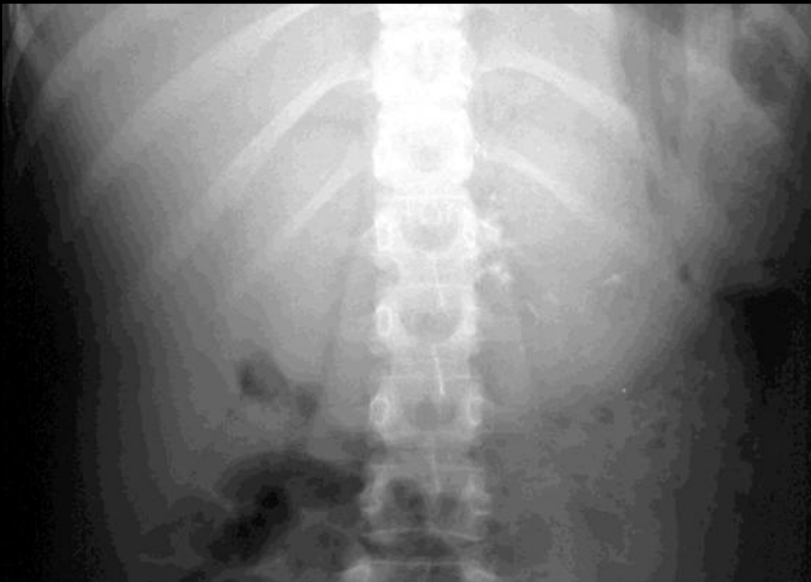
Calcifications centrales : 80%

Jeune fille 16 ans :

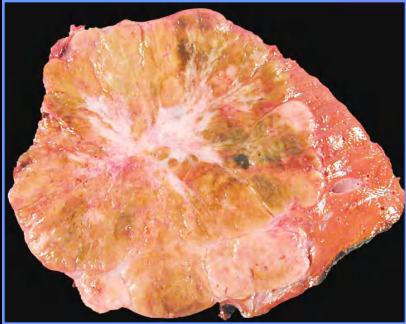
Douleurs épigastriques

Voussure abdominale

Cytolyse et cholestase modérée



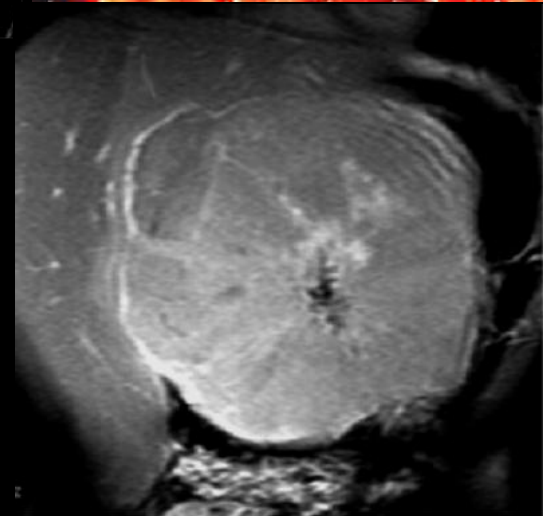
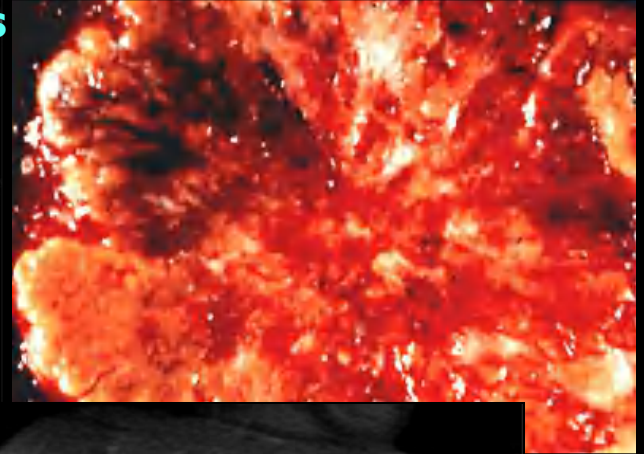
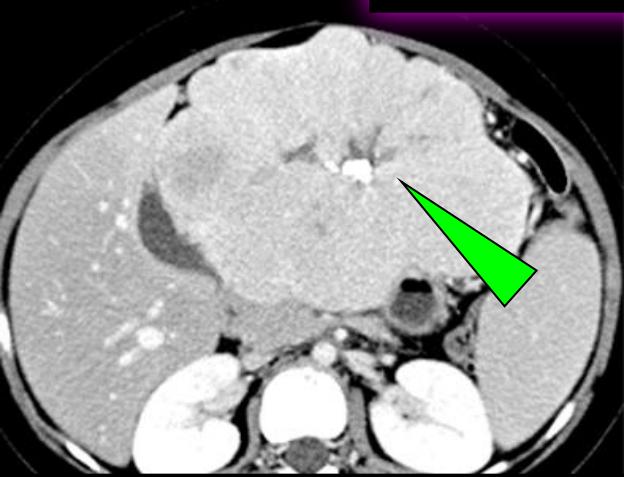
Forme particulière CHC sur foie sain Carcinome fibro lamellaire



McLarney et al. : Radiographics 1999, 19 : 453-71

CT 1' 30

Forme particulière CHC sur foie sain Carcinome fibro lamellaire



T1 Fat Sat 8'

T2 Fat Sat

diagnostic différentiel de l' HNF : l' hépatocarcinome fibro-lamellaire

Forme particulière CHC sur foie sain

Carcinome fibro lamellaire

Apport de l'IRM

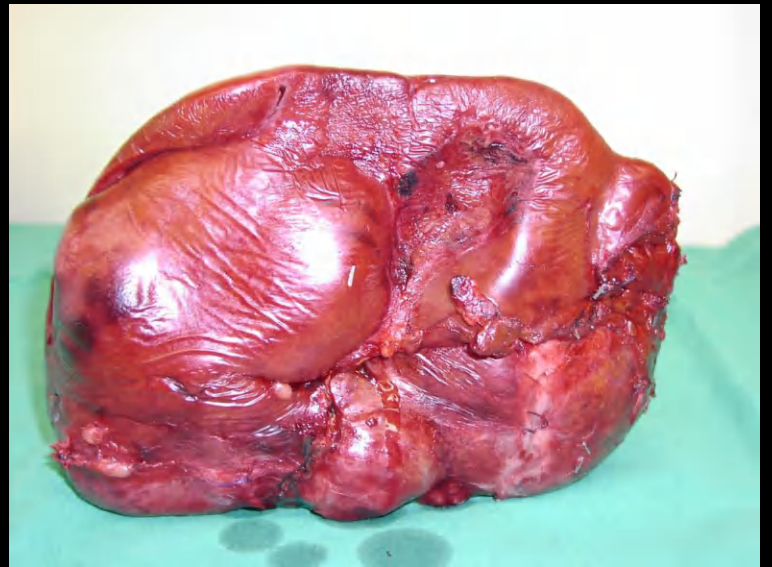
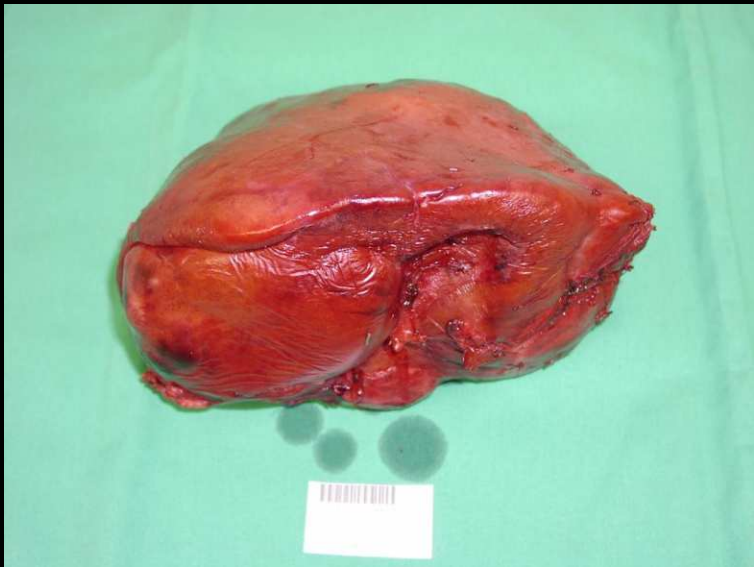
HNF

- Iso/faiblement hyperT2
- Zone centrale en hyper T2

Carcinome fibrolamellaire

- Hétérogène et hypersignal T2
- Zone centrale hypoT1 et hypoT2
- Pas de nécrose, pas d'hémorragie

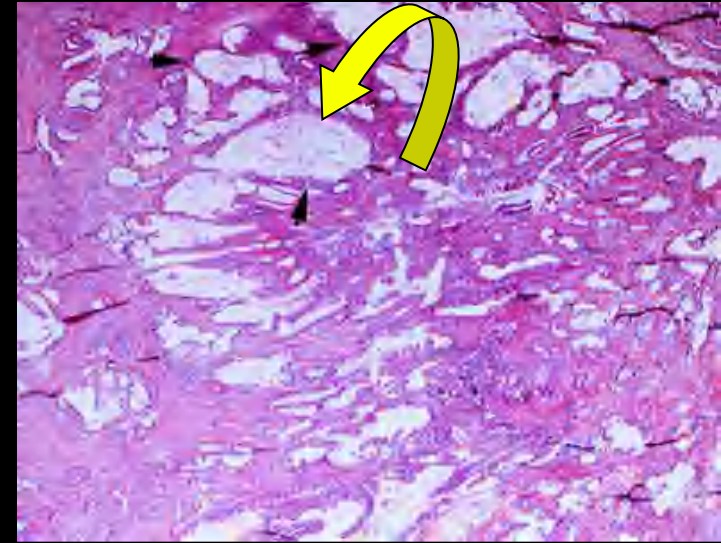
diagnostic différentiel de l' HNF : l' hépatocarcinome fibro-lamellaire



Carcinome fibro lamellaire



Cholangiocarcinome



présence de mucine



HES fibrose rose

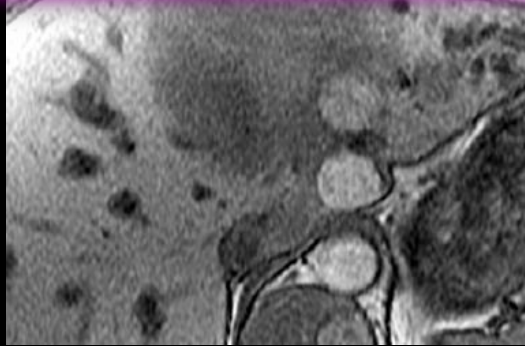


trichrome fibrose bleue

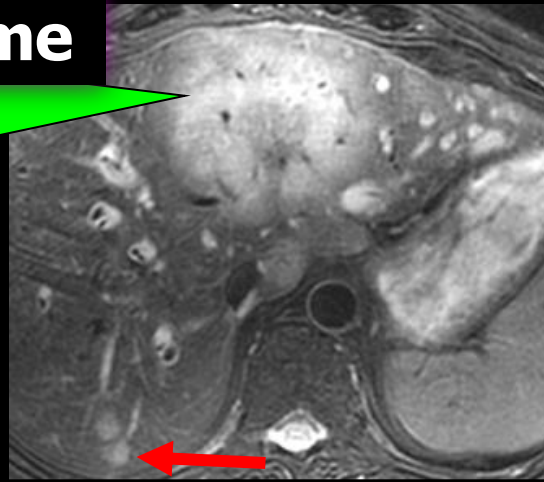
cholangiocarcinome « périphérique »

fibrose collagène (réaction
desmoplastique+++)

