

4.2 CT des occlusions intestinales

a. CT des occlusions du grêle



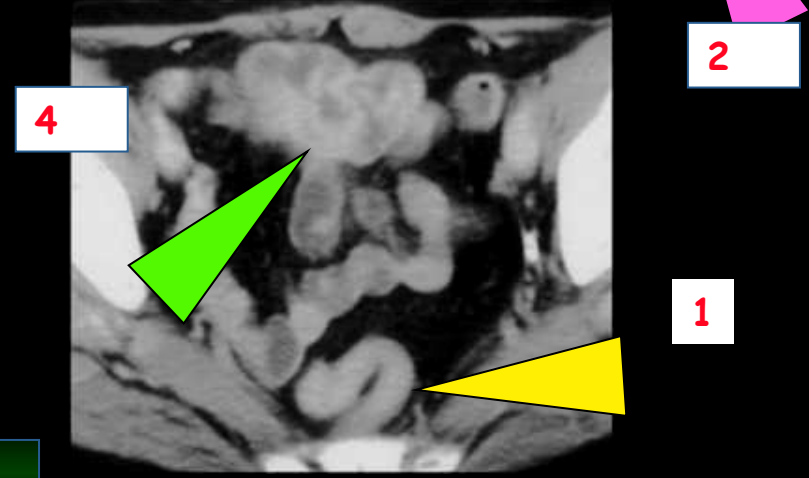
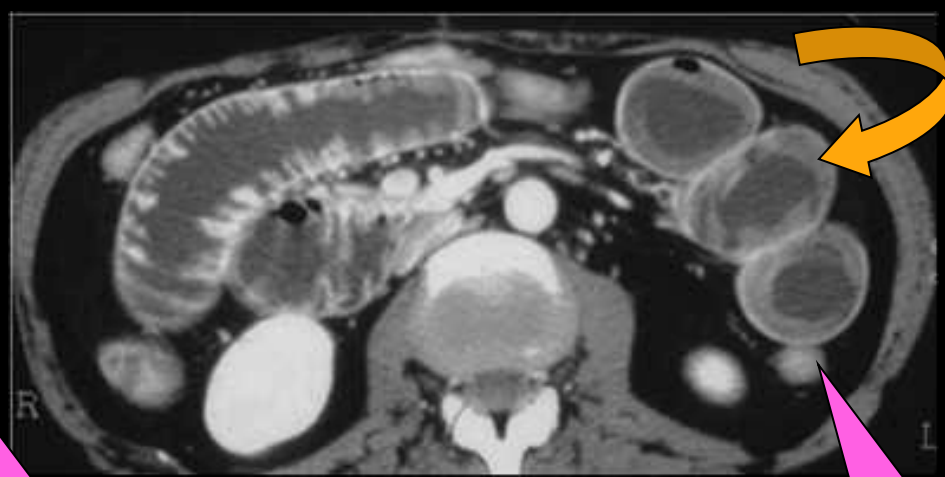
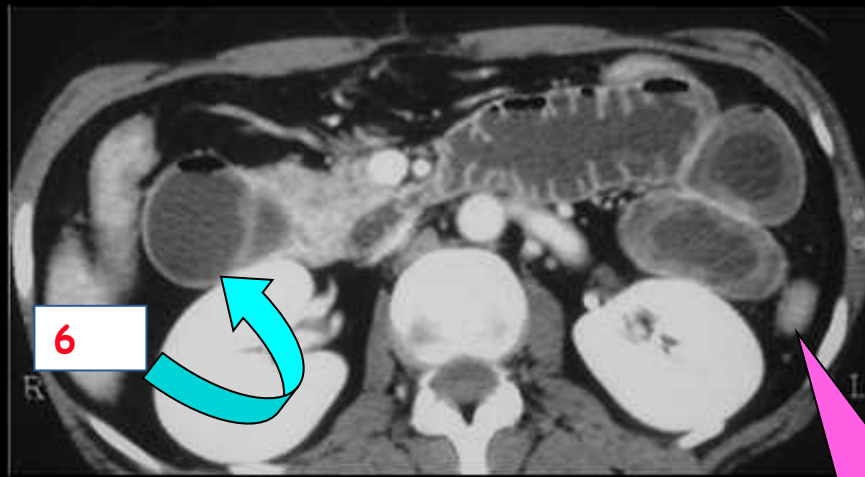
occlusion sur bride ou adhérences **sans** strangulation vasculaire = **problème "mécanique"** (compression extrinsèque de la paroi digestive) en un point



volvulus sur bride **avec** strangulation vasculaire = **problème "ischémique" dominant** (immédiat ou différé) ;compression en 2 points de la paroi digestive

1^{ère} étape: affirmer le syndrome occlusif =
éliminer un ileus fonctionnel, cad affirmer la présence de segments
digestifs non distendus (d'un syndrome sous lésionnel grêle)

5

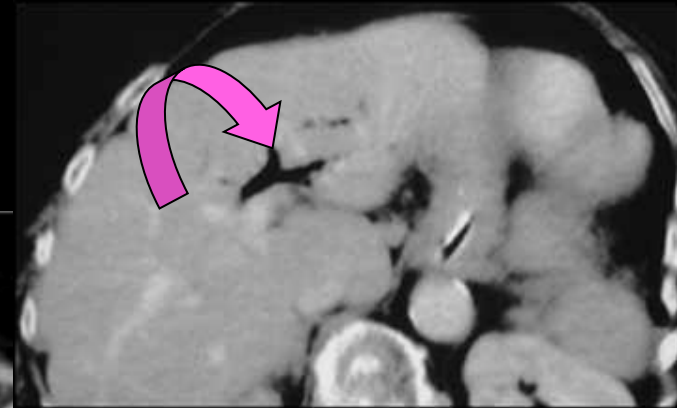
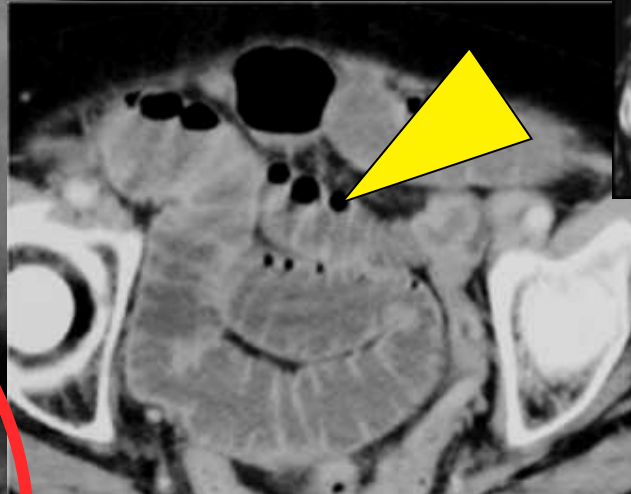
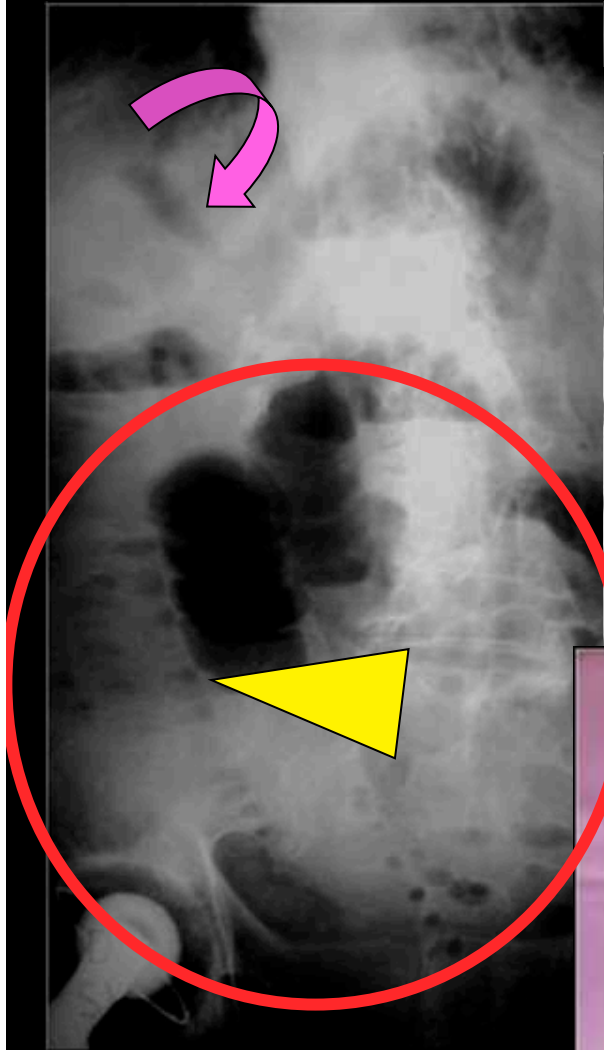


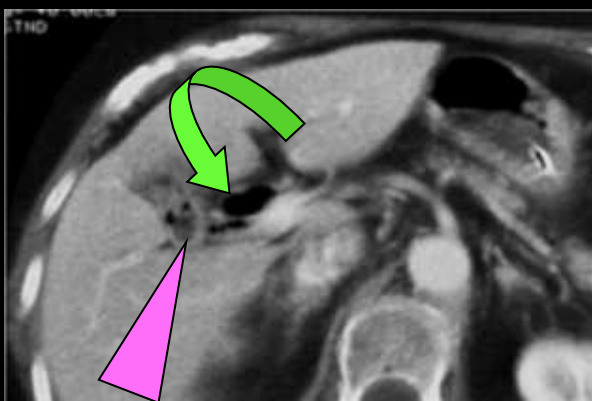
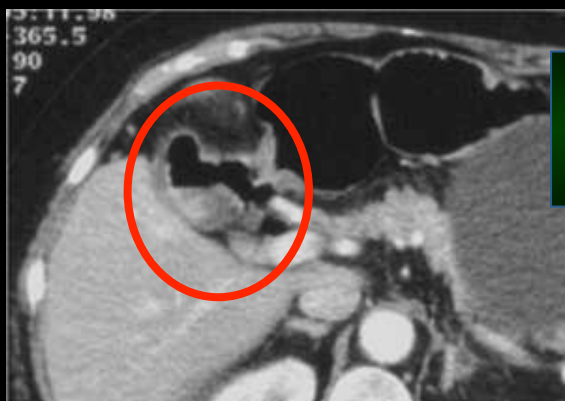
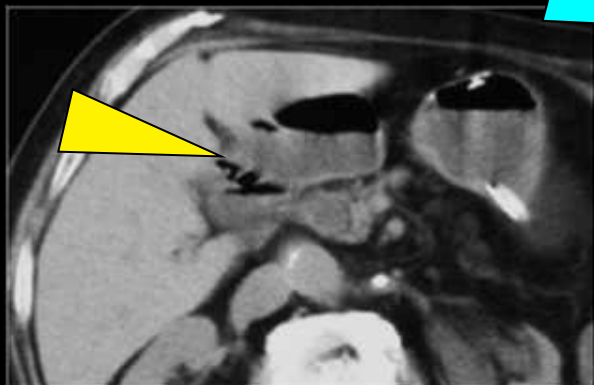
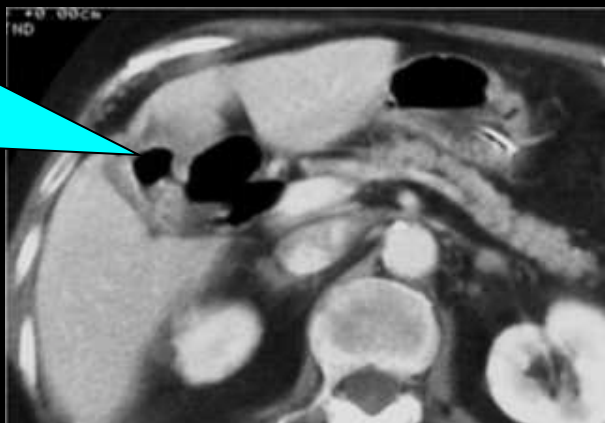
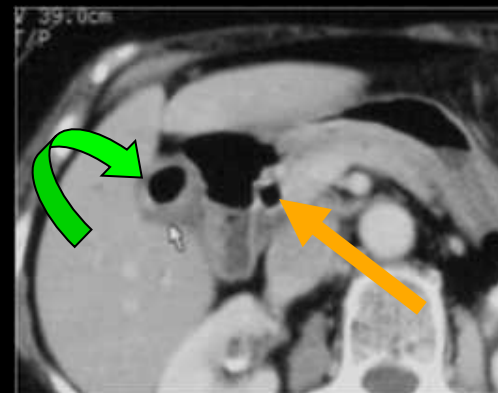
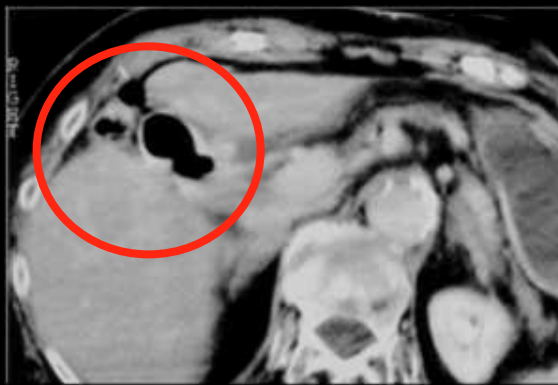
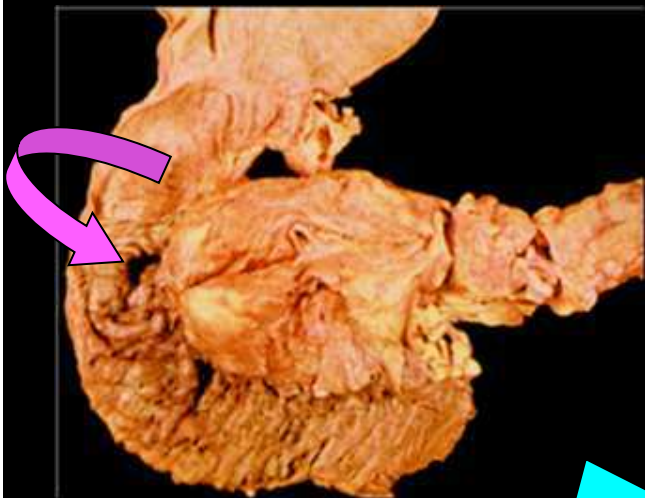
occlusion sur bride sans volvulus

2^{ème} étape: diagnostic étiologique :

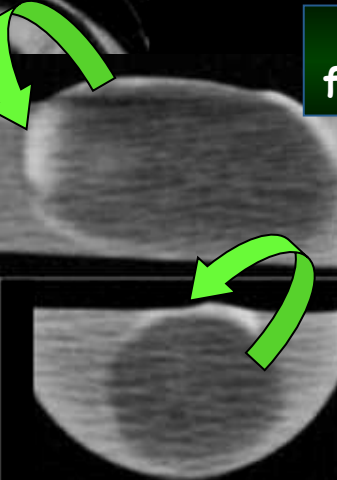
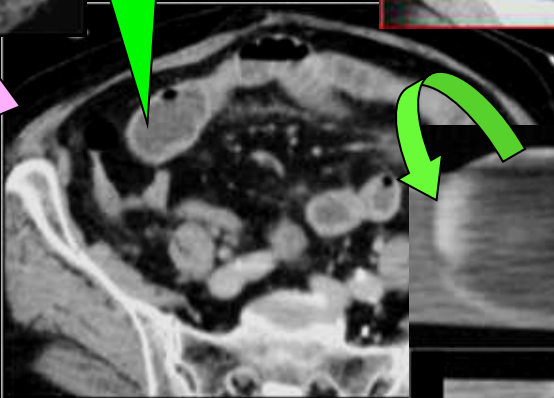
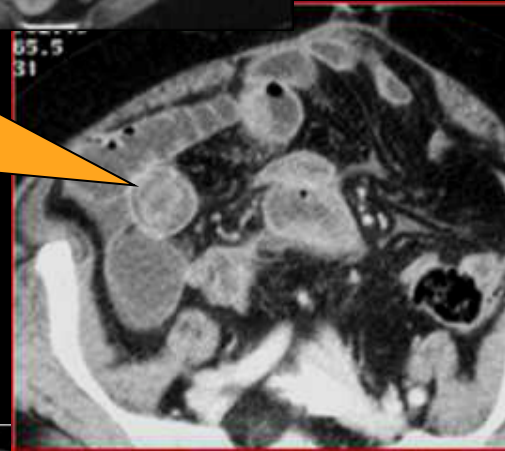
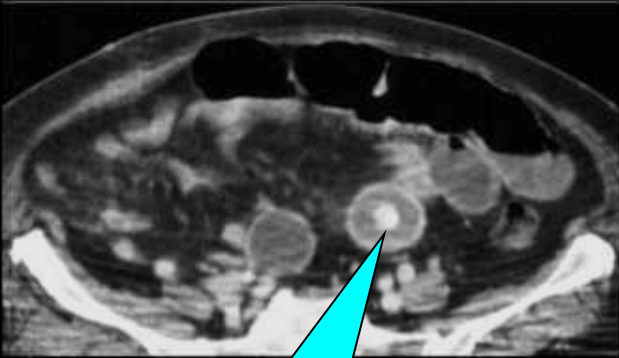
les causes " évidentes " d'occlusion du grêle