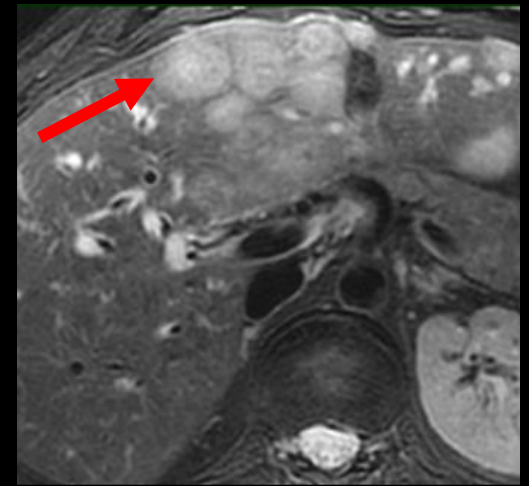
Cholangiocarcinome



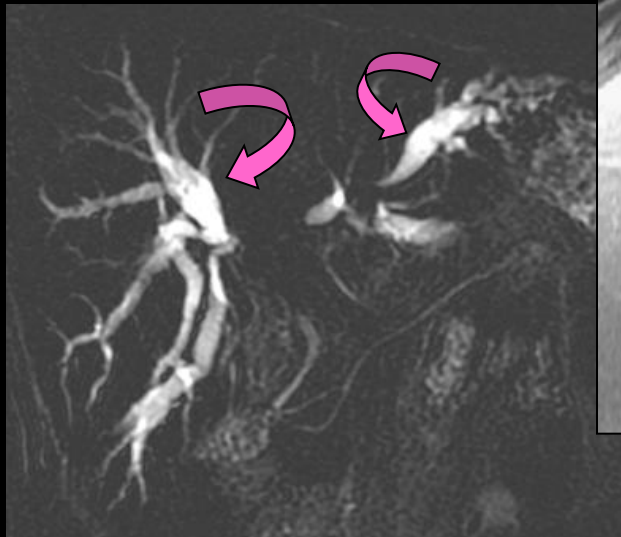
T1 sans injection



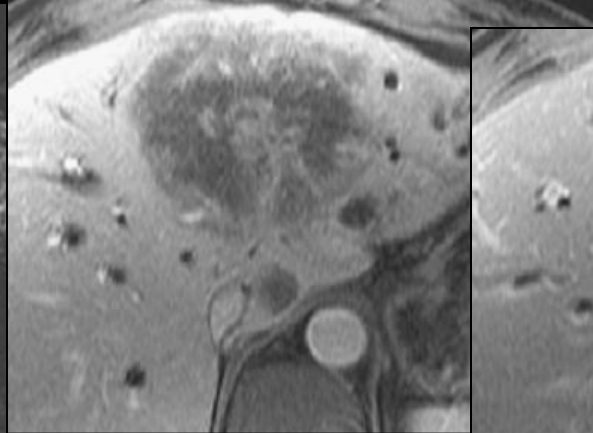
T2



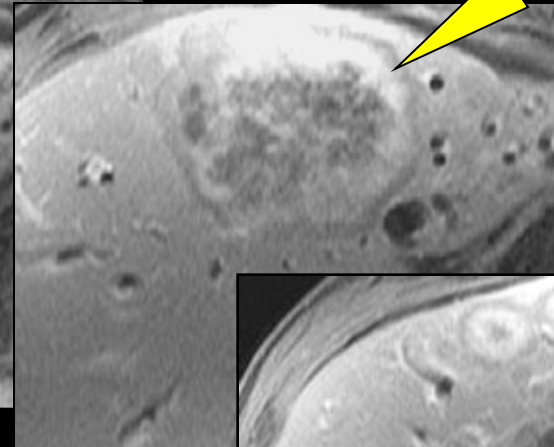
T2



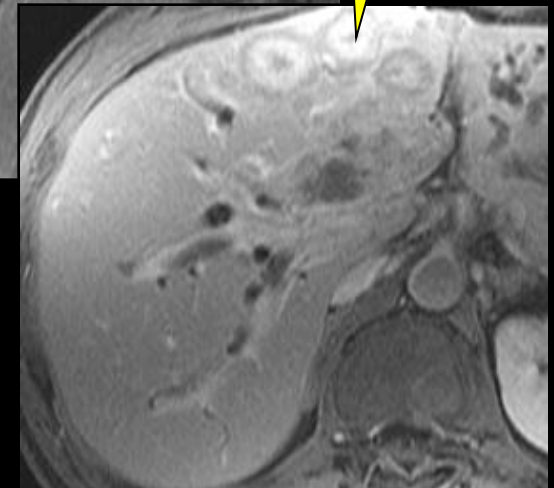
T2 TE long



T1 1'30''



T1 4'

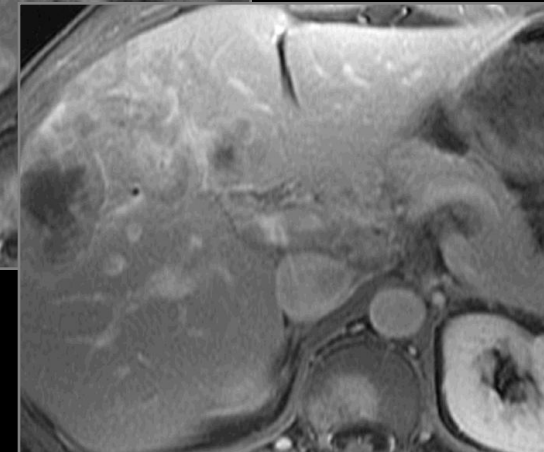
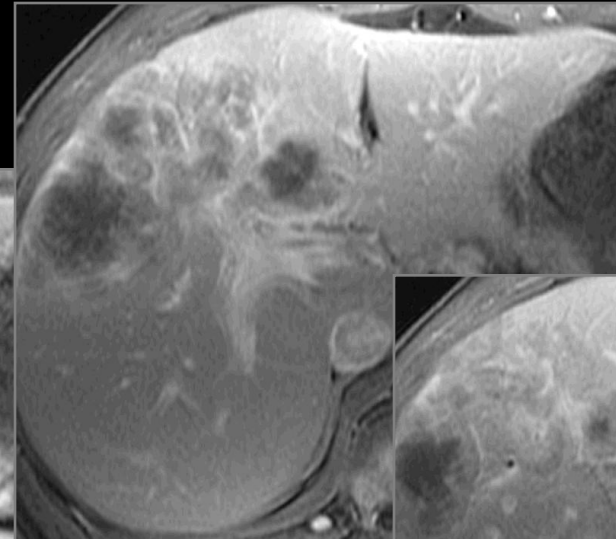
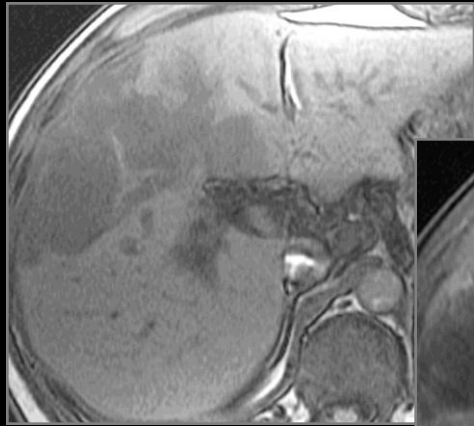
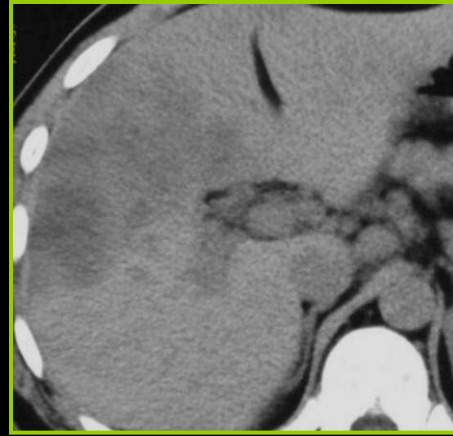


cholangiocarcinome intra-hépatique
multifocal ; retentissement biliaire+++

Cholangiocarcinome

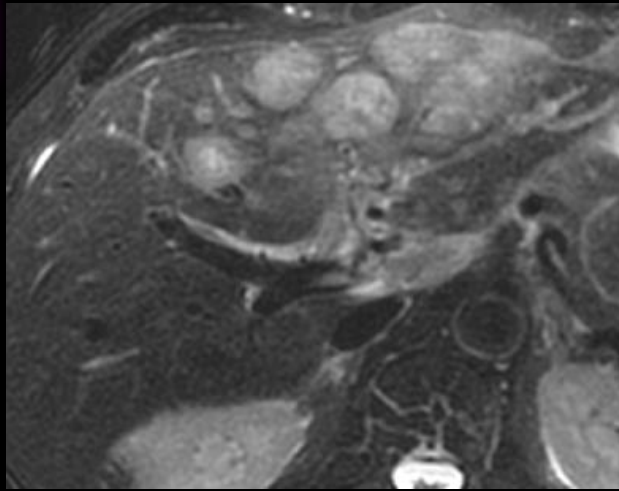
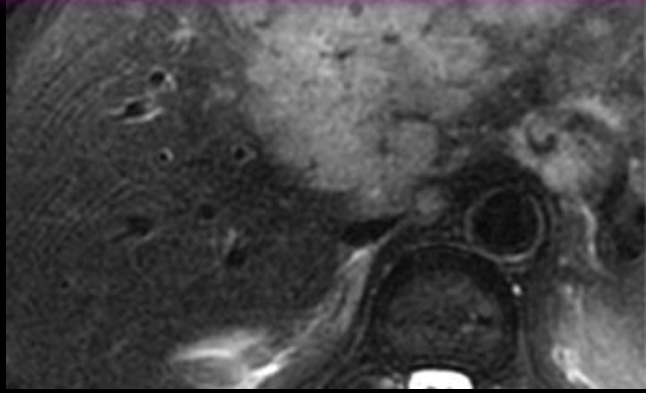
Homme 39 ans :

- Douleurs abdominales de l'hypochondre droit
- Fièvre 39°
- ATCD récent (J8) exérèse d'une dent de sagesse
- Echo abdo. : Masse hépatique