1. ileus biliaires

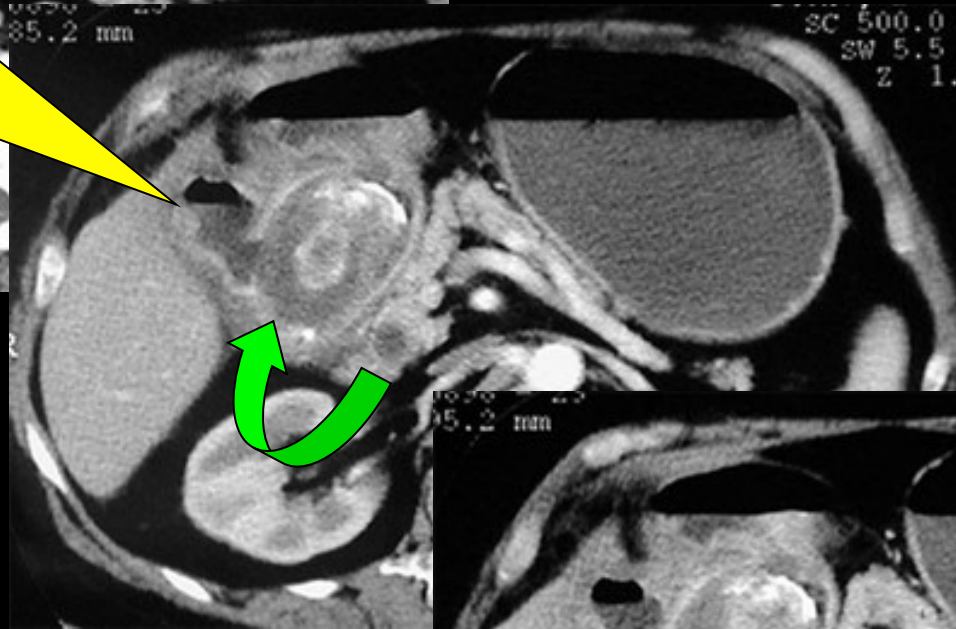
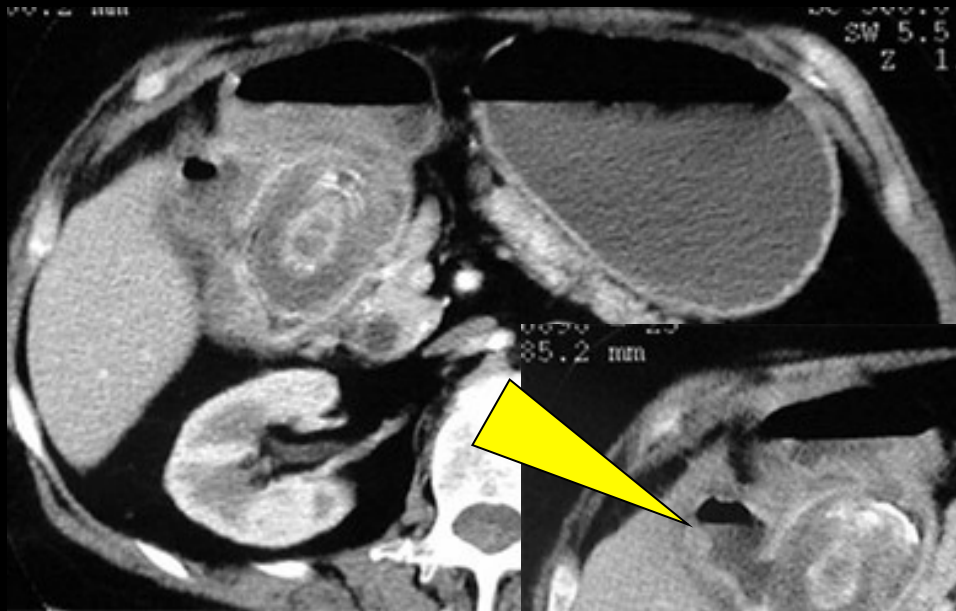




la pneumobilie, (en particulier le pneumocholécyste) est variable et peut manquer !

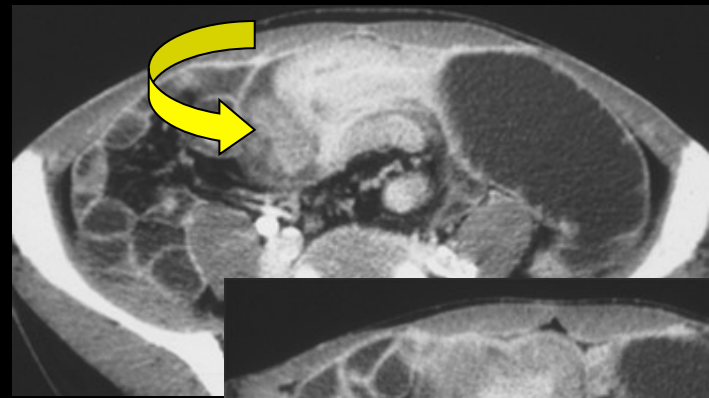
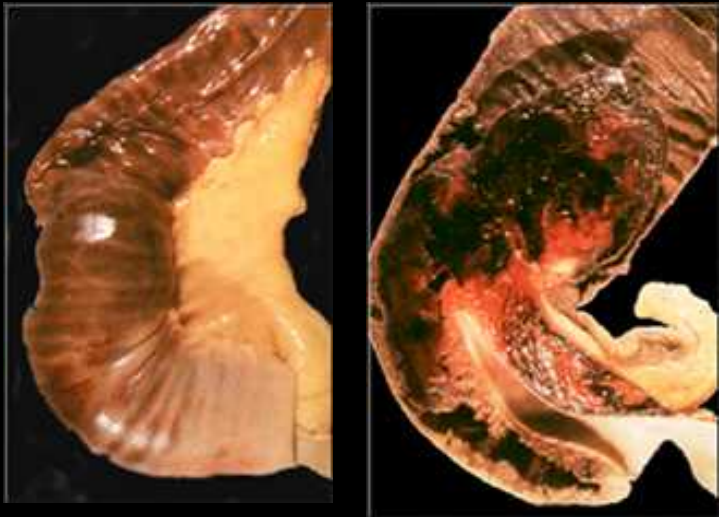


la visibilité du(des) calcul(s) est fonction du degré de calcification



ileus biliaire duodénal
durcissement épigastrique intermittent de Bouveret

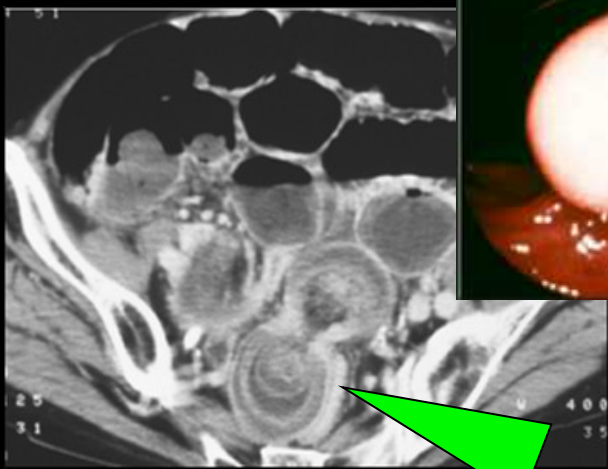
2. invaginations aiguës



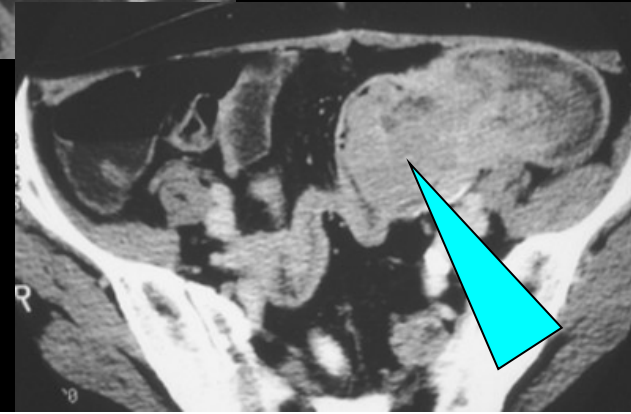
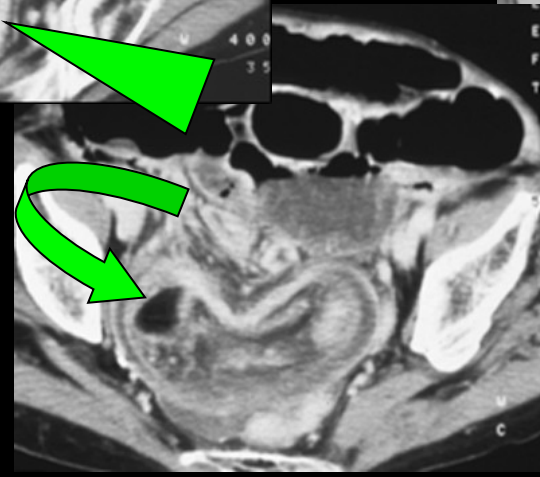
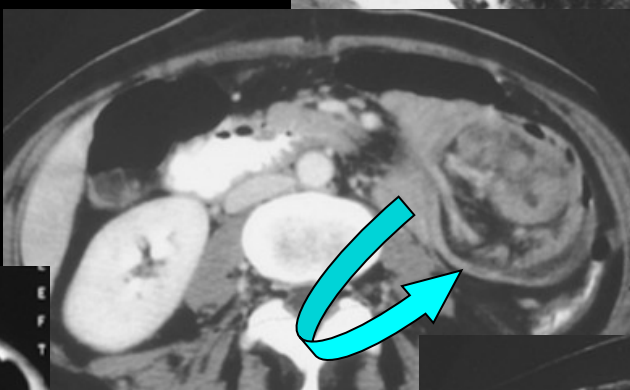
lmnh

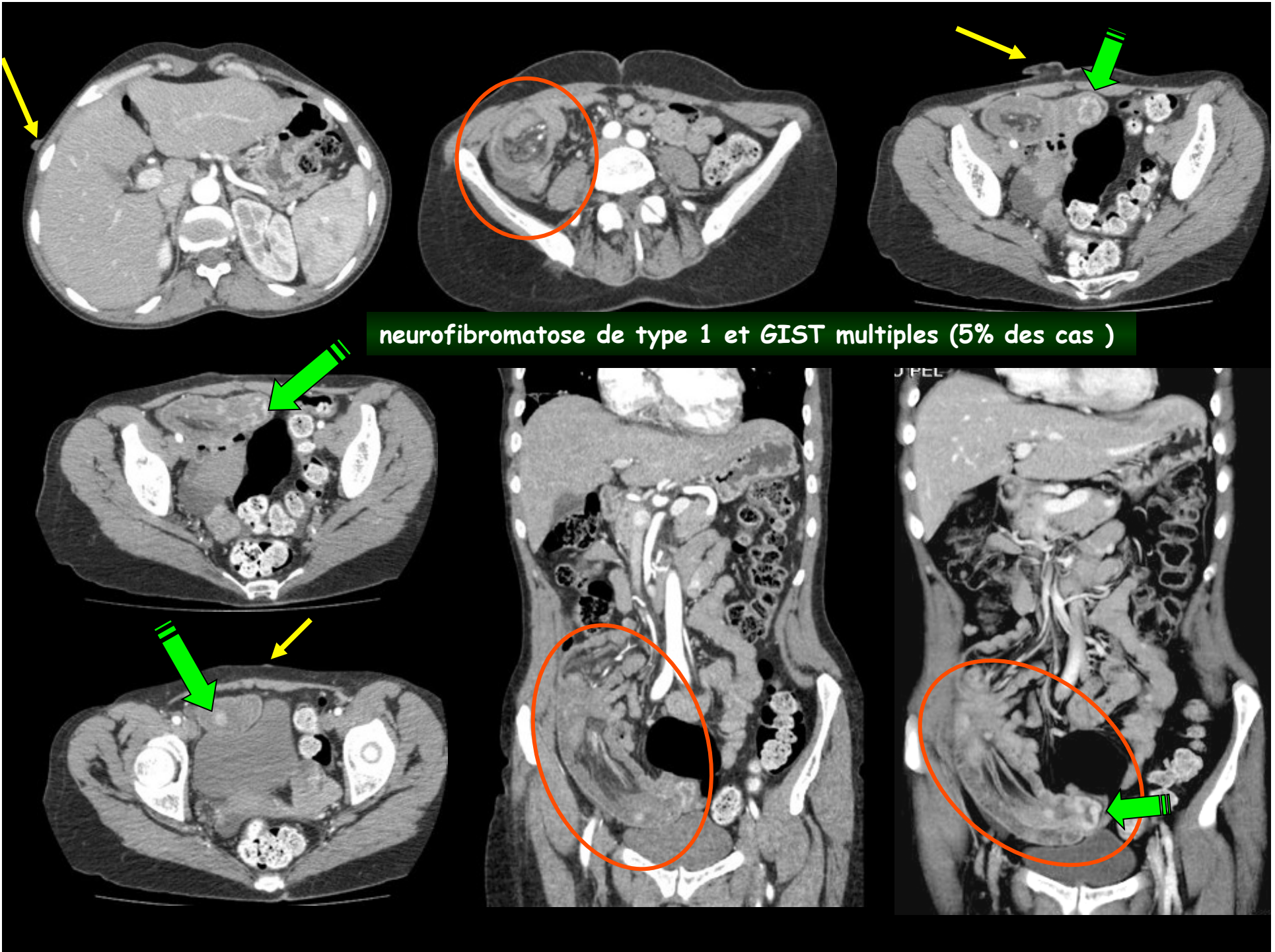


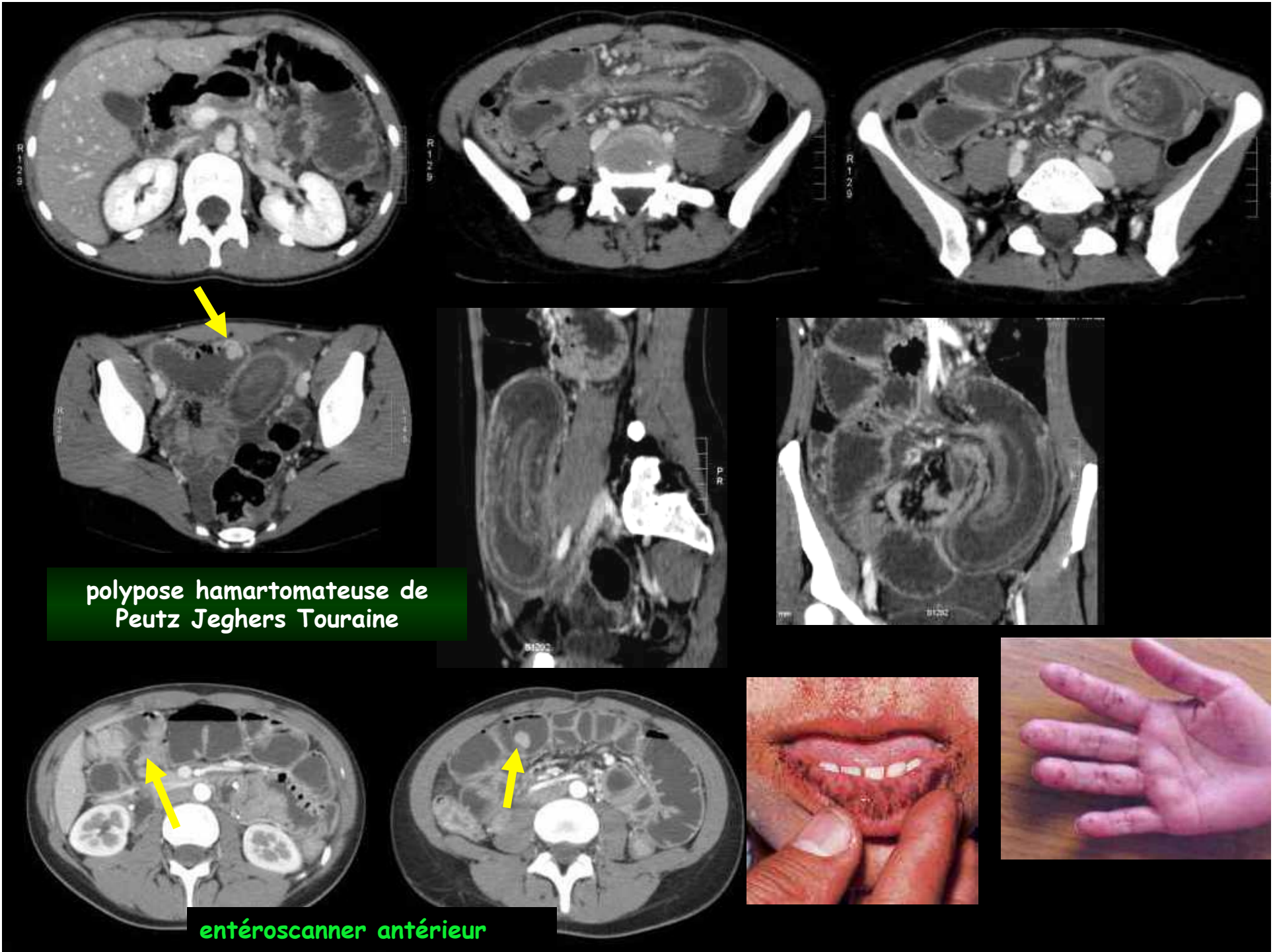
métas
mélanome

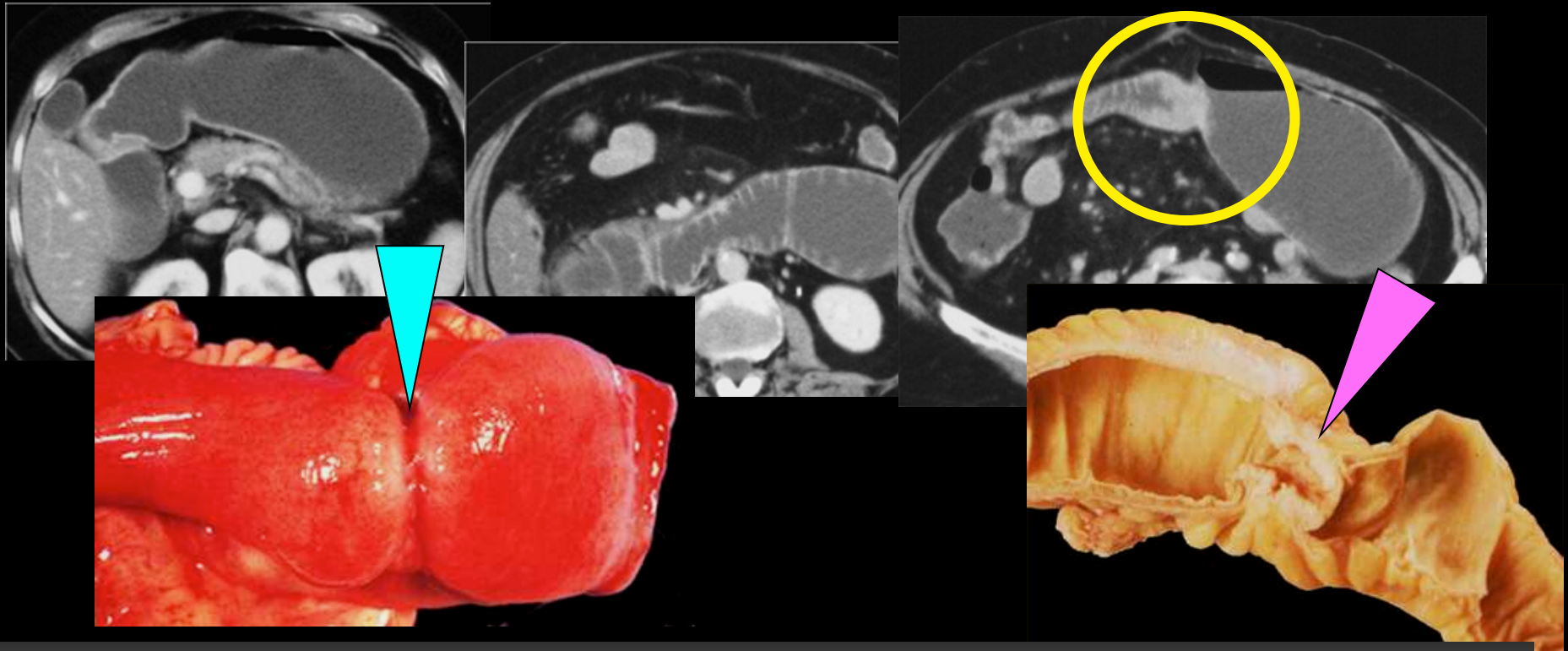


lipome

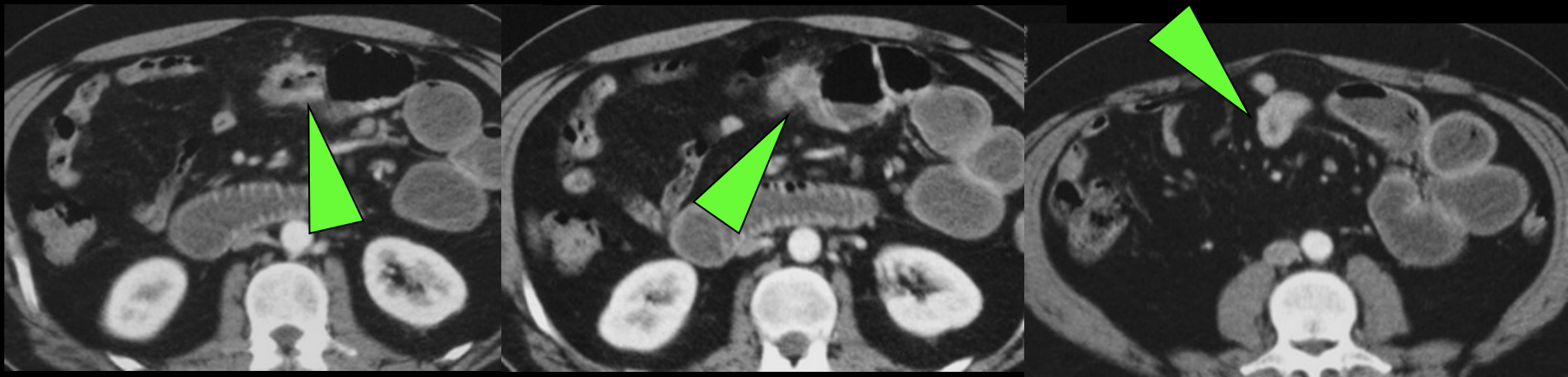


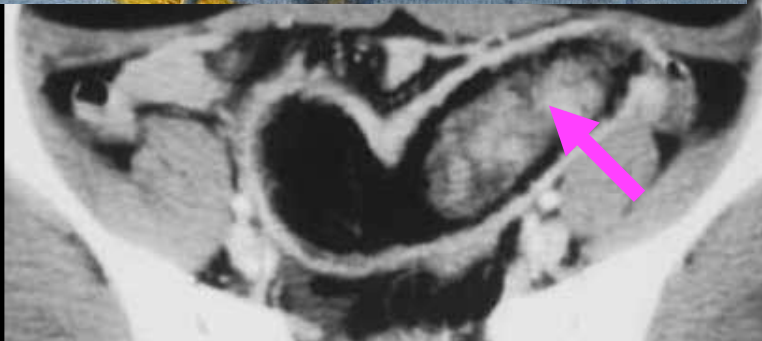
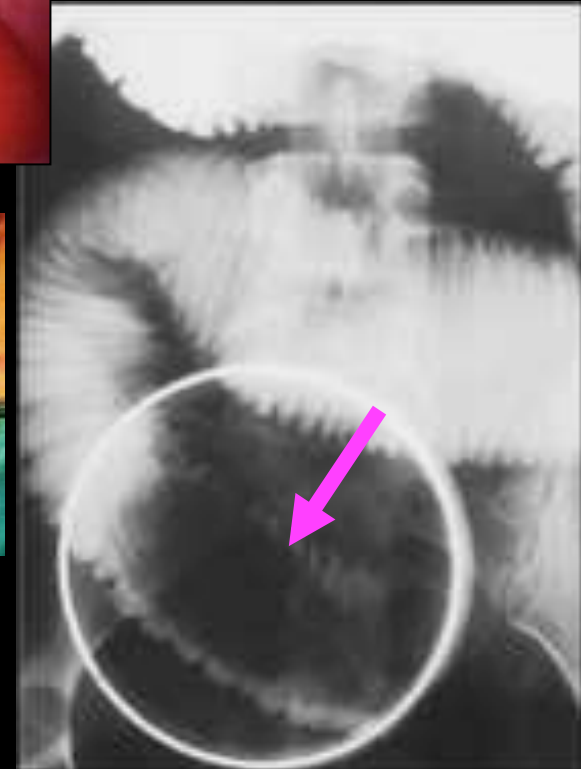
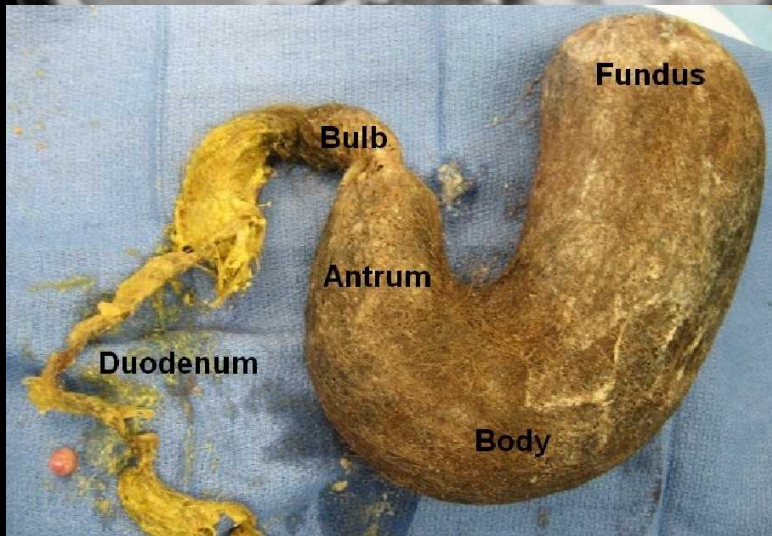






3. sténoses tumorales jéjunales hautes
nap ring adenocarcinoma = lésion circonférentielle courte ou LMNH



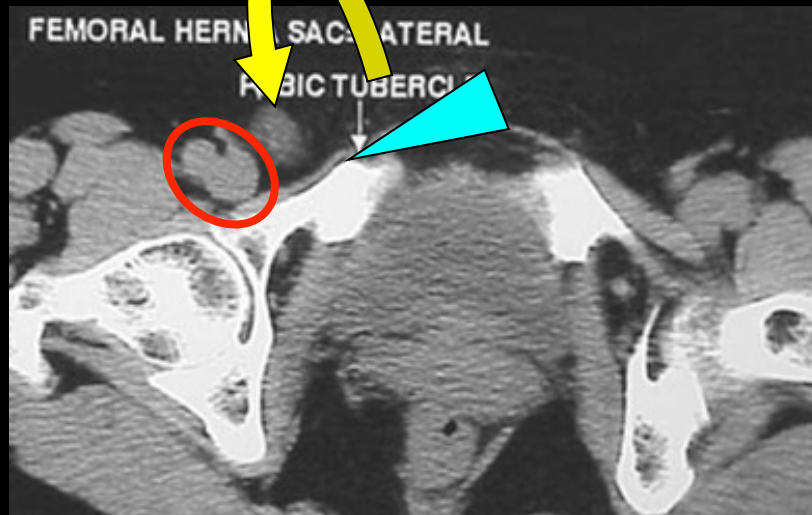
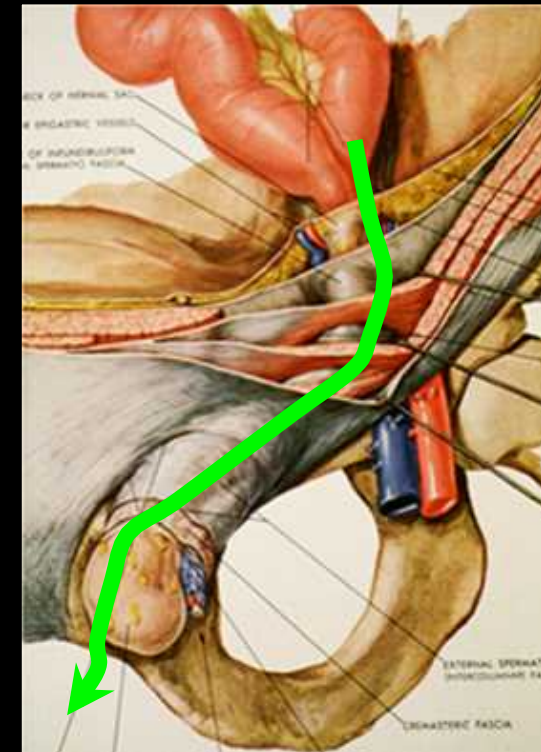
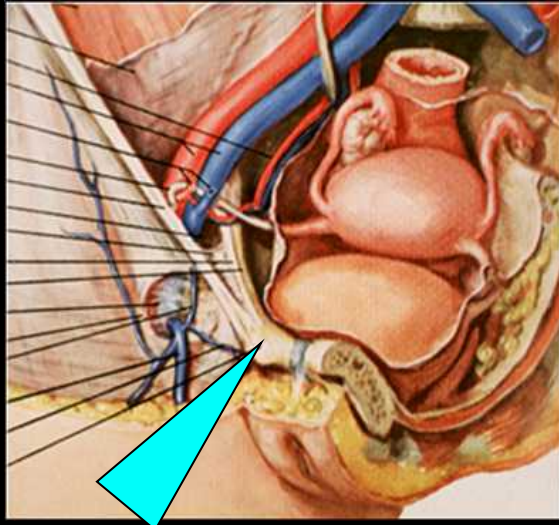


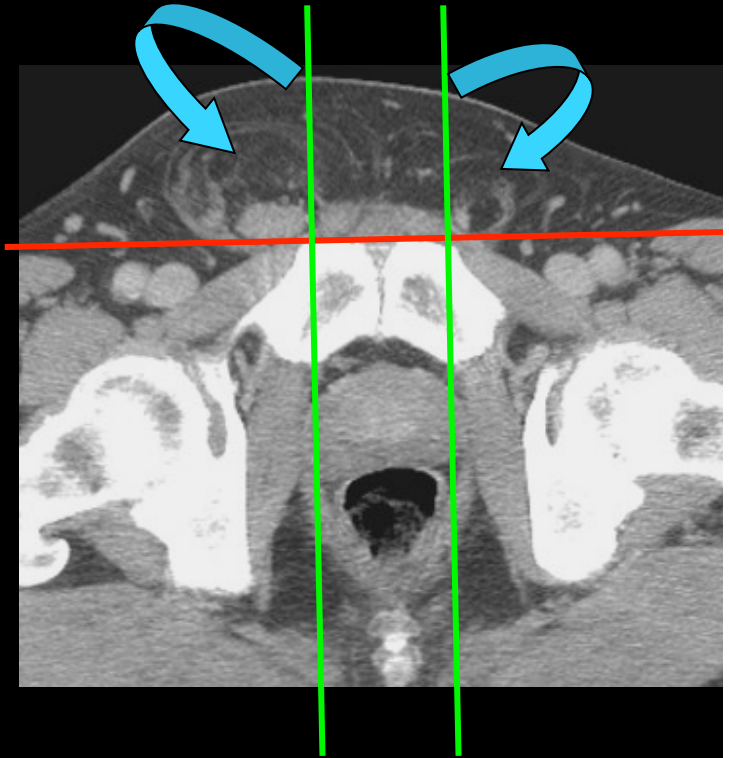
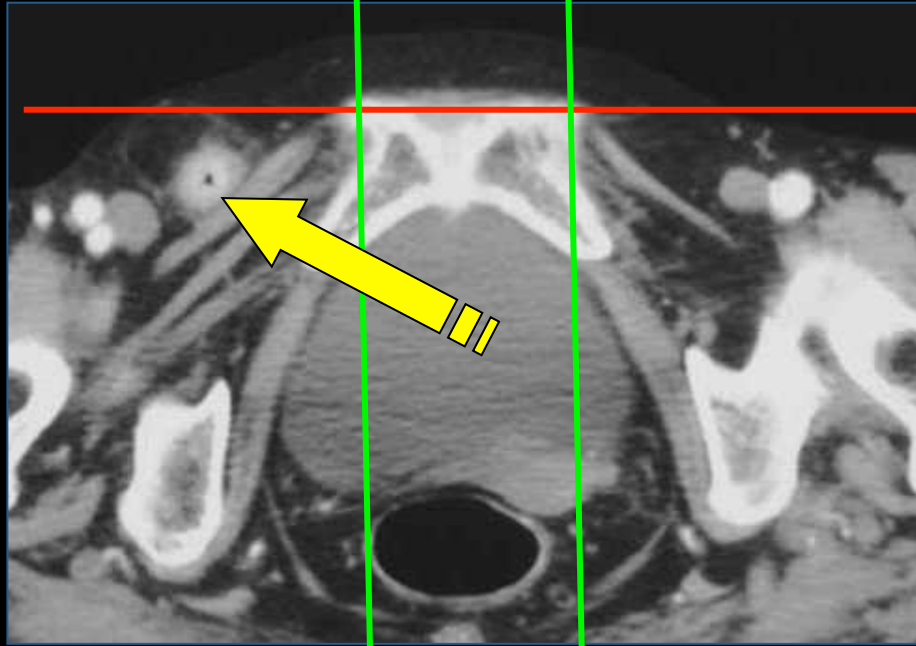
4. bézoards
trichobezoard
jeune fille
trichotillomaniaque