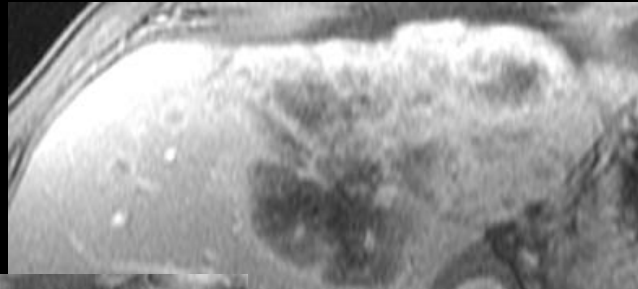
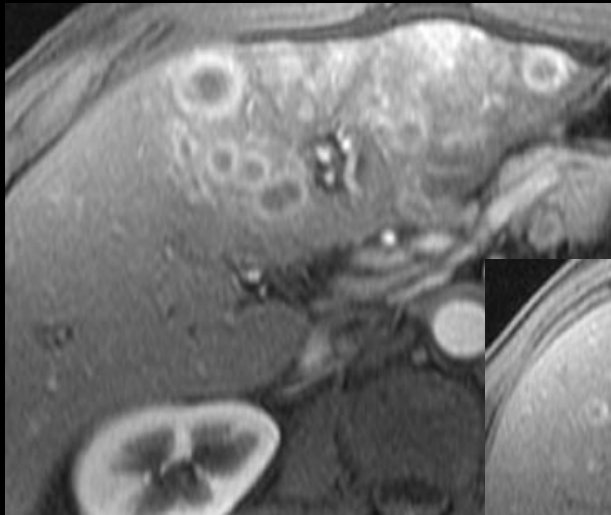


Cholangiocarcinome intrahépatique

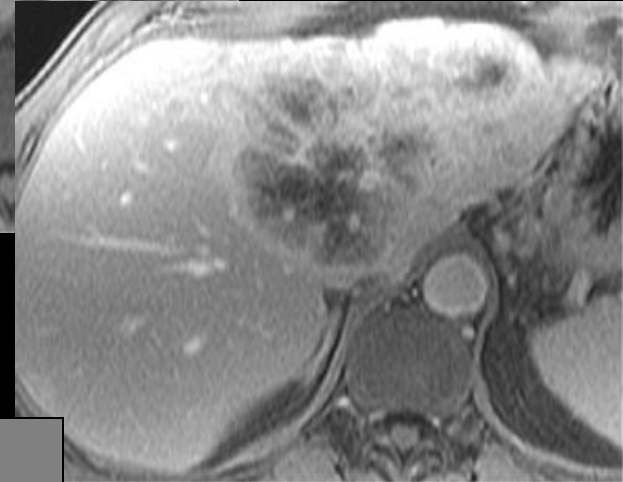
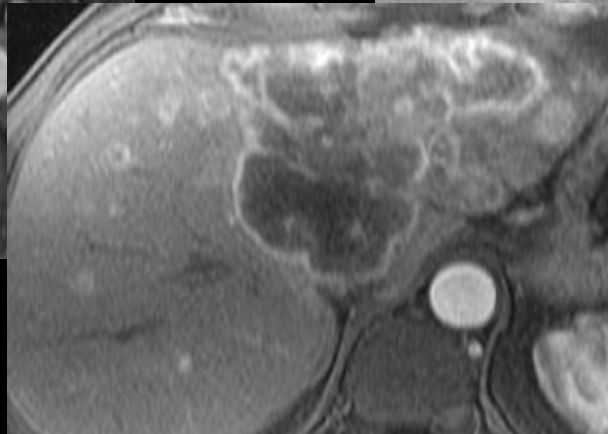
Cholangiocarcinome



MR T2 FSE



MR 2'



MR 50''

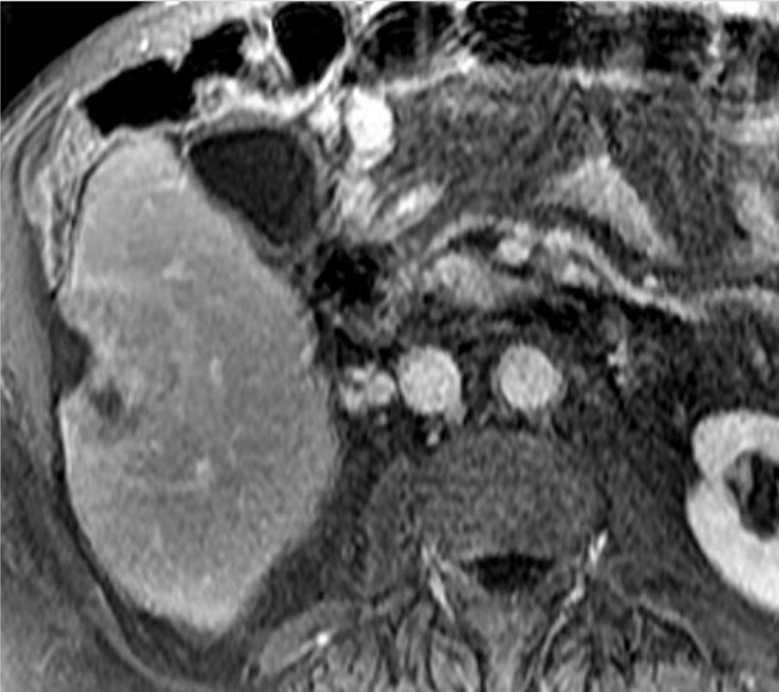
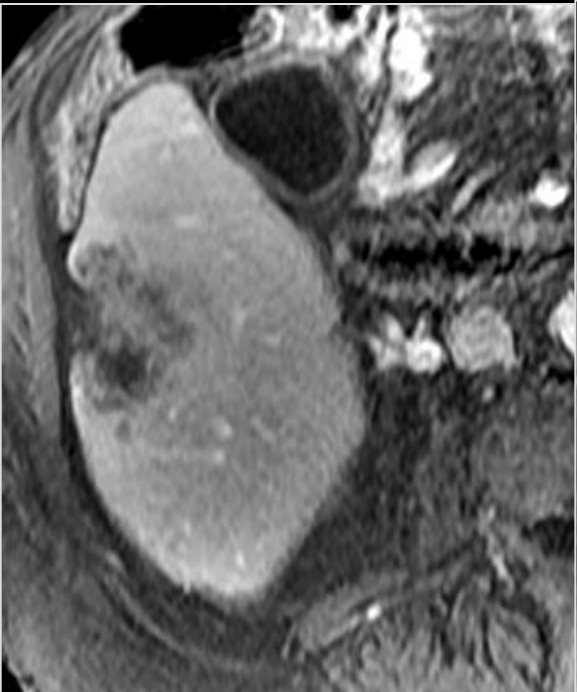
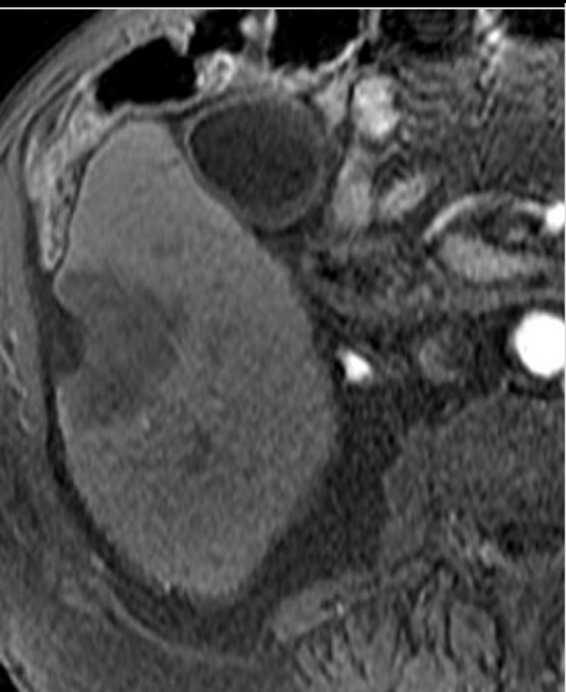
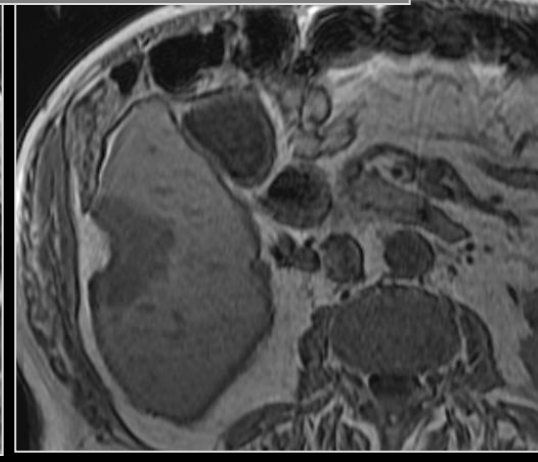
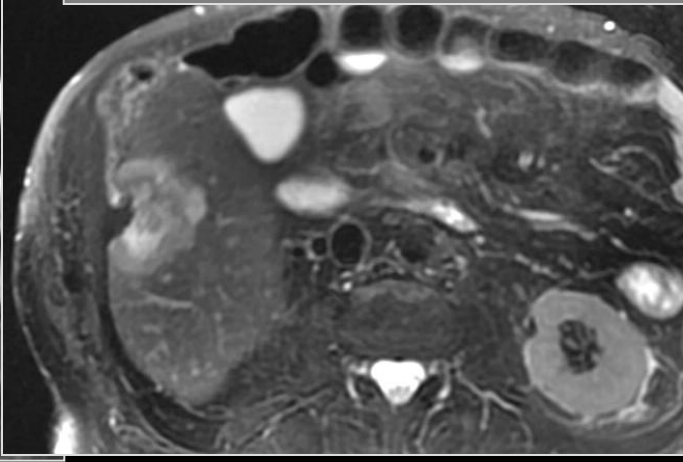
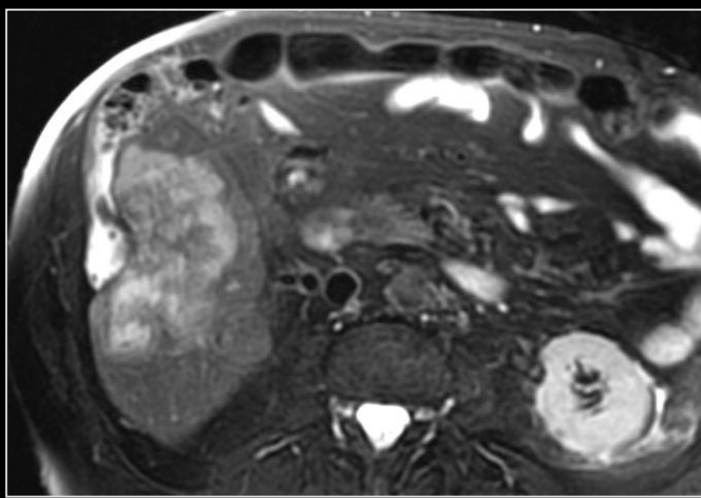
MR 50''

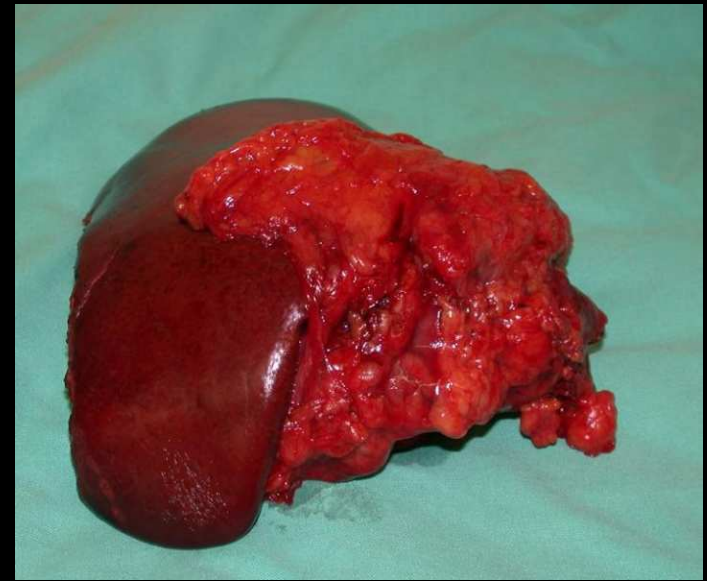
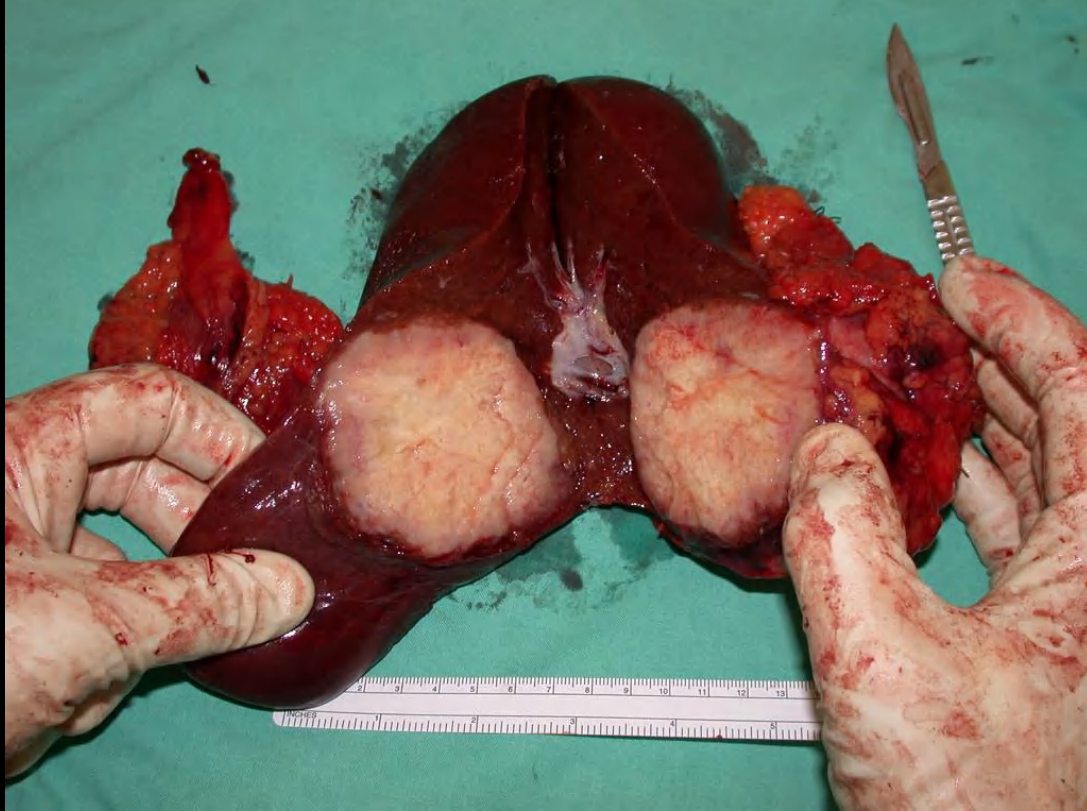
cholangiocarcinome intra-hépatique périphérique
multinodulaire

MR 7'

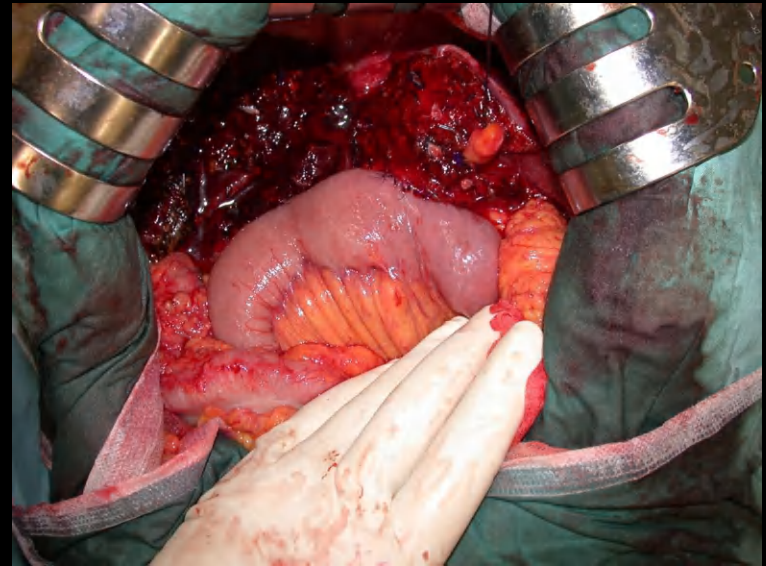
Cholangiocarcinome

Cholangiocarcinome intra hépatique
Rétraction capsulaire +++

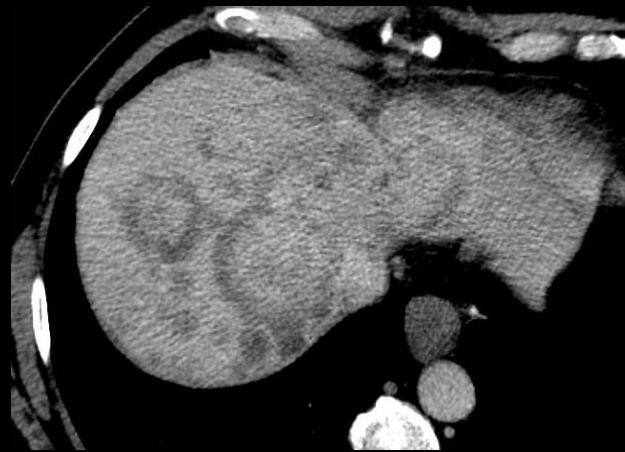




Cholangiocarcinome



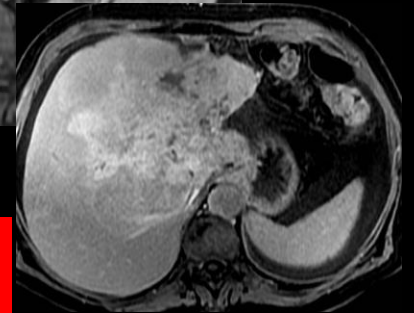
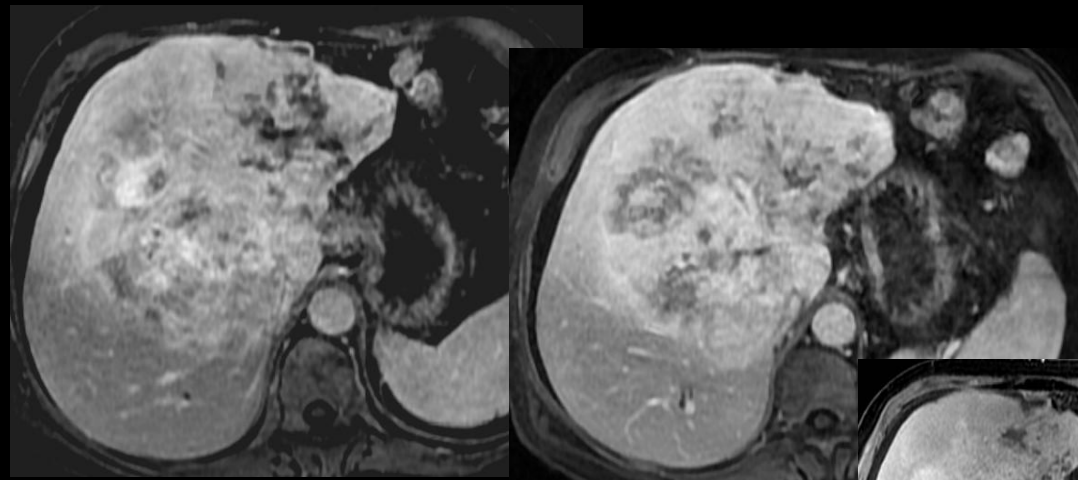
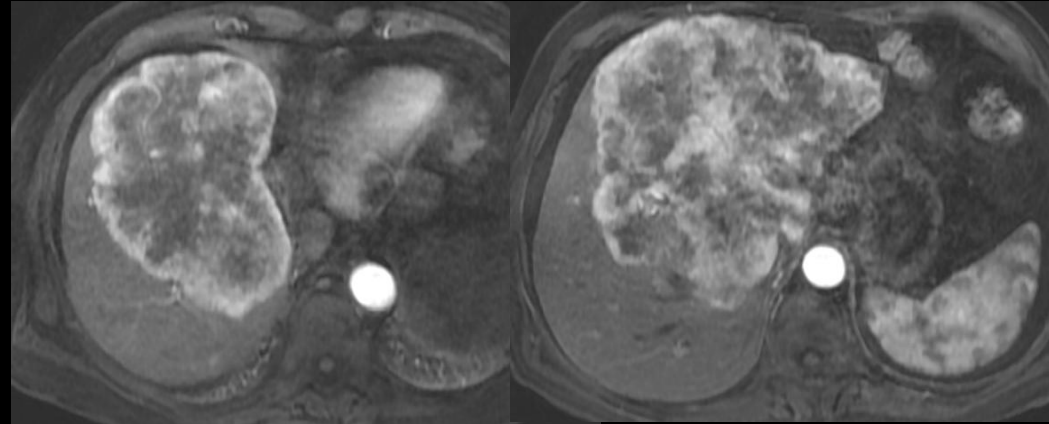
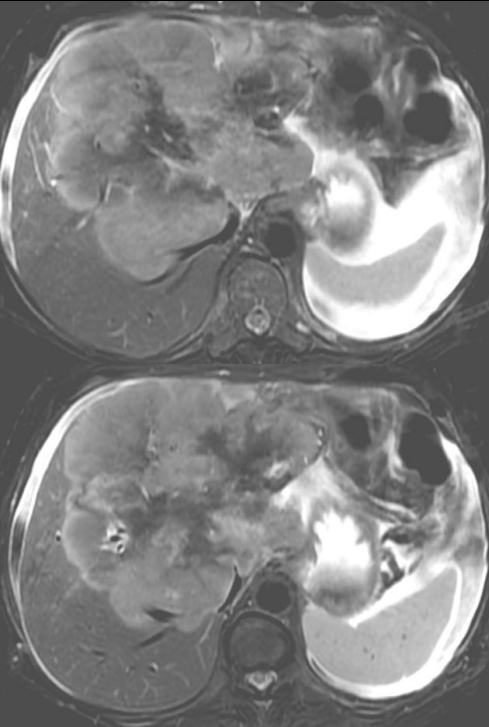
Cholangiocarcinome



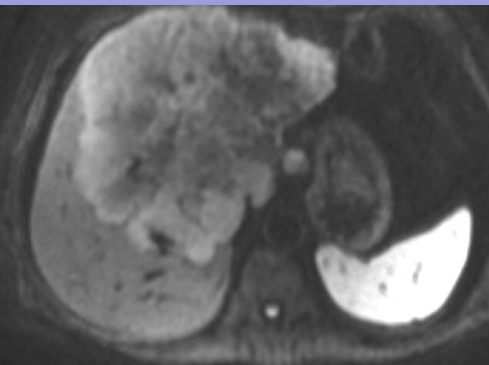
Temps tardifs

Maetani et al. AJR 2001
Manfredi et al. Semin Liver Dis 2004
Rimola et al. Hepatology 2009