Sd de Rapunzel ou de Raiponce

3^{ème} étape : examen des orifices herniaires +++

région inguino-scrotale ; trous obturateurs ; ligne blanche; hernies incisionnelles

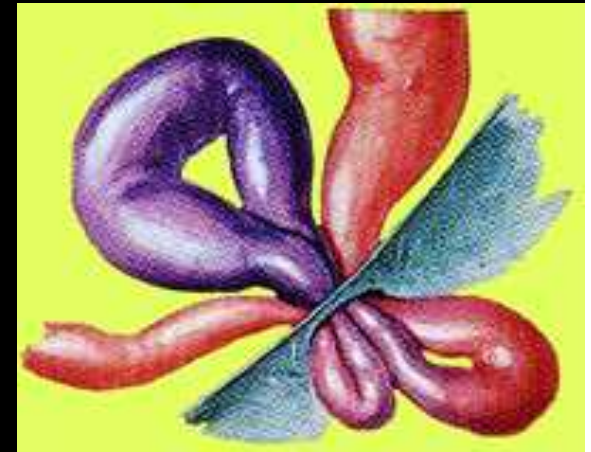




repères orthonormés pour les hernies de l'aine

Wechsler et coll : AJR,1989,153,517-521

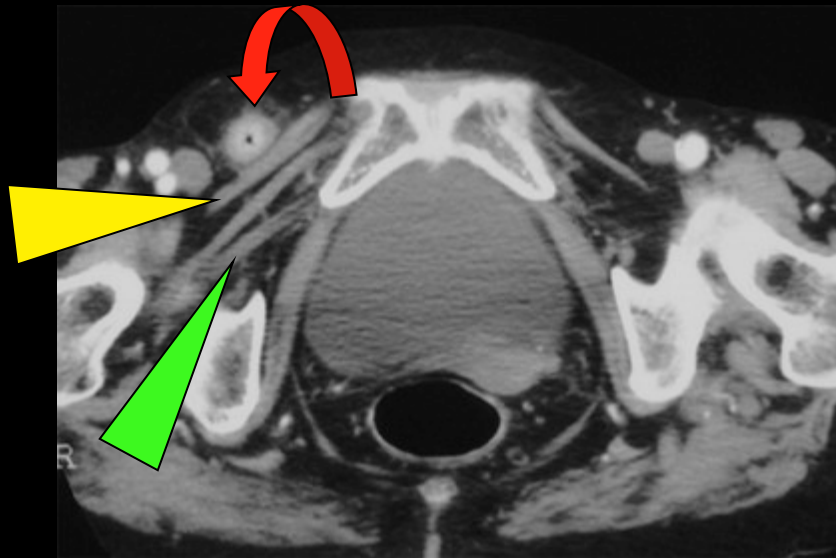
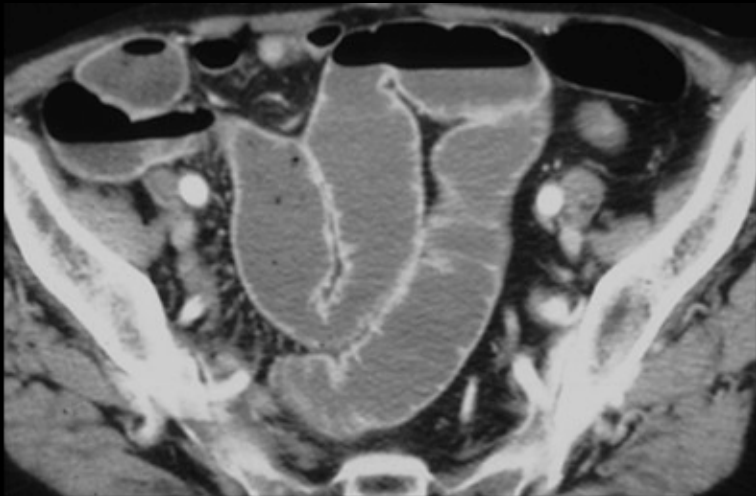
Delabrousse et coll : J Radiol.2005 ;86:393-8



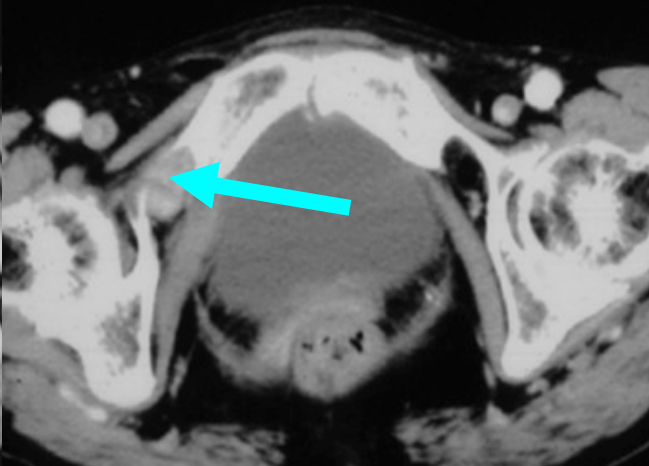
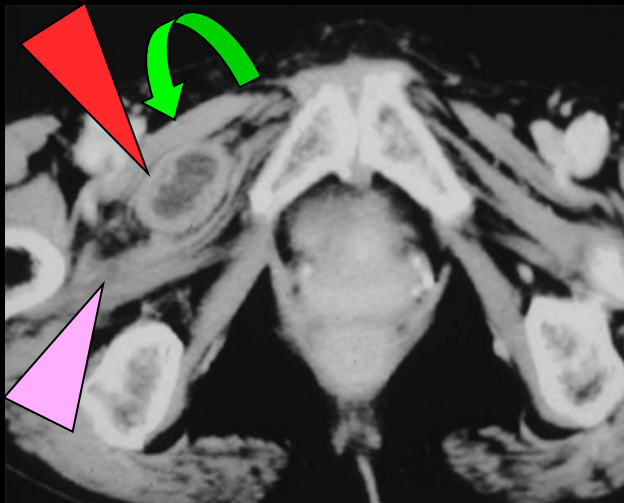
hernie inguinale
hernie en W de
Maydl



Karel Maydl (1853-1903)

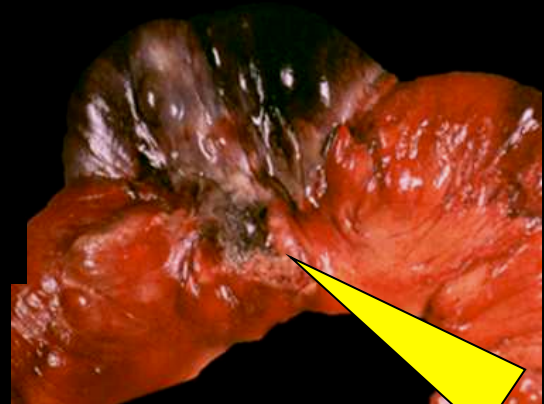
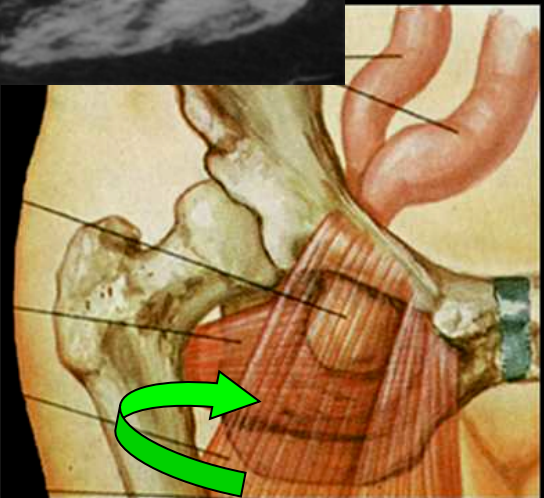


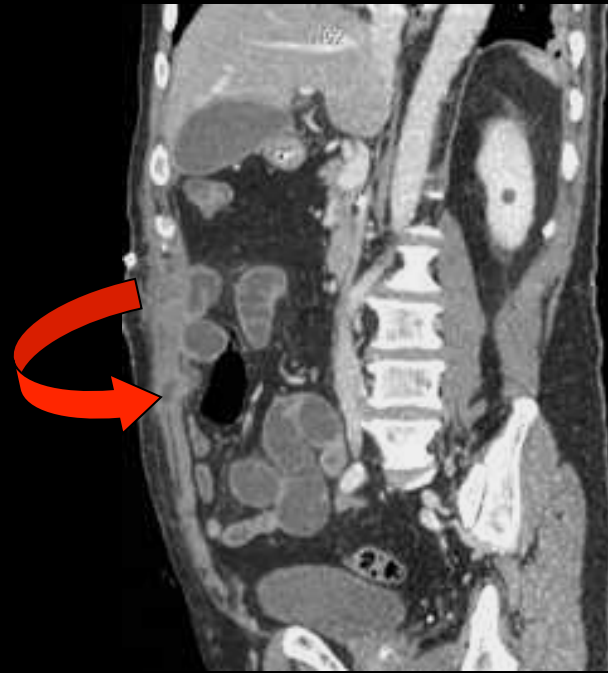
hernie **crurale**, en avant du muscle pectiné !!!



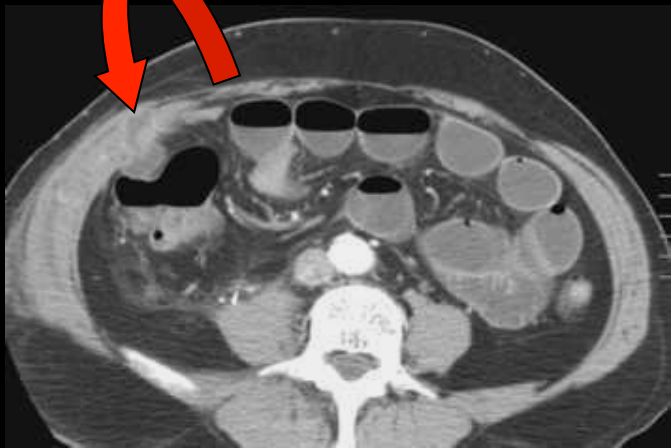
hernie **obturatrice**; pincement latéral= **hernie de Richter**

Signe de Howship-Romberg ; signe de Hannington-Kiff



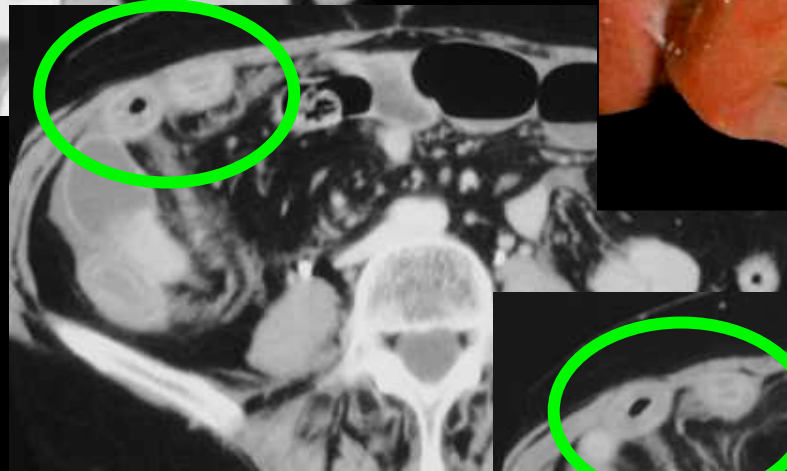
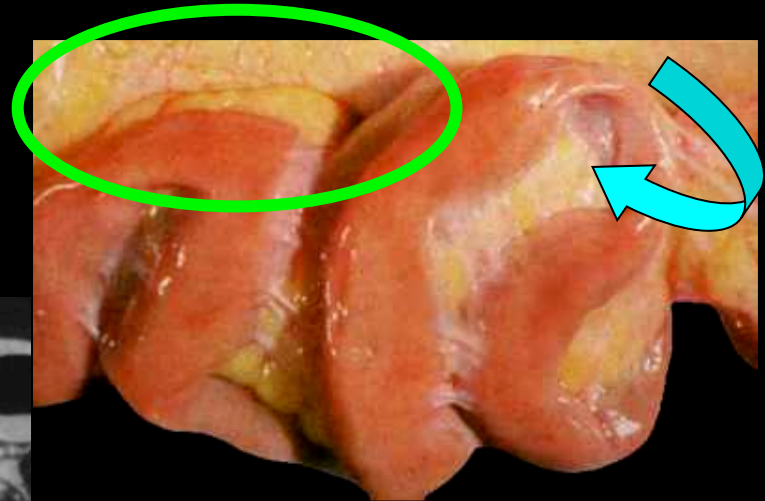
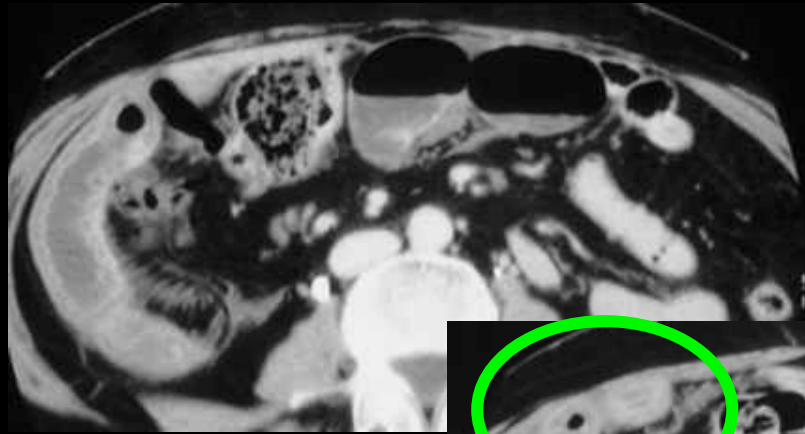


anse incarcerationnée dans un orifice de coelochirurgie

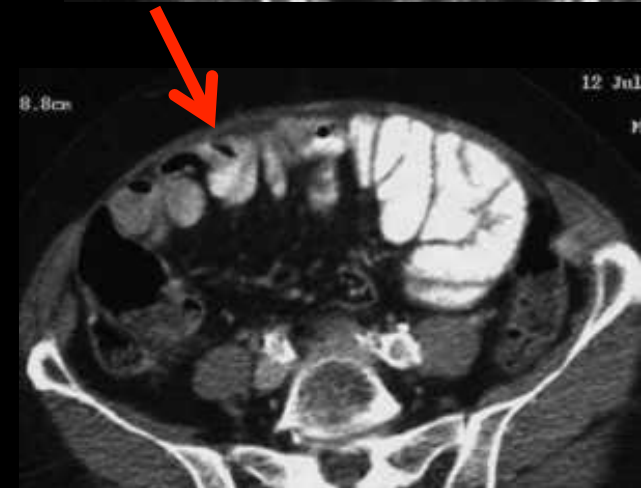
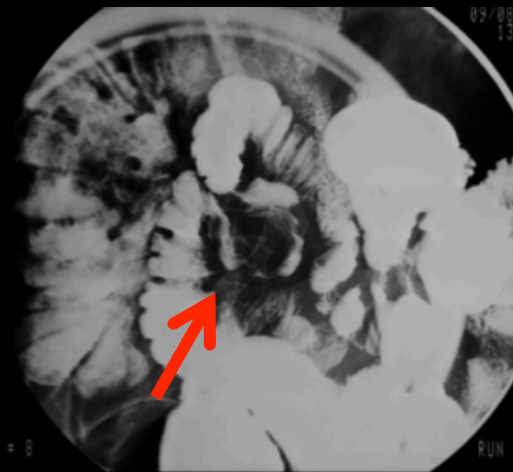
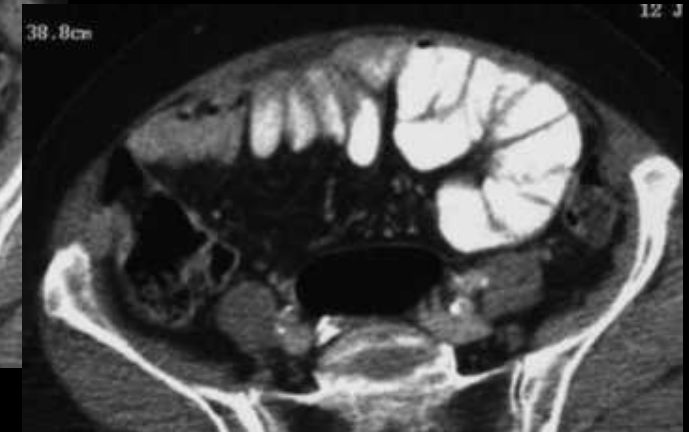
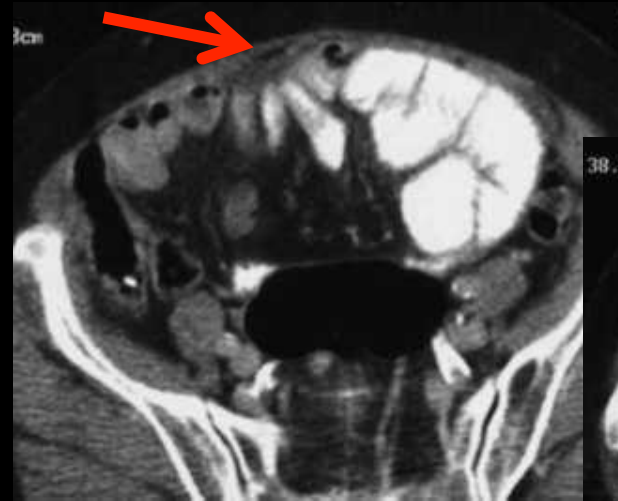