Cholangiocarcinome



Diffusion



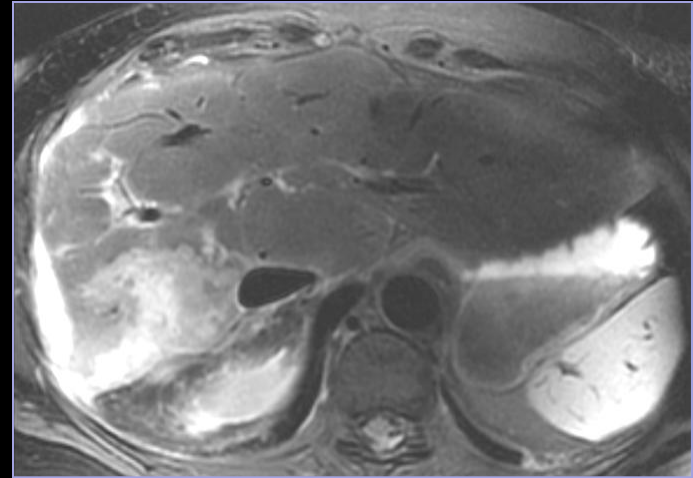
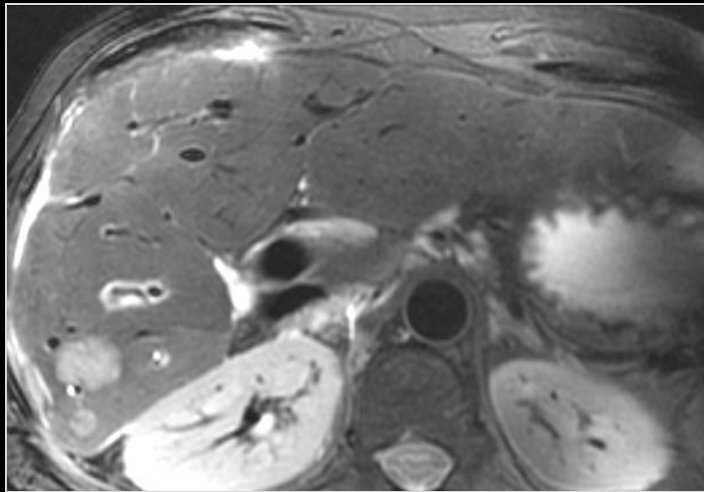
Temps tardifs

Cholangiocarcinome

Femme, 52 ans

Perturbations mineures du bilan biologique hépatique depuis 10 ans

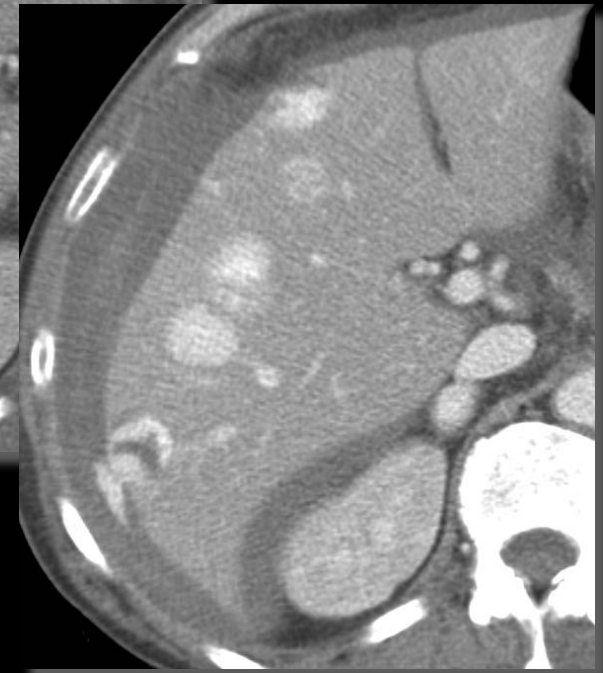
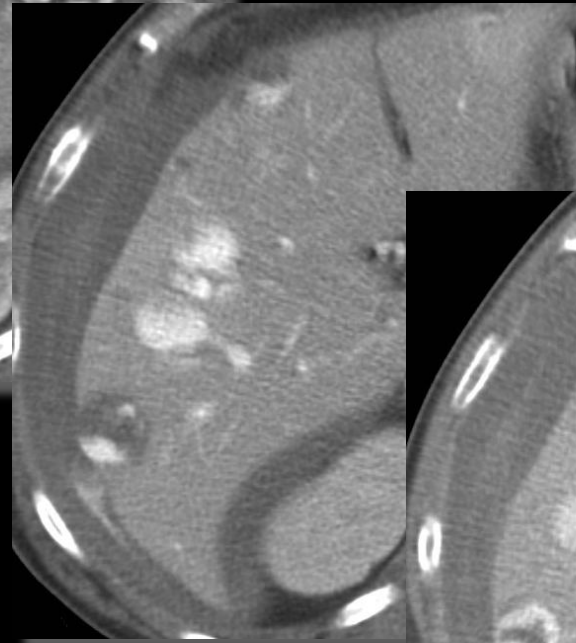
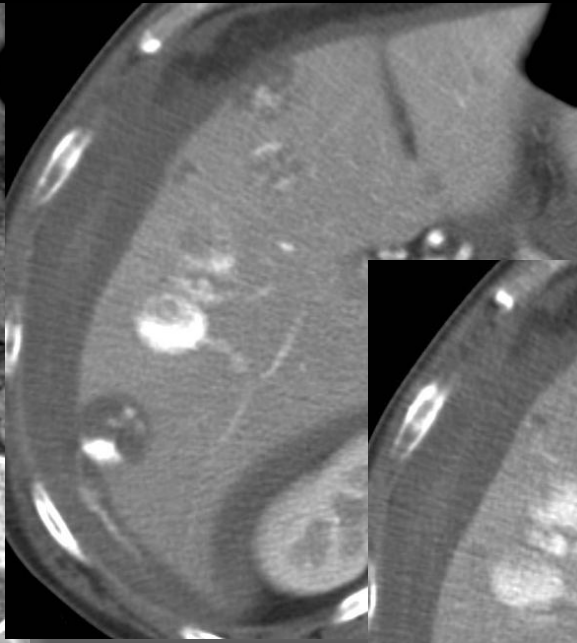
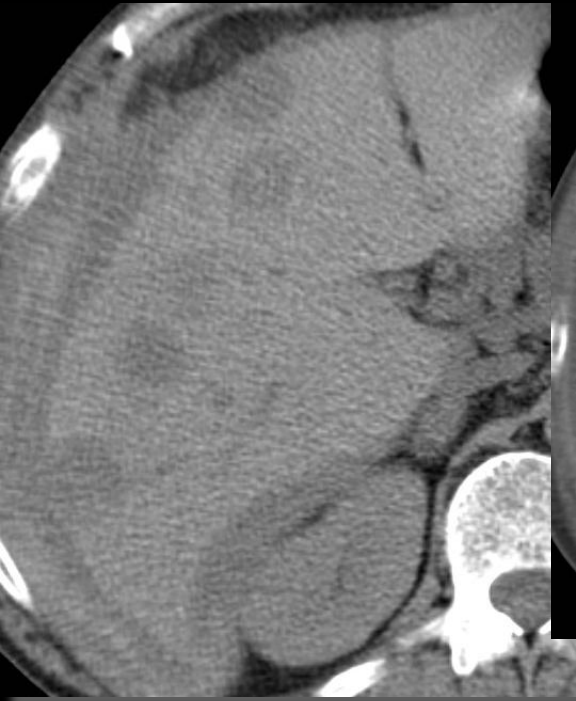
Découverte lésions focales hépatiques du foie droit



Facteur de risque

-Cholangite sclérosante primitive

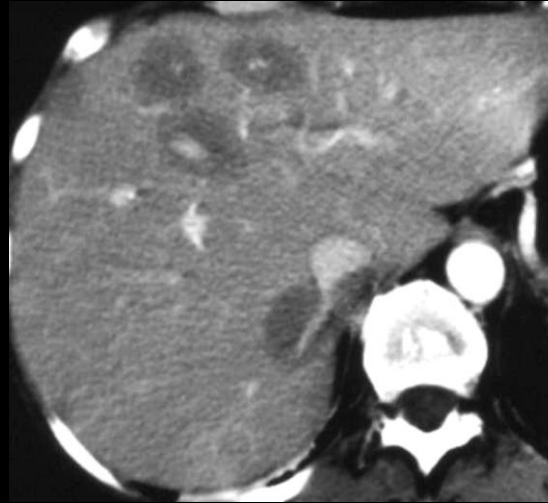
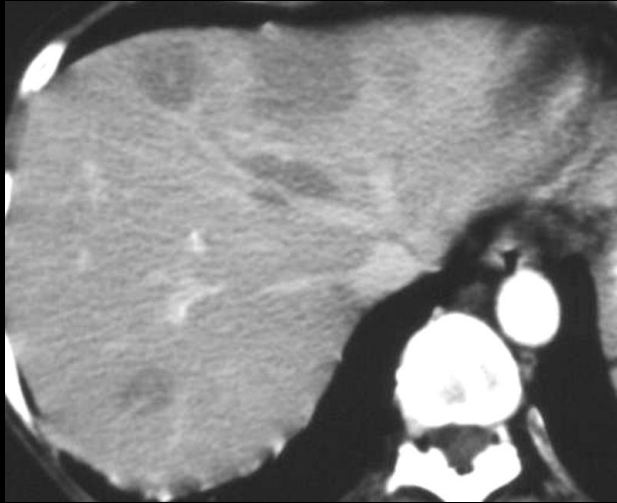
Tumeurs rares



Angiosarcome hépatique

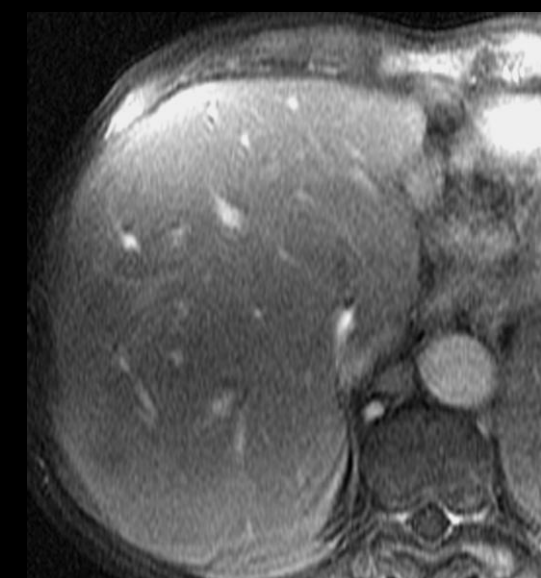
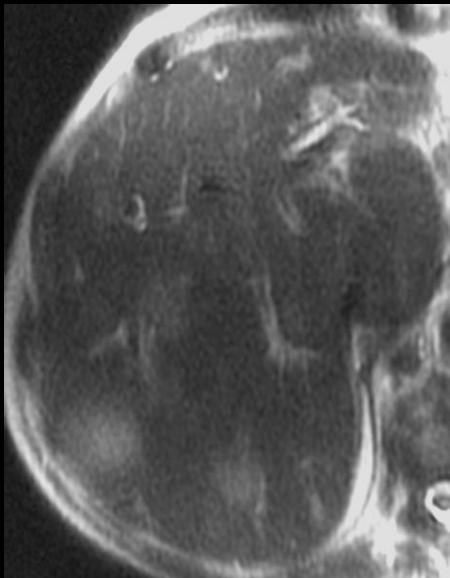
Tumeurs rares

Lymphome hépatique



Tumeur maligne : ??