4^{ème} étape : recherche d'une occlusion sur bride et évaluation des signes de " souffrance "

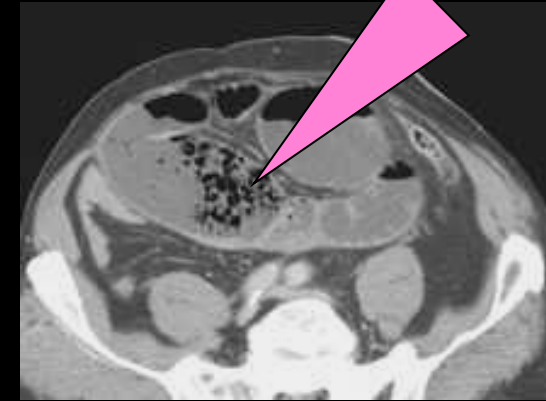
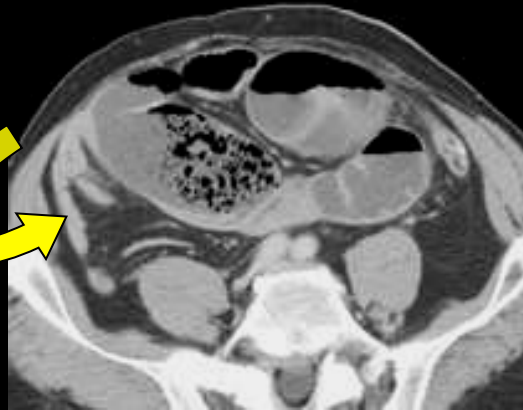
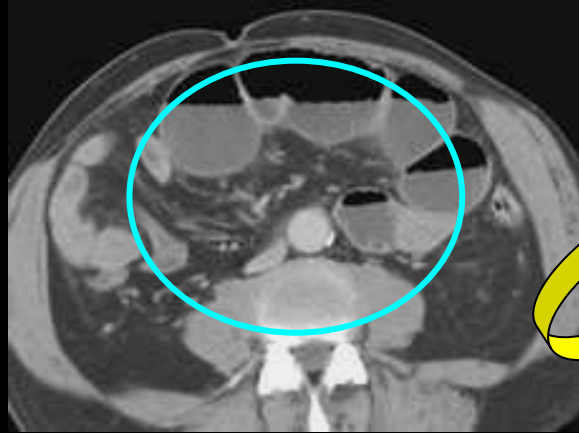
compression extrinsèque simple : adhérences et brides



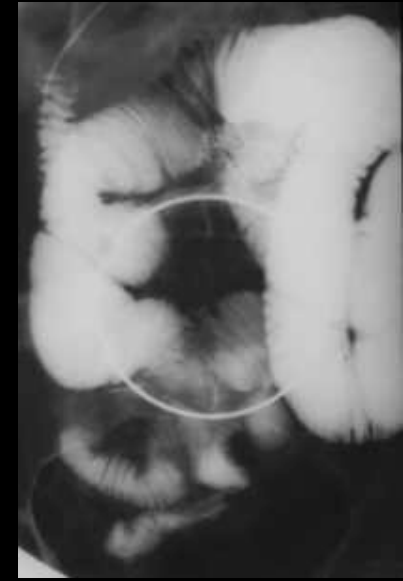
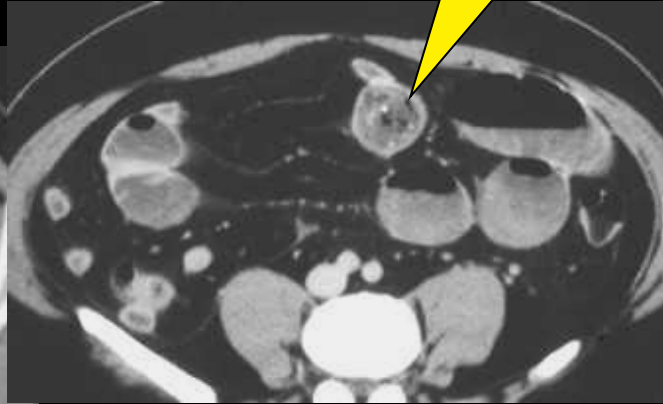
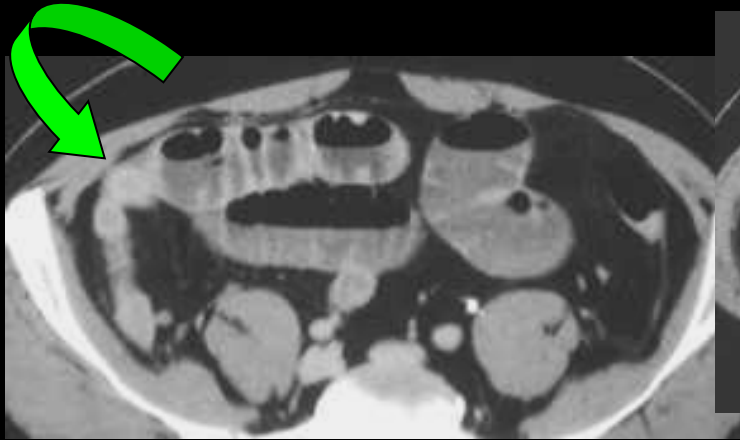
occlusion sur adhérences intestino-mésentériques



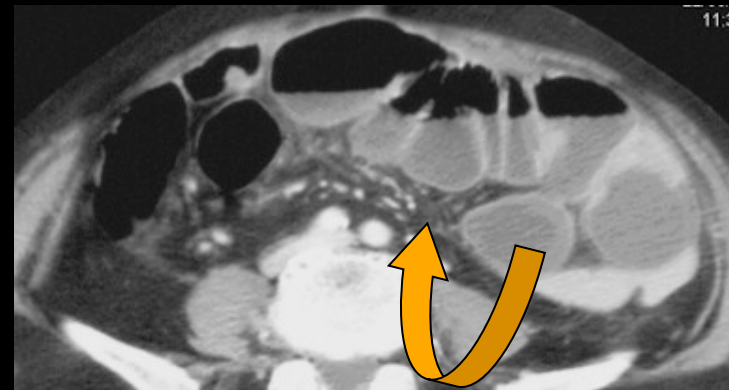
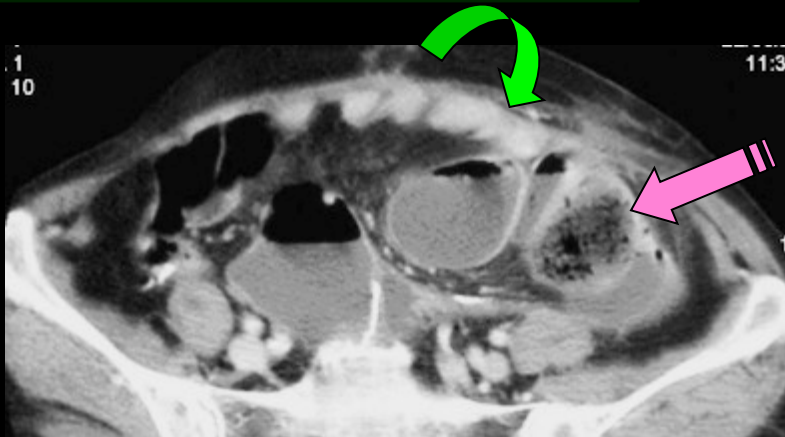
adhérences intestino-mésentériques
pariétales antérieures et interanses



occlusion sur **adhérences** intestino-mésentériques ; volvulus chronique **sans images de strangulation** ; "pseudo-fèces" valeur localisatrice pour le siège de l'obstacle++++

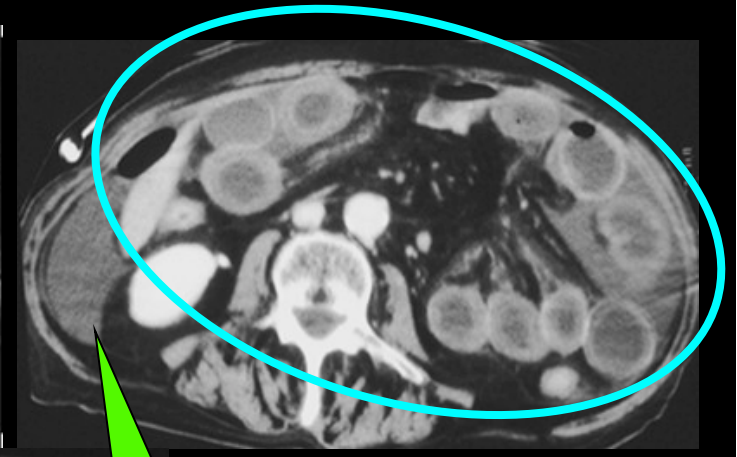
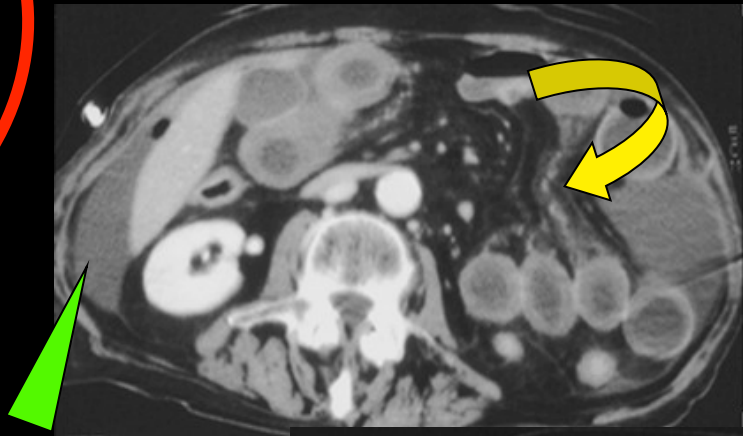
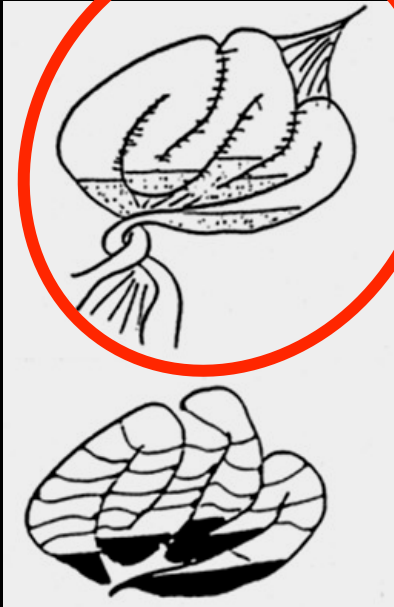


adhérences et bézoard

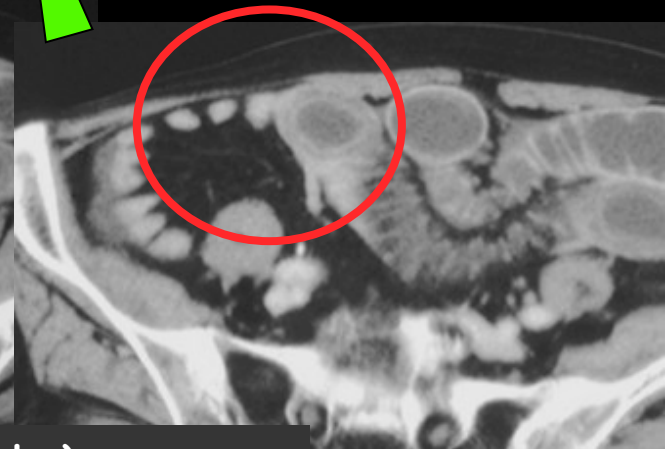
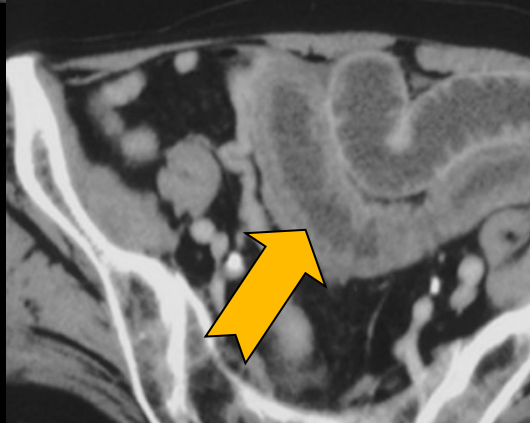


- pas de disposition radiaire des anses
- pas (peu) de « souffrance » vasculaire mésentérique ni intestinale
- anse comprimée en un seul endroit
- composante endoluminale associée fréquente (bezoard)

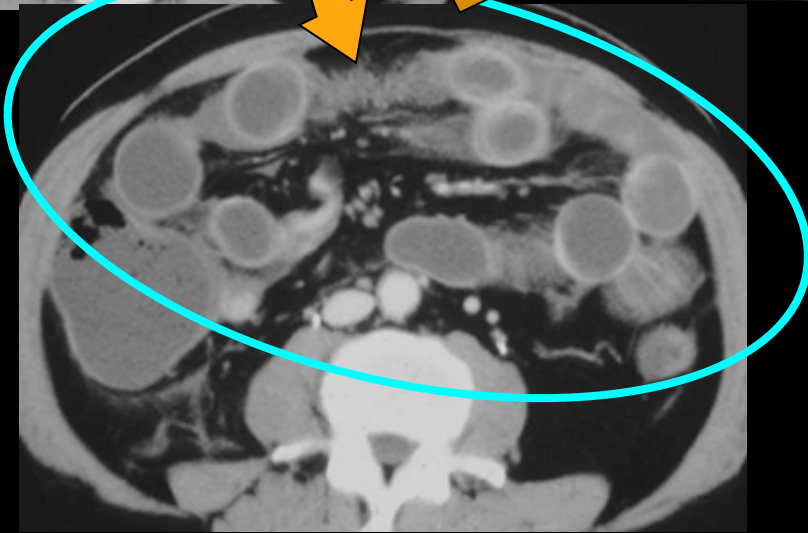
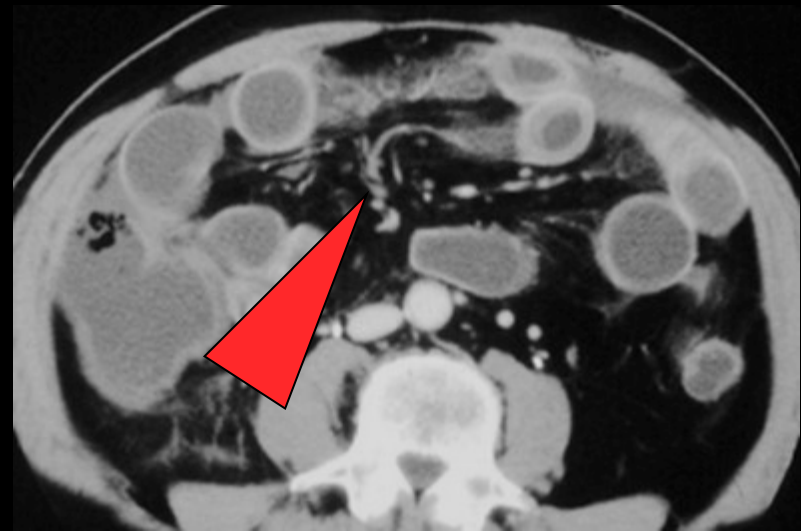
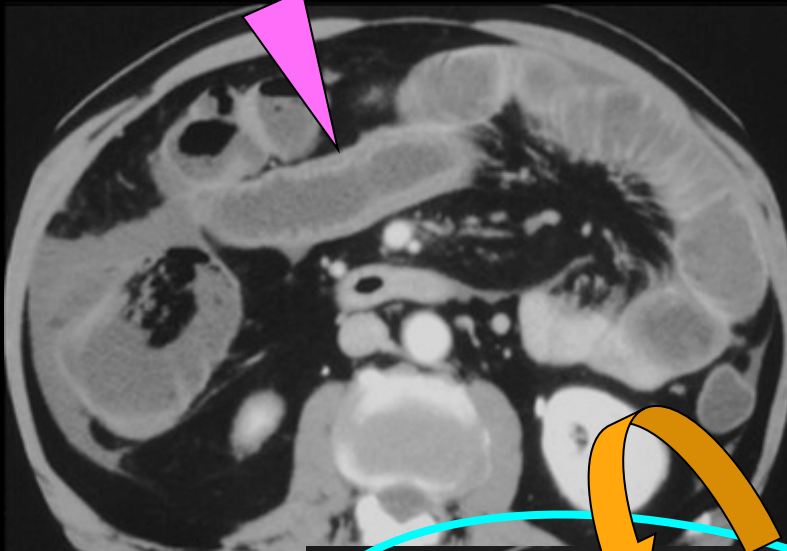
volvulus sur bride



volvulus sur bride
avec signes de congestion veineuse

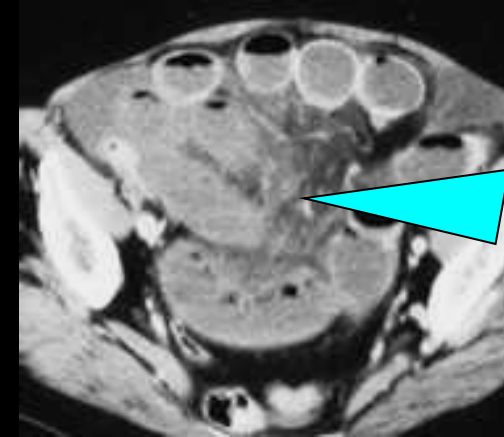
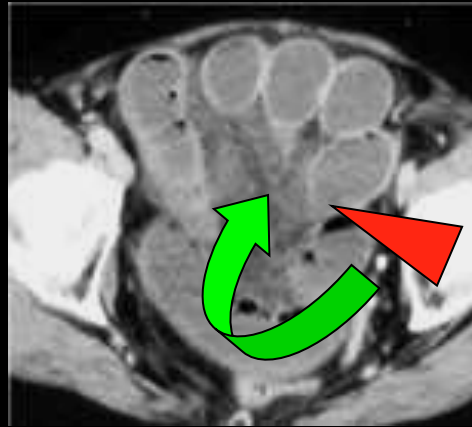


- congestion (oedème) **modérée** du mésentère(vaisseaux identifiables)
- épaississement circonférentiel des parois (oedème sous muqueux)
- épanchement liquidien péritonéal abondant**

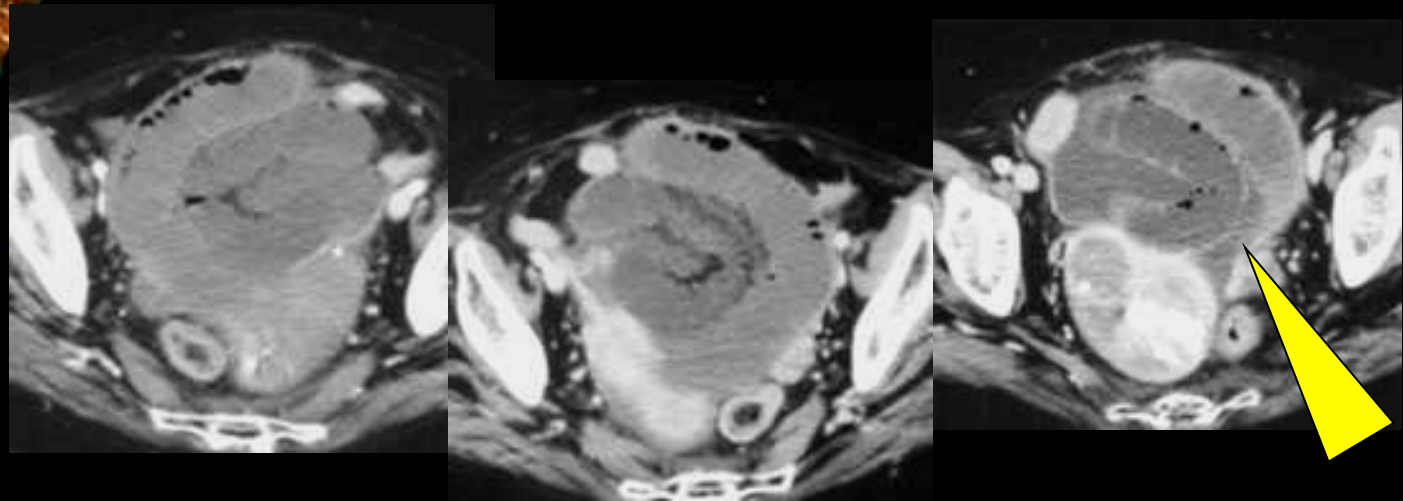


volvulus sur bride
avec signes d'ischémie
subaiguë artérielle
(oedème de la sous muqueuse)

- congestion (oedème) plus marquée du mésentère
- épaississement circonférentiel des parois (oedème sous muqueux)
- pas ou peu d'épanchement liquidien péritonéal

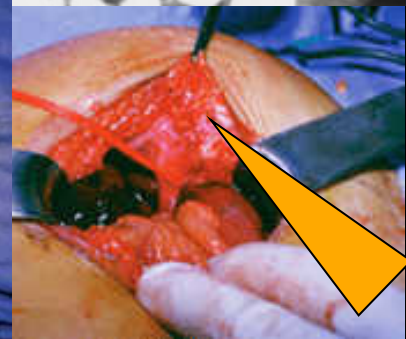
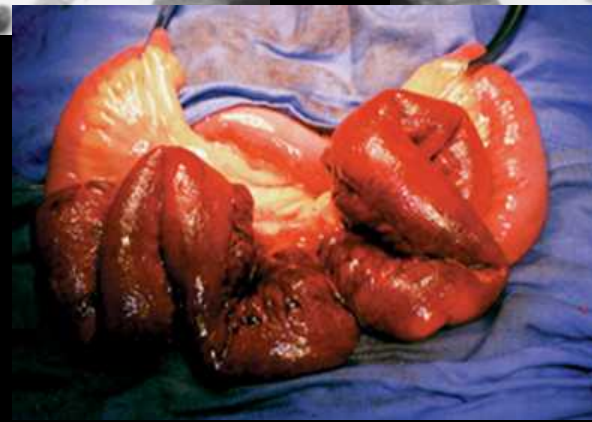
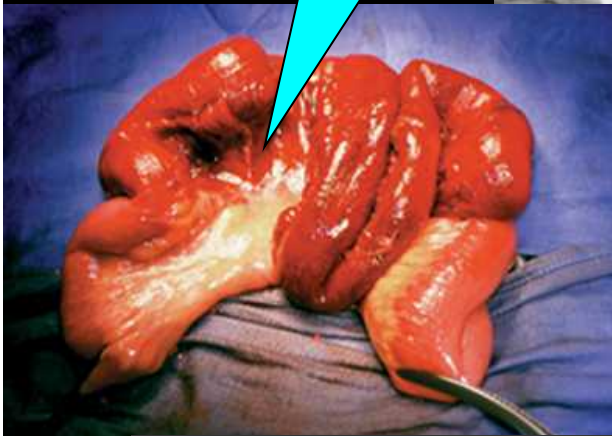
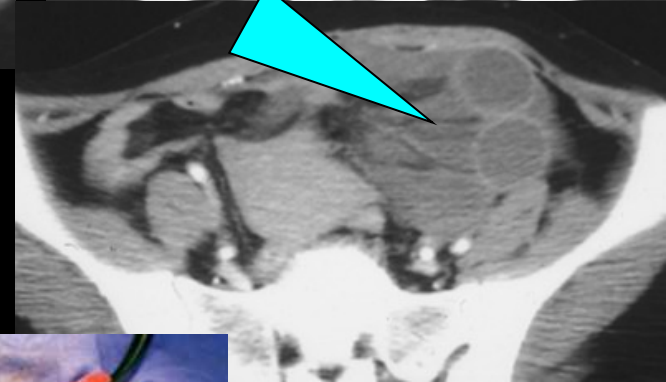
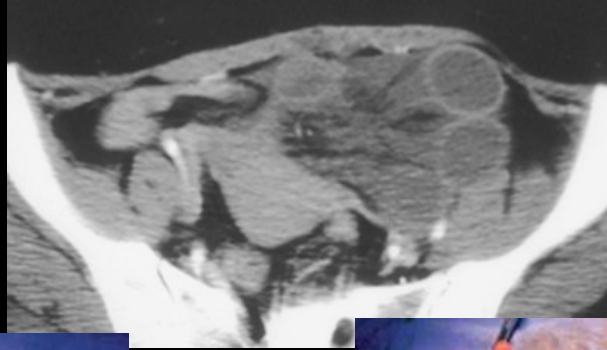
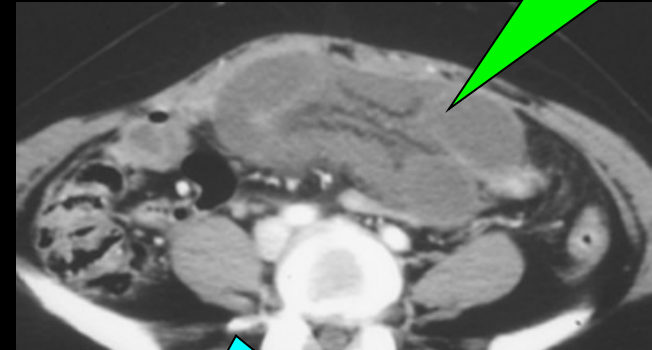
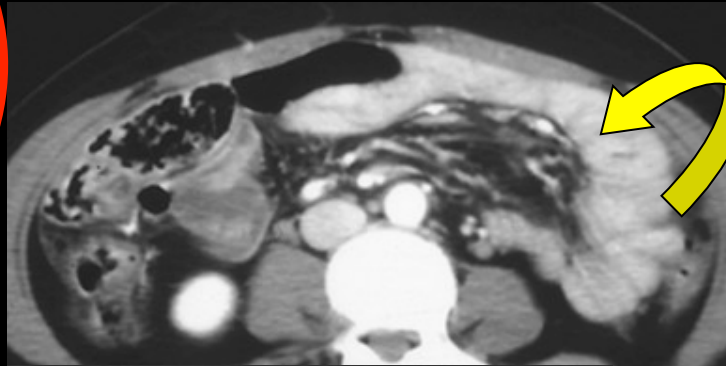
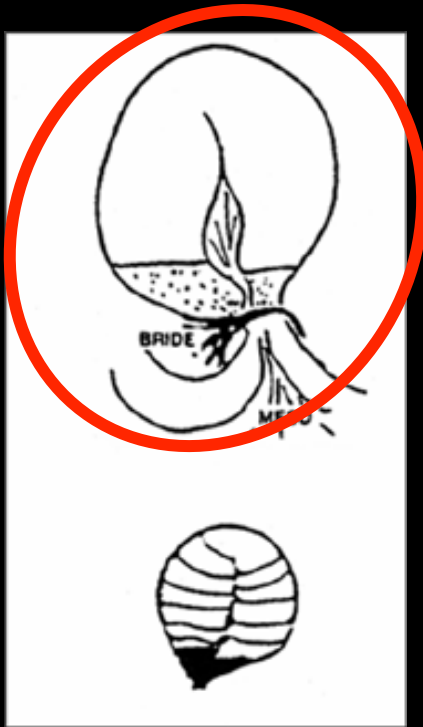


volvulus sur brides avec signes de nécrose



- infiltration **dense** du mésentère (**vaisseaux non identifiables**)
- parois « **virtuelles** » (amincies et non rehaussées)+/-pneumatose
- pas d'épanchement liquidien péritonéal**

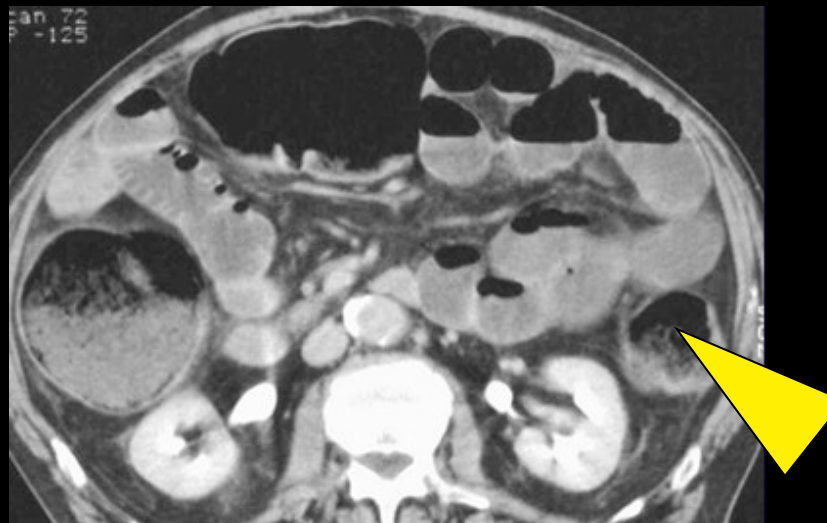
anse incarcerated (closed loop obstruction) = occlusion "à ventre plat"