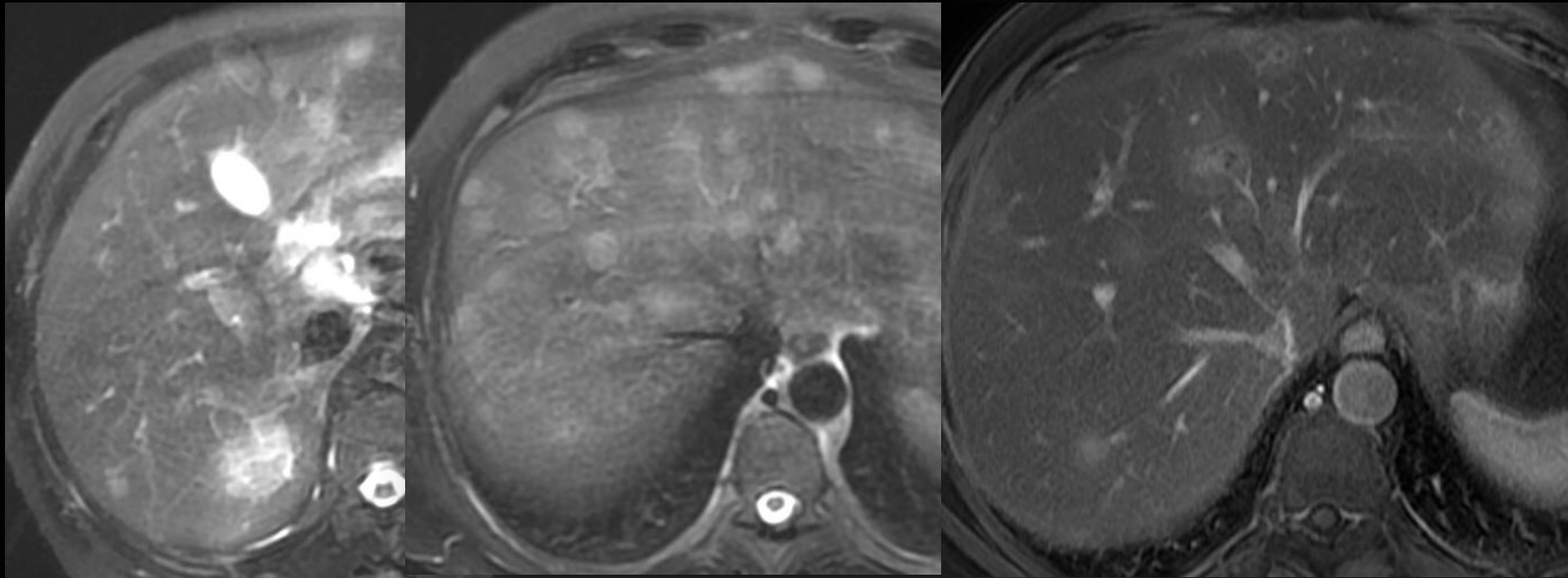
Biopsie : oui



Tumeurs rares

Ne jamais oublier contexte !!

SIDA



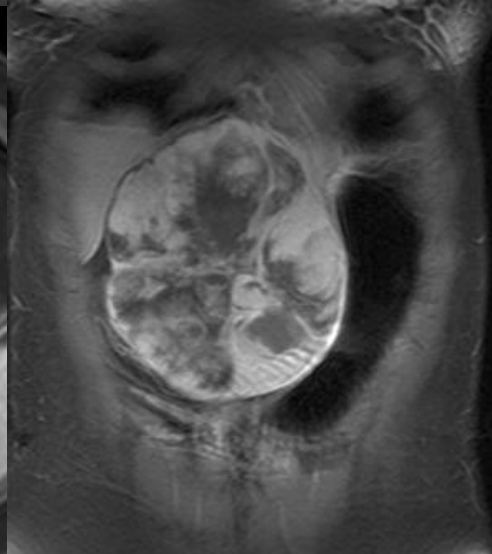
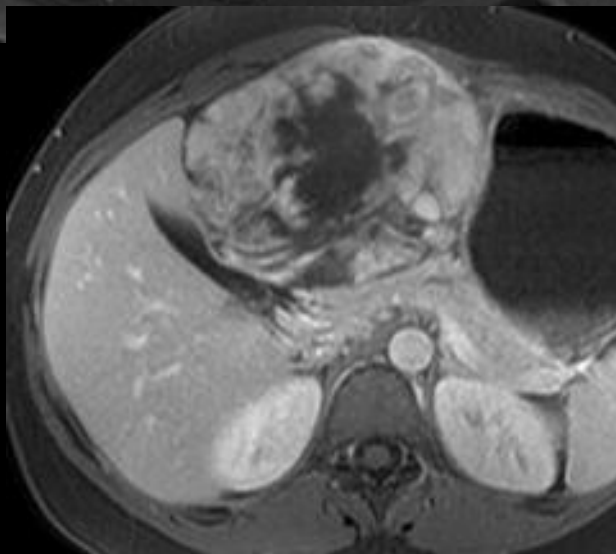
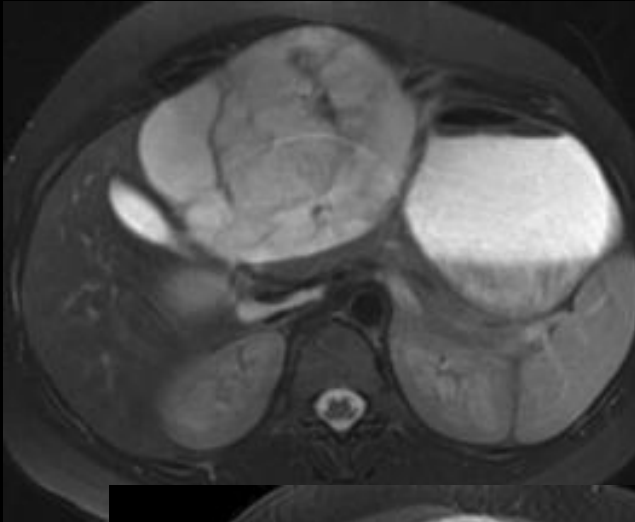
Lymphome hépatique

Tumeurs rares

Femme, 25 ans

Douleurs abdominales

Pas d'antécédent

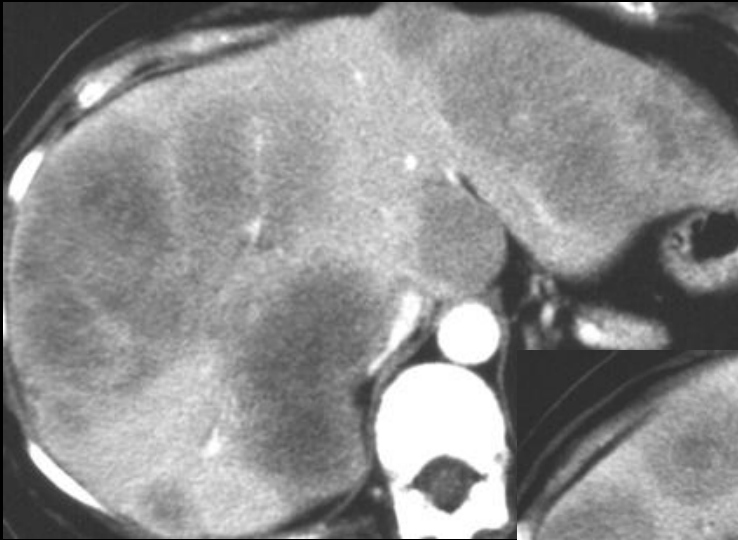


Tumeur maligne : oui

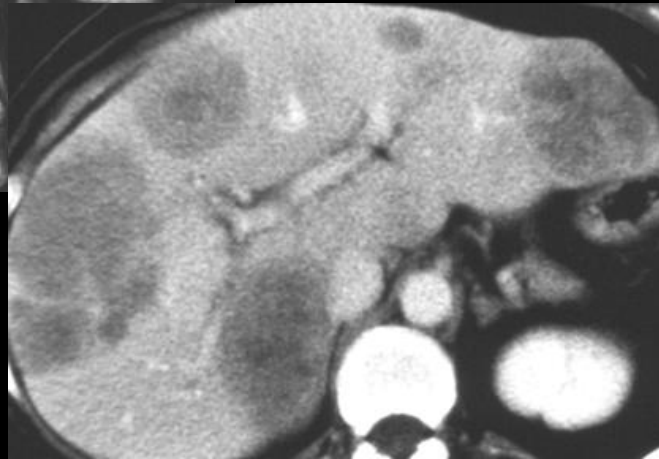
Biopsie : non

Chir d'emblée : OUI

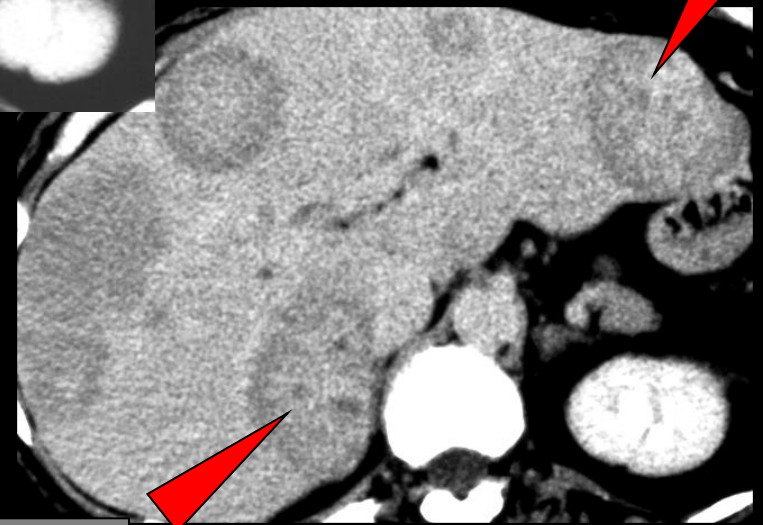
Métastases colo-rectales



CT 50"

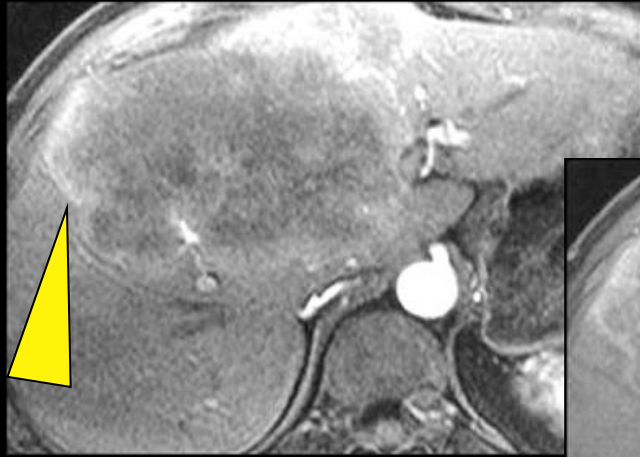


CT 70"