signes majeurs de nécrose ischémique intestino-mésentérique

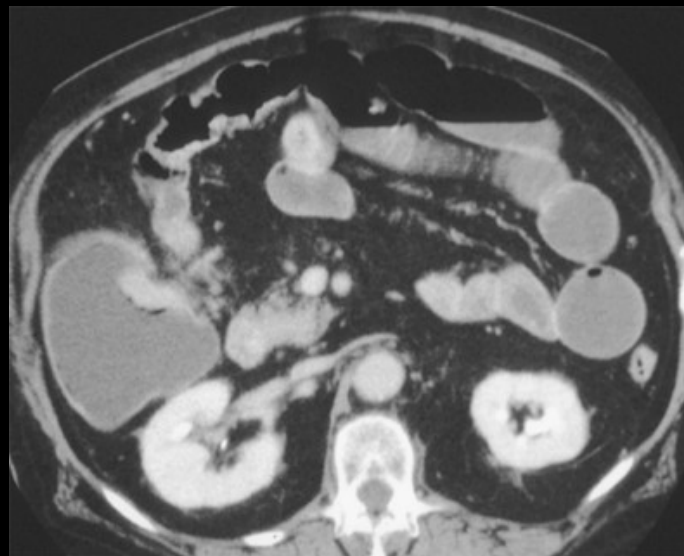
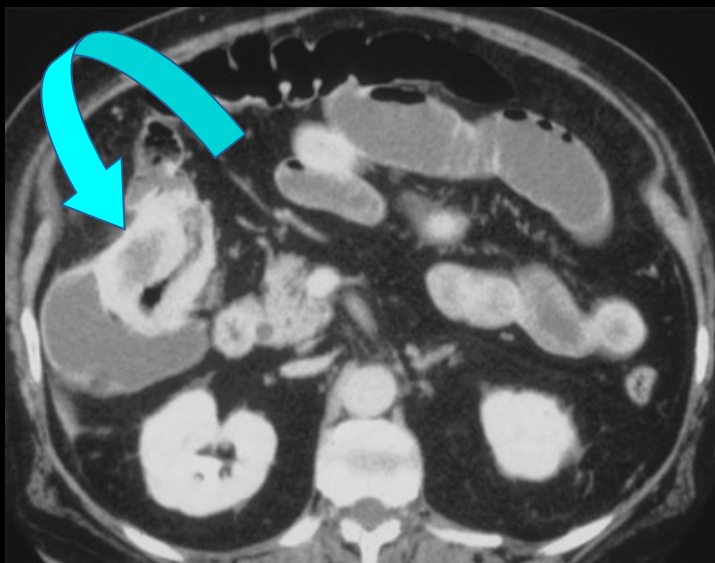
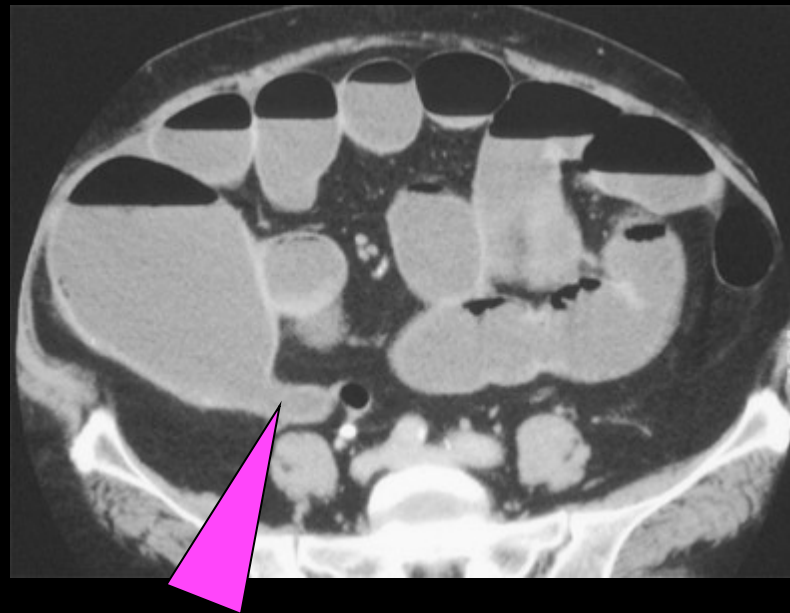
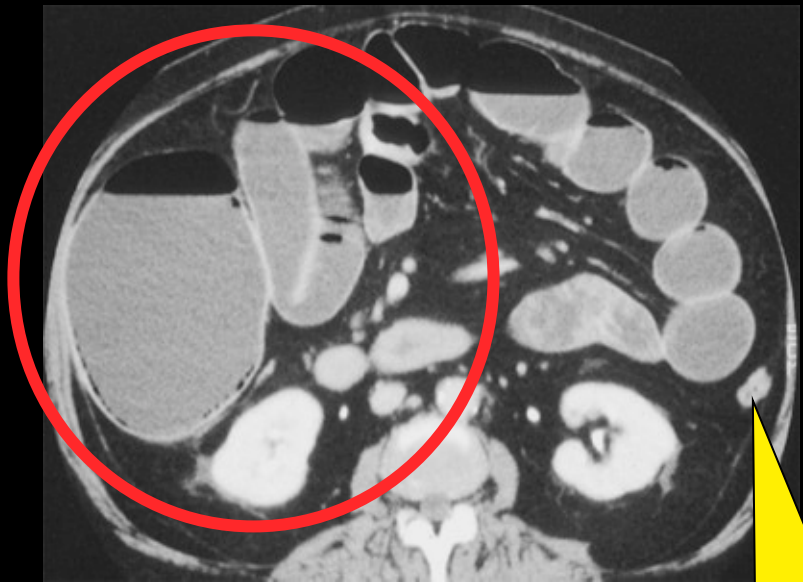
a. CT des occlusions coliques

3a. ne pas méconnaître une occlusion basse devant un abdomen ballonné avec " dyspepsie" ± constipation !!!

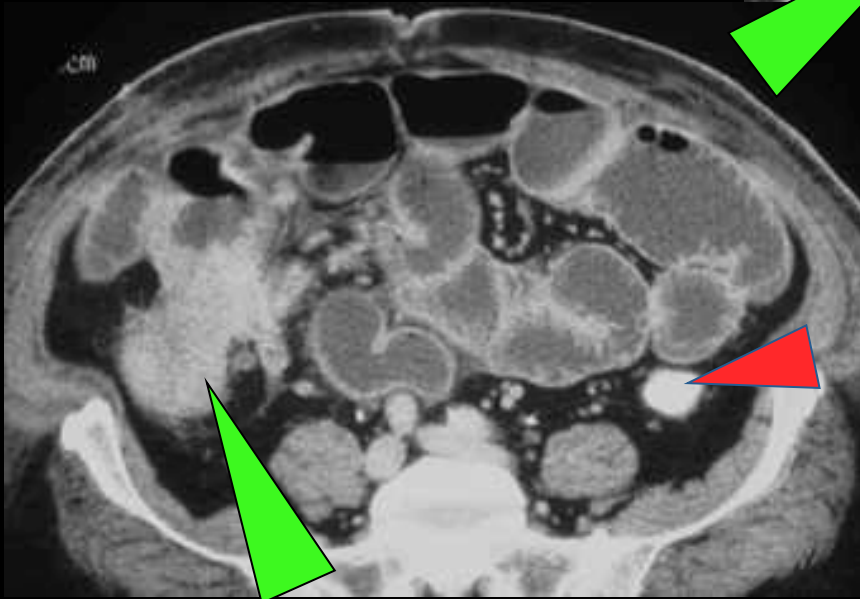
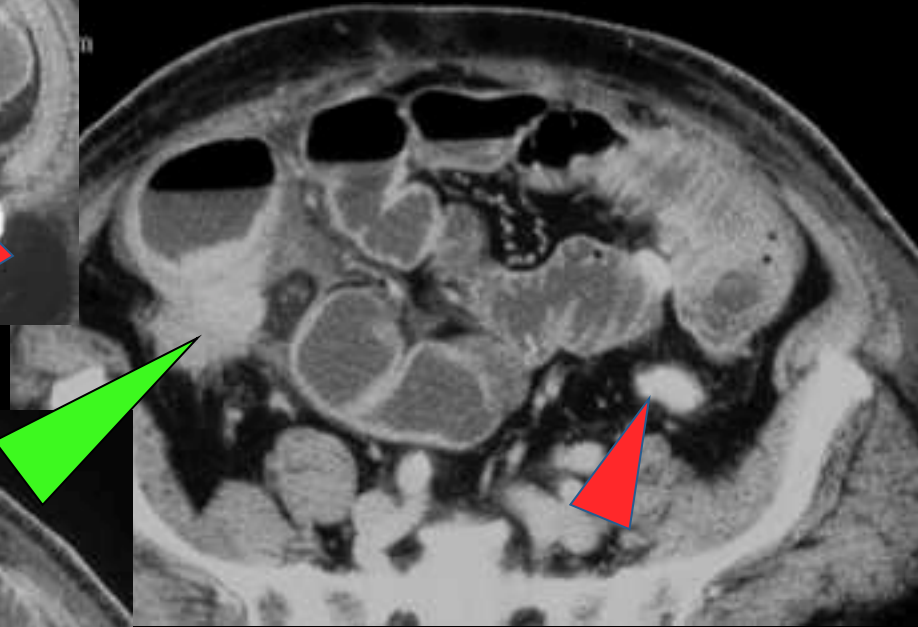


la distension cœcale avec stase stercorale est la clé du diagnostic des occlusions basses !!!

occlusion sur ADK du sigmoïde



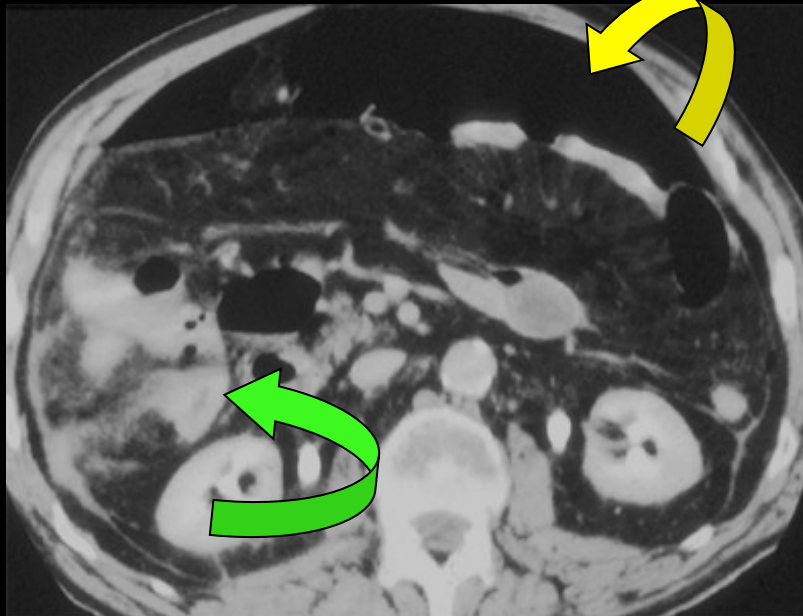
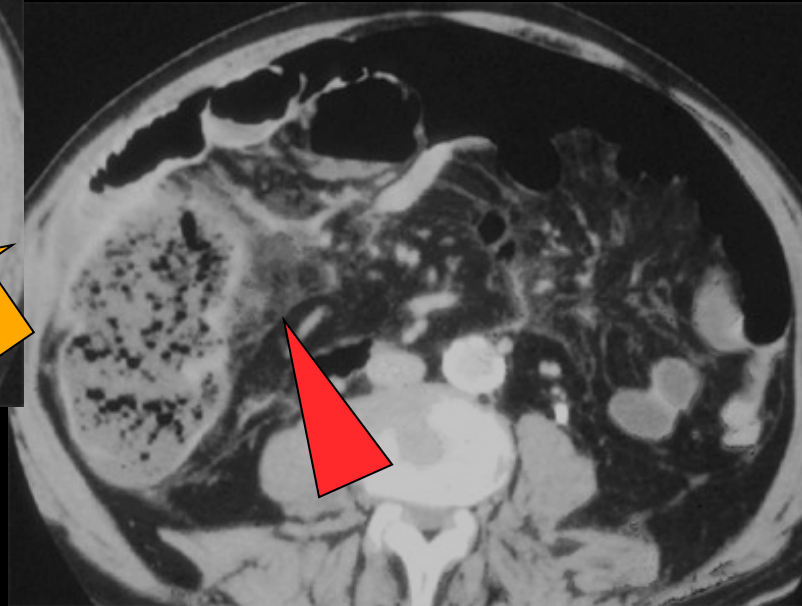
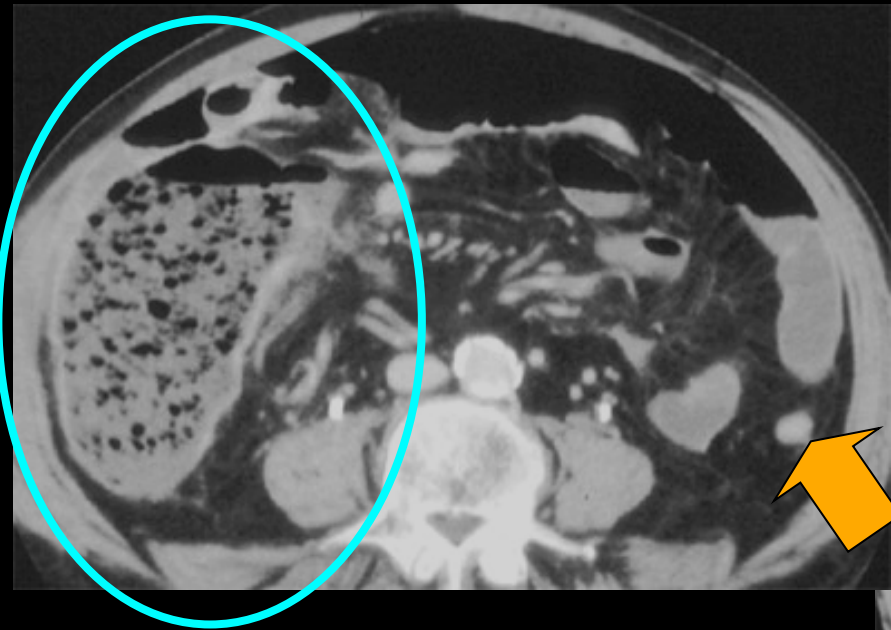
occlusion sur ADK de l'angle droit



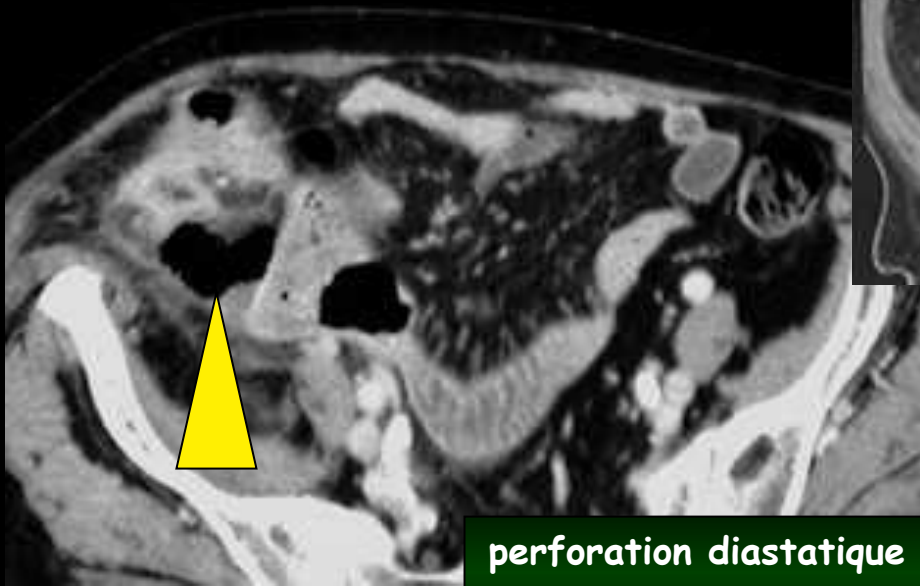
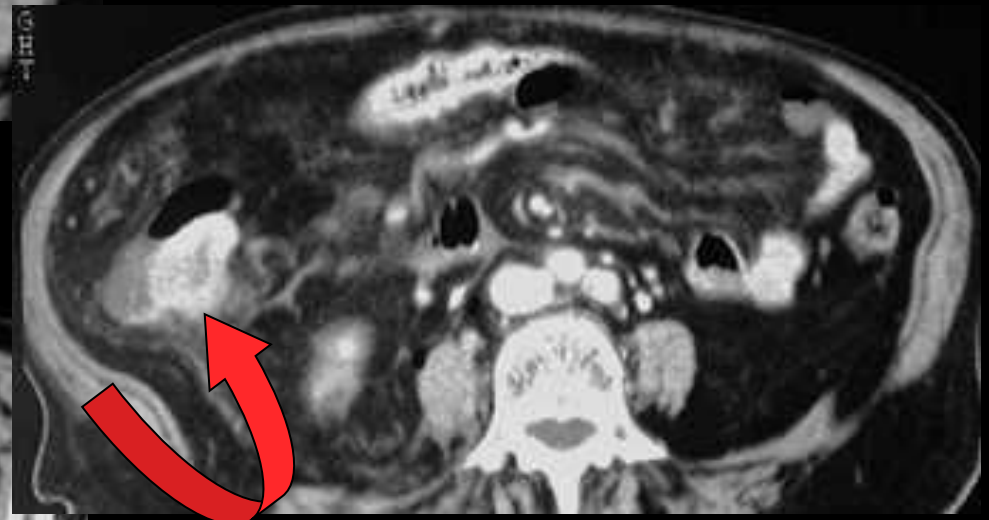
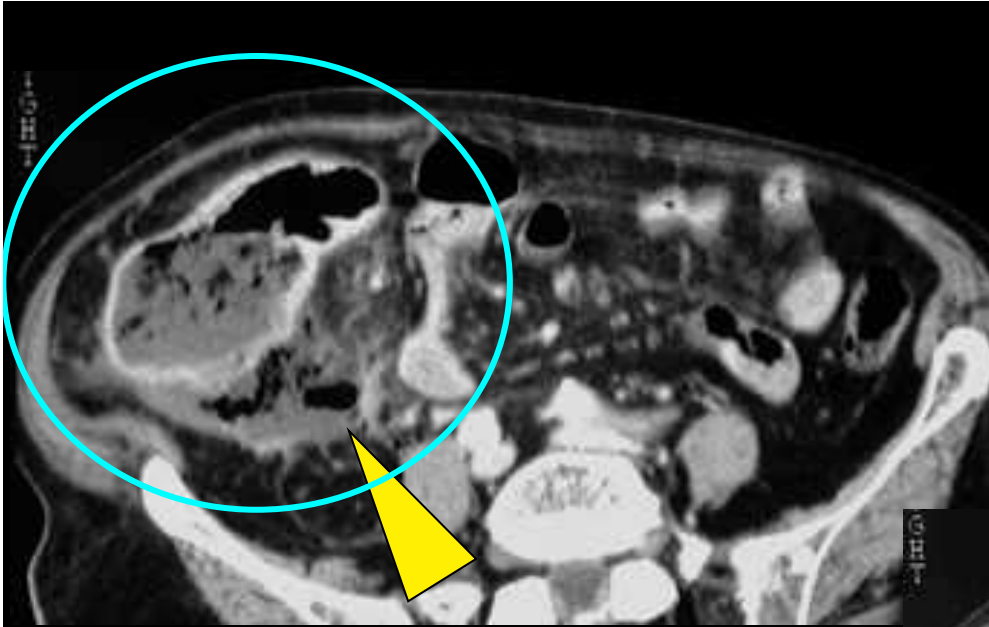
adénocarcinome cæcal et
occlusion d'amont

occlusion colique avec valvule de Bauhin continente :