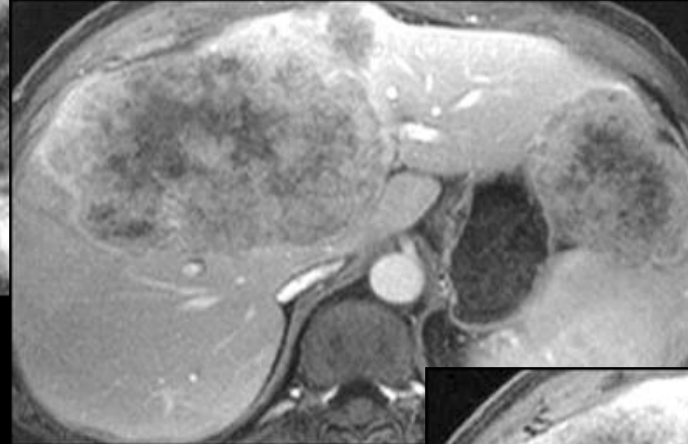


CT 20'

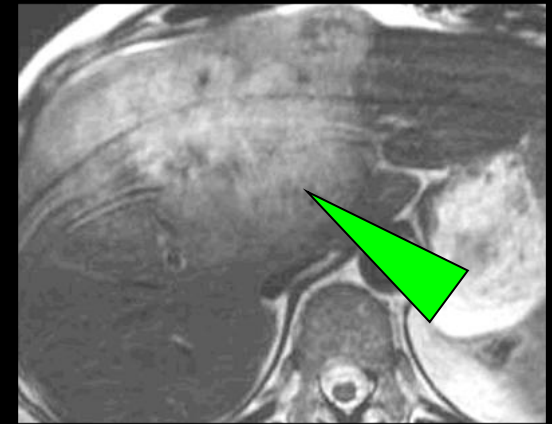
métastases d'un adénocarcinome colique
Contingent fibreux intralésionnel



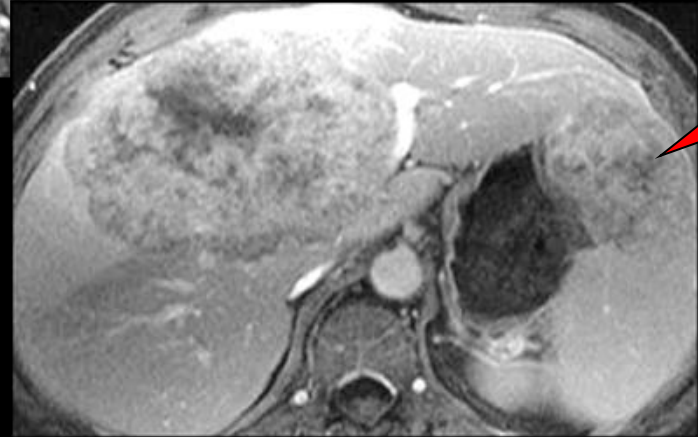
T1 45"



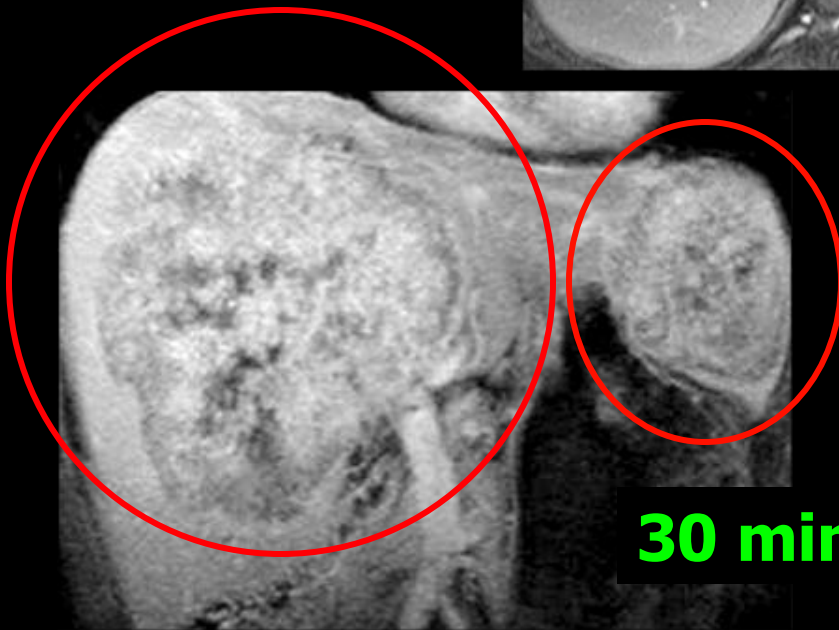
T1 70"



T2



T1 3'

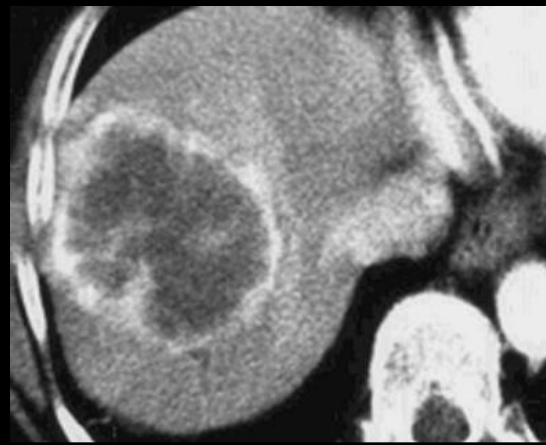


30 min après IV

**métastases d'un adénocarcinome colique
Contingent fibreux intralésionnel**



T1 45''



T1 60''



T1 2'



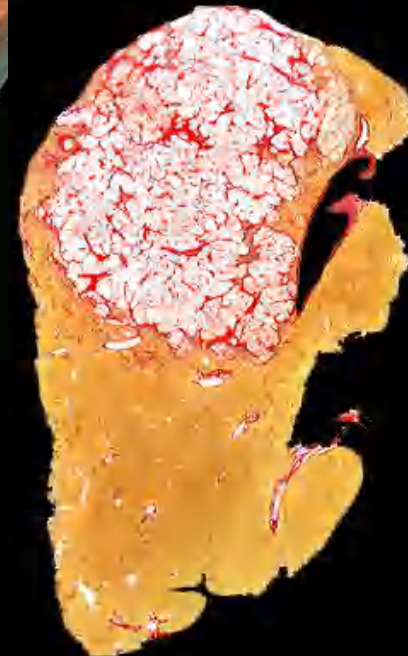
T1 20'



T1 20'



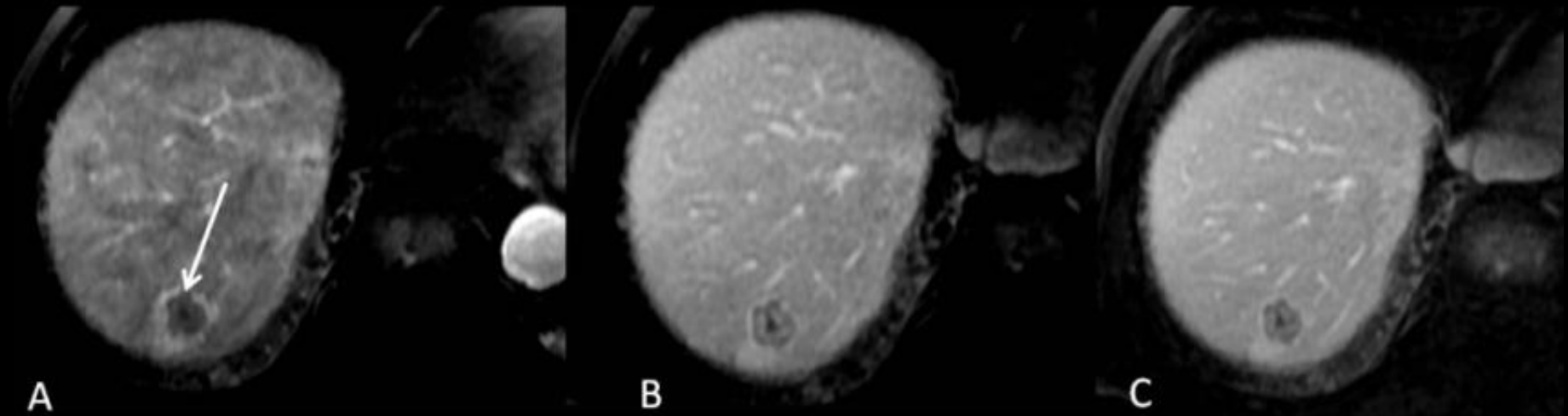
rouge Sirius

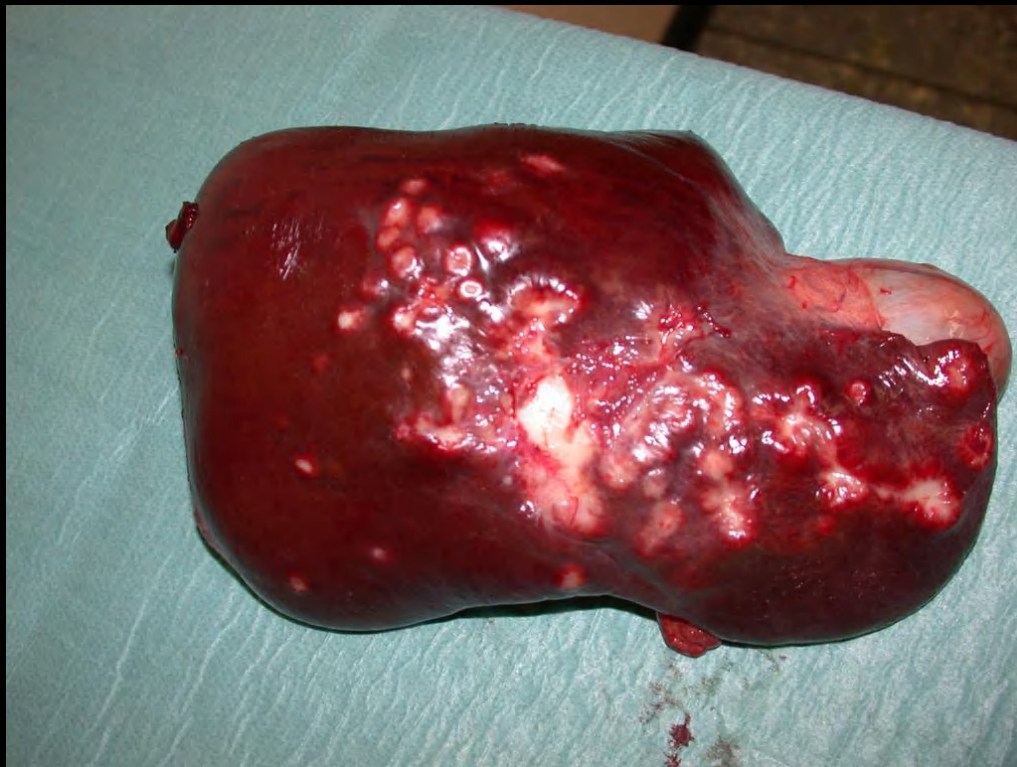


**métastase d'un adénocarcinome colique
et anomalie transitoire de la perfusion (THAD=transcient
hepatic attenuation differences)**

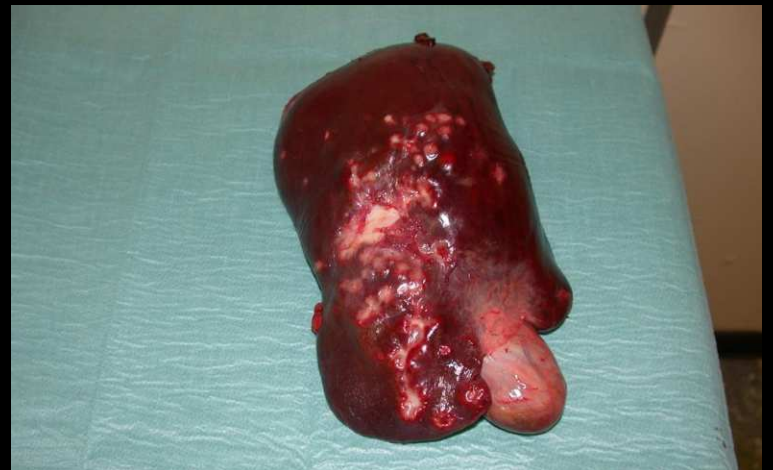
métastase d'un adénocarcinome colique

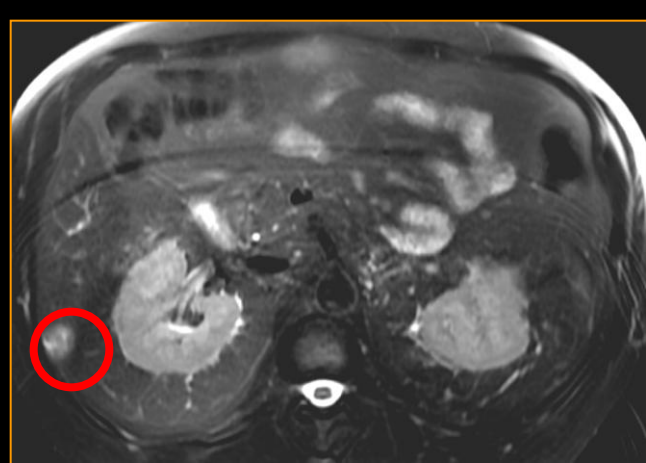
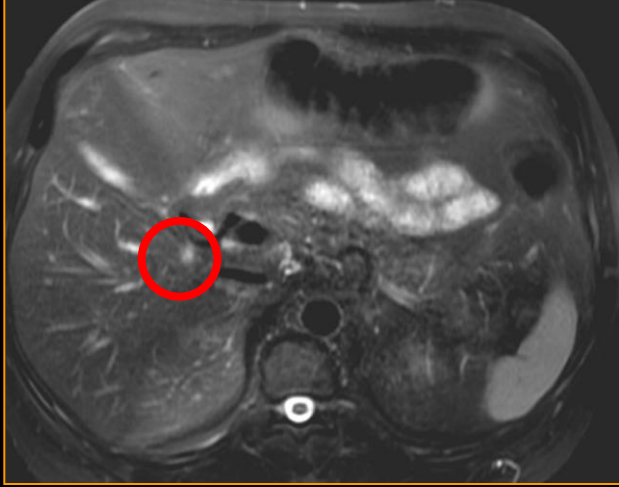
Avant chimiothérapie :



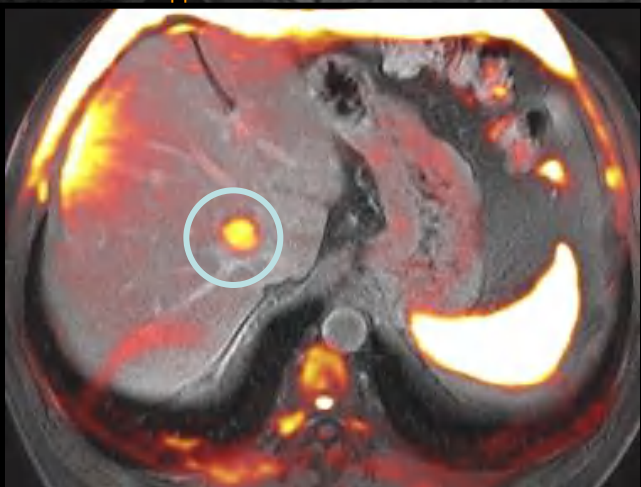


Métastases colo-rectales





Virtual PET MRI



Métastases d'ADK colique : séquence de diffusion est indispensable



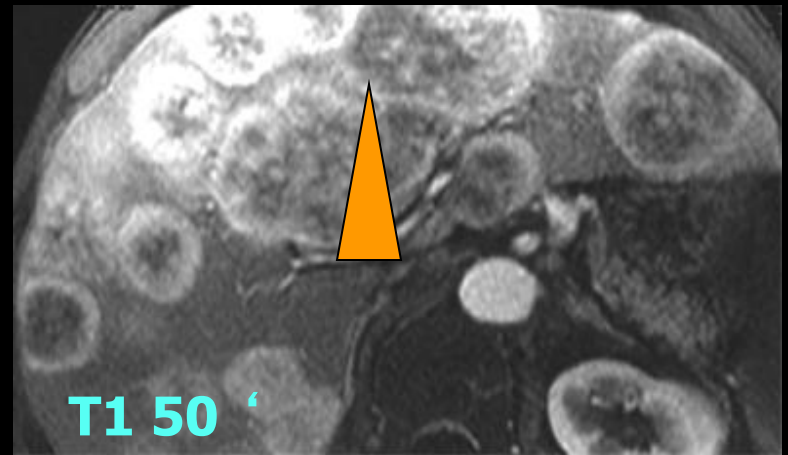
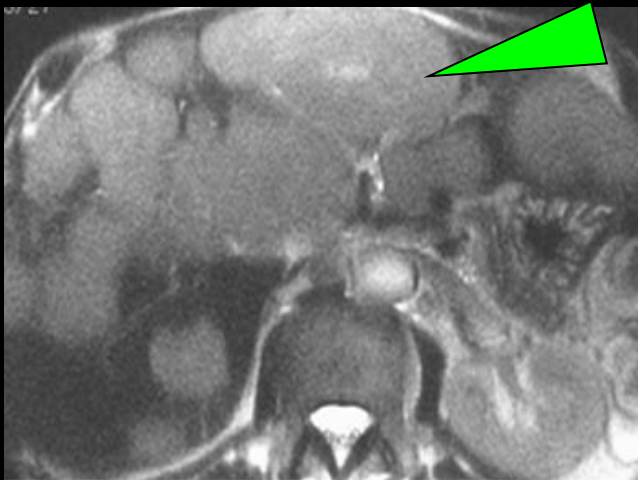
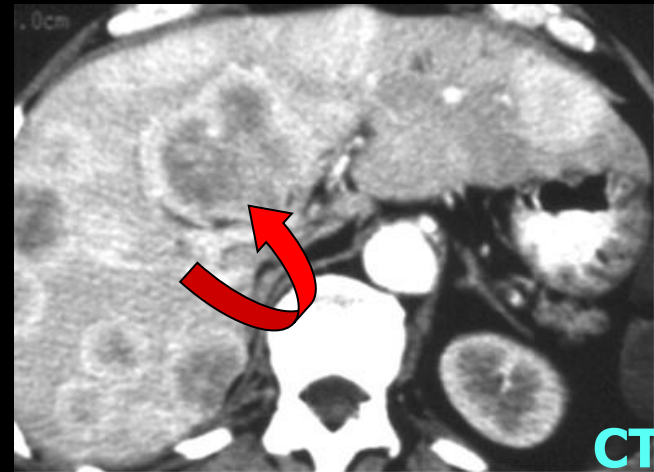
Virtual PET-MRI



Métastases des cancers colo rectaux

- **Prise en charge des MH CCR : Spécificités**
 - Seul traitement curatif : chirurgie +++
 - Encadrée par un protocole de chimio
 - Métastases résécables d'emblée
 - Potentiellement résécables
 - Jamais résécables
 - Qd lésions secondaires hépatiques
 - Faire un bilan d'imagerie précis +++ avant tte décision thérapeutique +++
 - IRM ++++ avec séquence de diffusion +++++
 - TDM TAP
 - Après chimio : refaire imagerie , en pré op et ce quelle que soit l'option choisie

CT avt inj Métastases des tumeurs endocrines

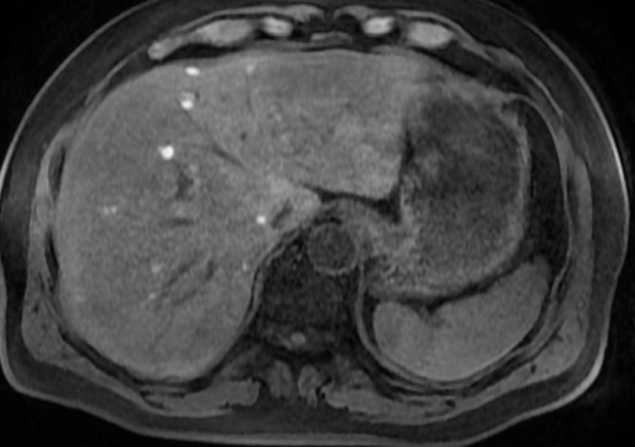
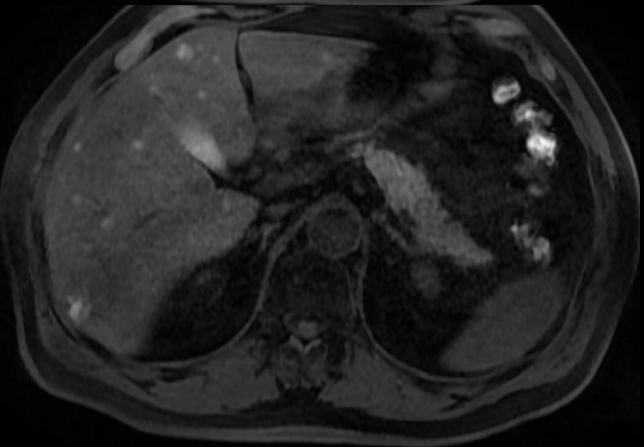
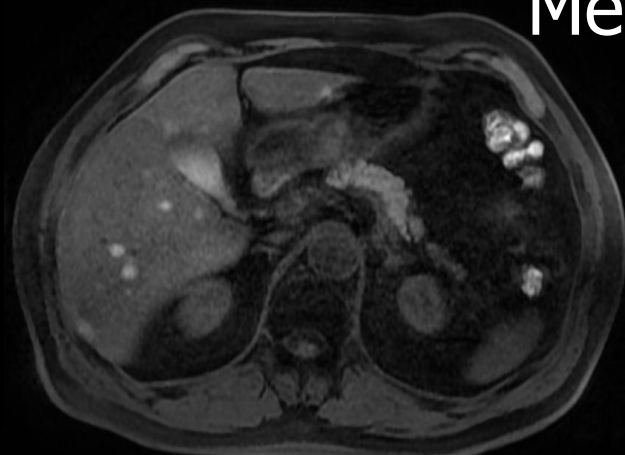


T2

T1 50

Métastases de tumeur endocrine

Métastases de mélanome



Possible hypersignal T1 spontané lié à la présence de mélanine.