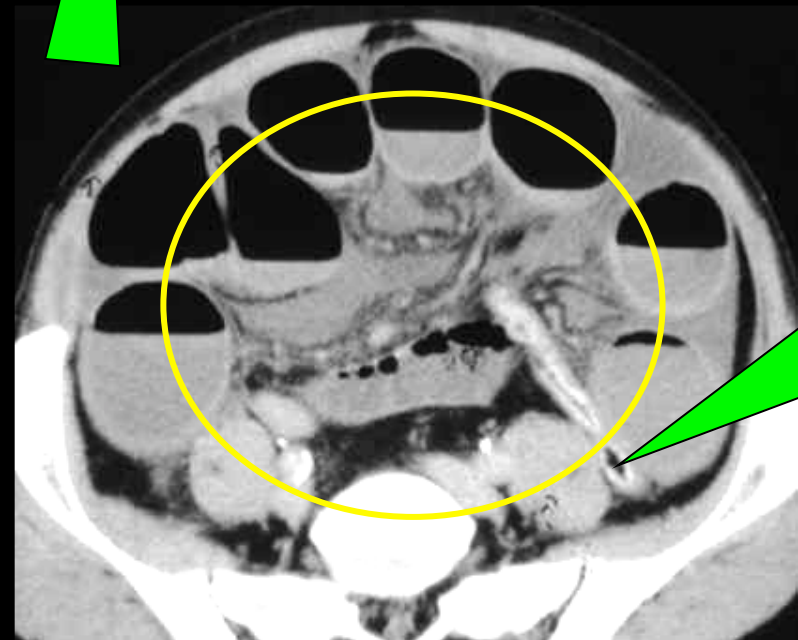
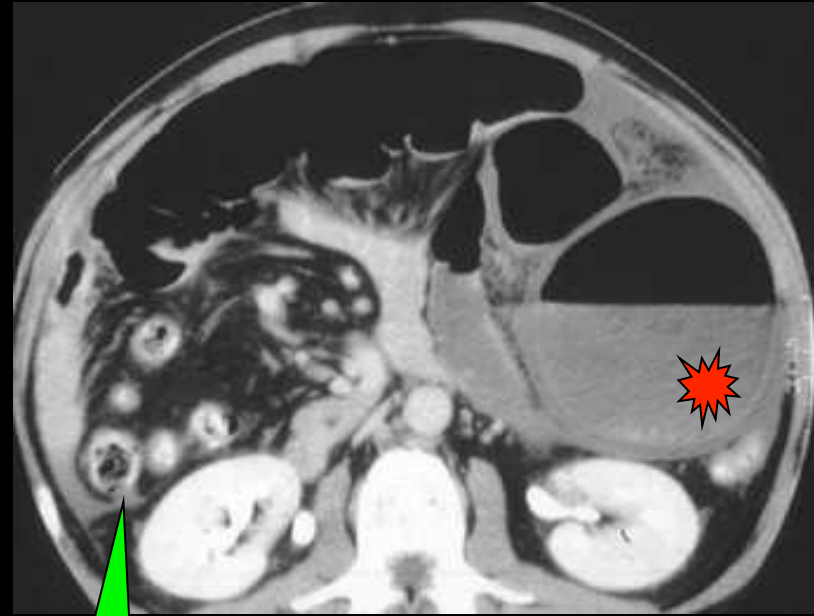
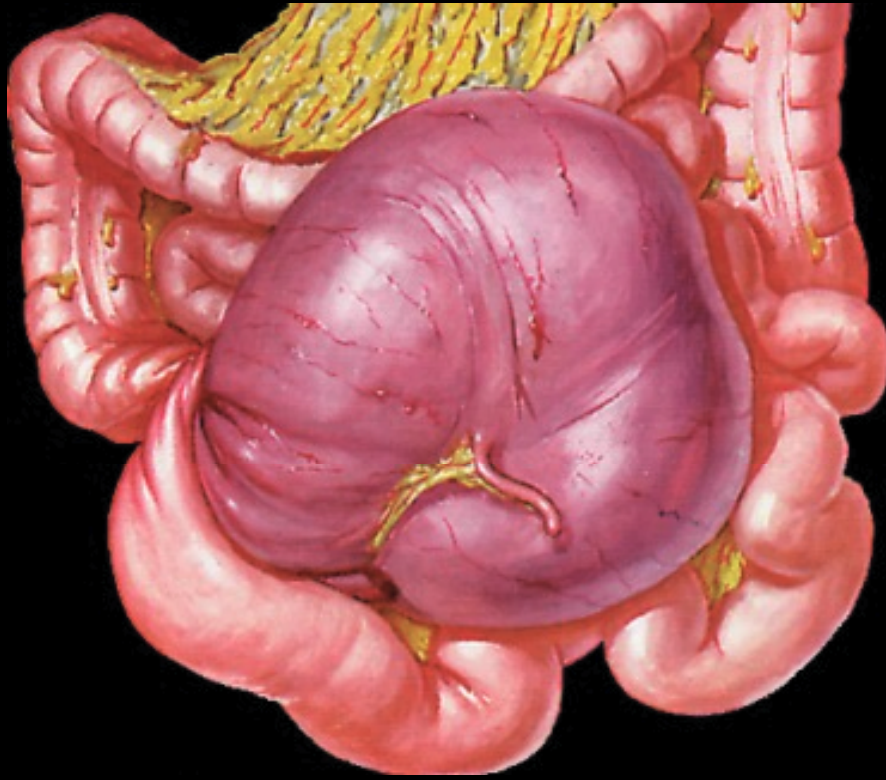
ATTENTION !!!



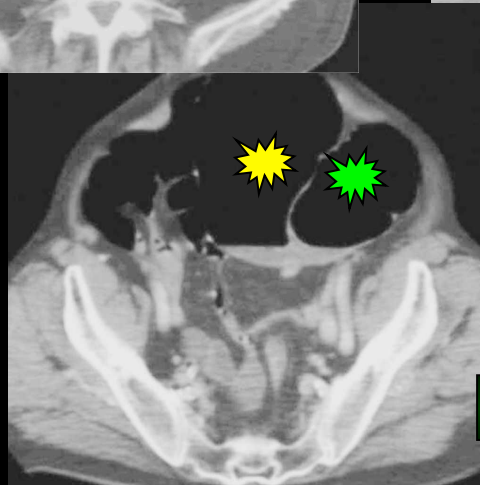
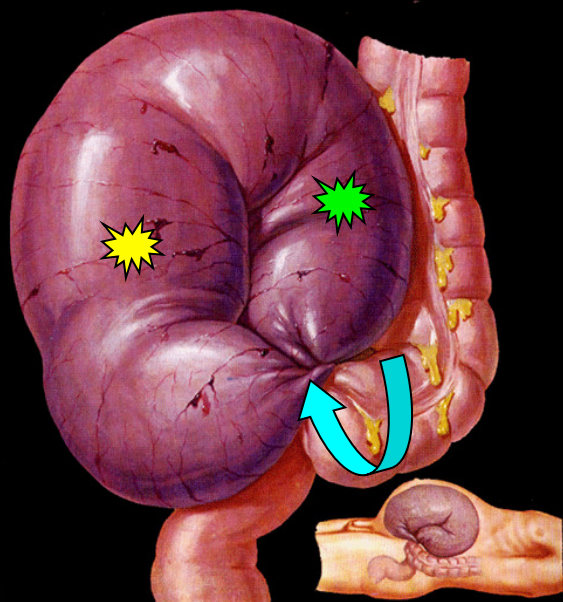
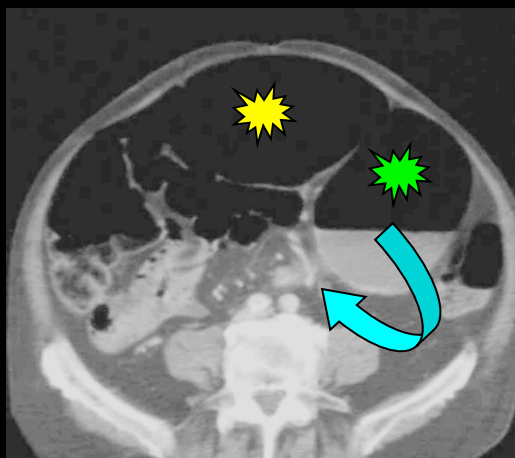
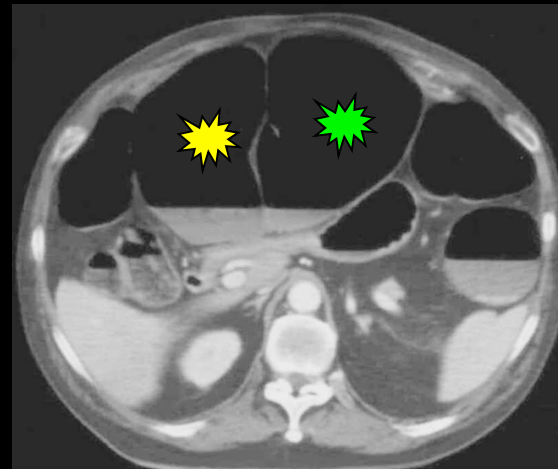
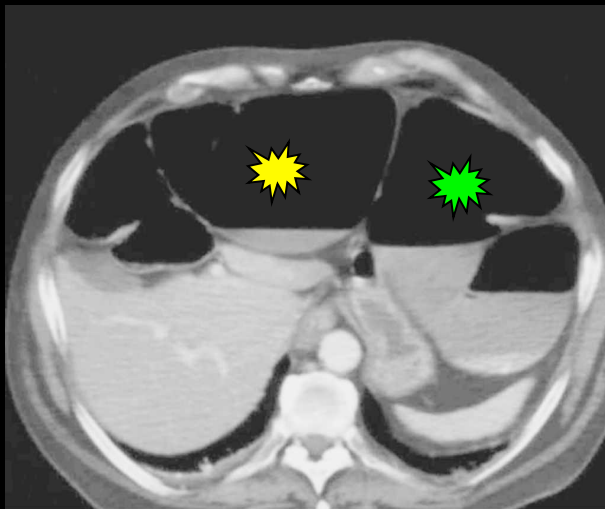
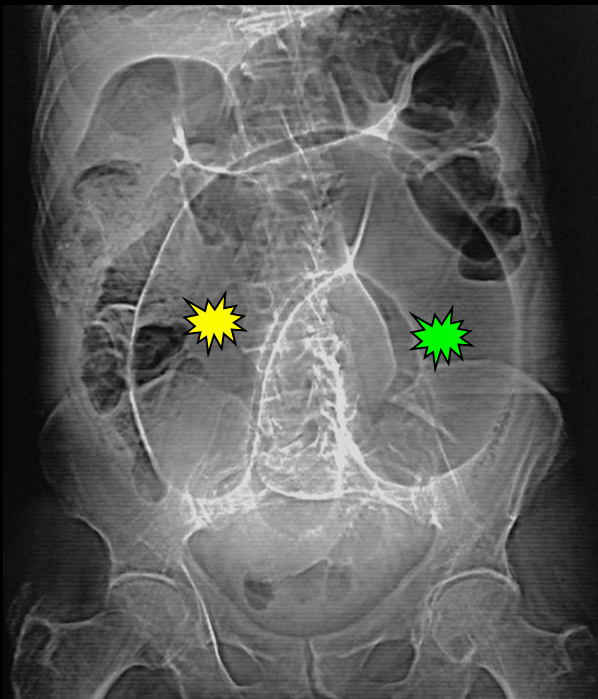
perforation diastatique sur adénocarcinome de l'angle droit



perforation diastatique « couverte » sur ADK sténosant du colon ascendant



volvulus du cæcum (et du grêle)



volvulus du sigmoïde

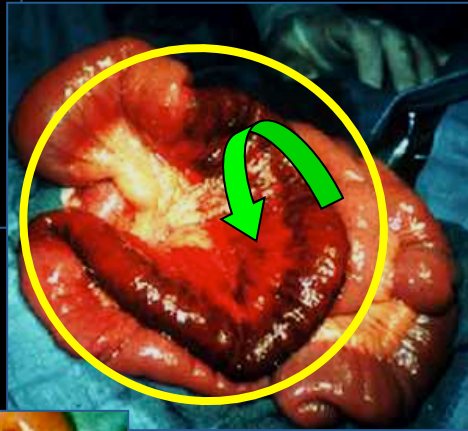
4.3 CT des ischémies intestino-mésentériques

présentations cliniques variées , fonction :

- du type d'atteinte vasculaire ;
tronculaire **artérielle**,
capillaires distaux,
tronculaire **veineux**
- de la **brutalité d'installation** de l'ischémie
- de la **qualité des réseaux anastomotiques** de
vicariance

caractère **hyperalgique** = **ischémie artérielle aiguë ++++**
dans ce contexte , la clinique prime sur les images !!!

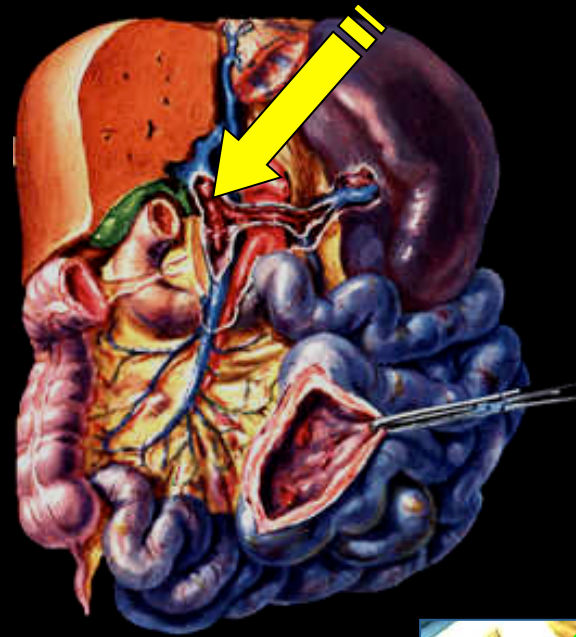
ischémie **artérielle** aiguë



entéro-colite
hémorragique

80% des ischémies intestino-mésentériques
résection chirurgicale d'urgence lorsqu'elle
est possible

ischémie **veineuse** aiguë



20% des ischémies intestino-mésentériques
80% de bons résultats sous traitement
anticoagulant

ischémie **artérielle** aiguë

atteinte du versant artériel ++++
"ischémie critique abdominale"

terrain :

- sujets âgés
- facteurs de risque vasculaires
- intervention chir. lourde récente
- hypoTA (patients de réa)

clinique :

- douleurs abdo. brutales, intenses
- ex.clinique souvent pauvre ;auscultation abdominale

ischémie **veineuse** aiguë

atteinte du versant veineux ++++
"phlébite abdominale"

terrain :

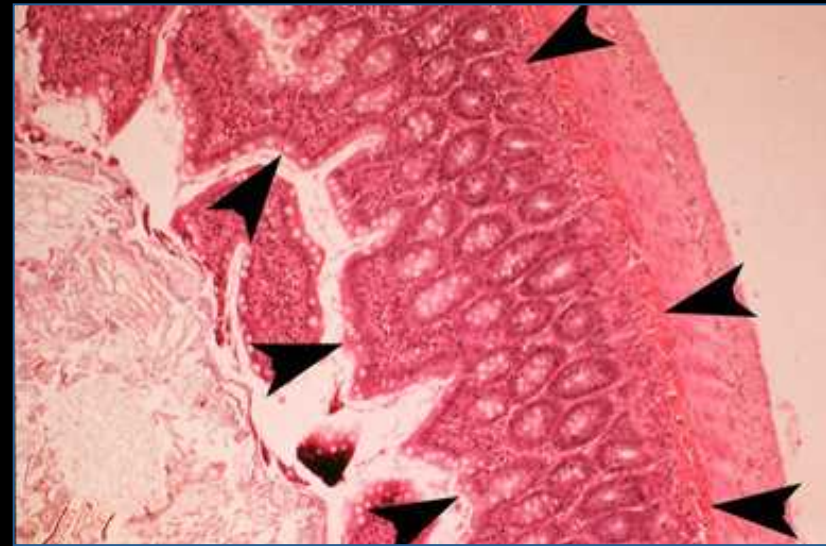
- sujets d'âge moyen
- FDR : pilule, tabac, thrombophilies génétiques, acquises...

clinique :

- douleurs abdo. torves, évoluant svT depuis plusieurs jours sans spécificité
- défense +/-

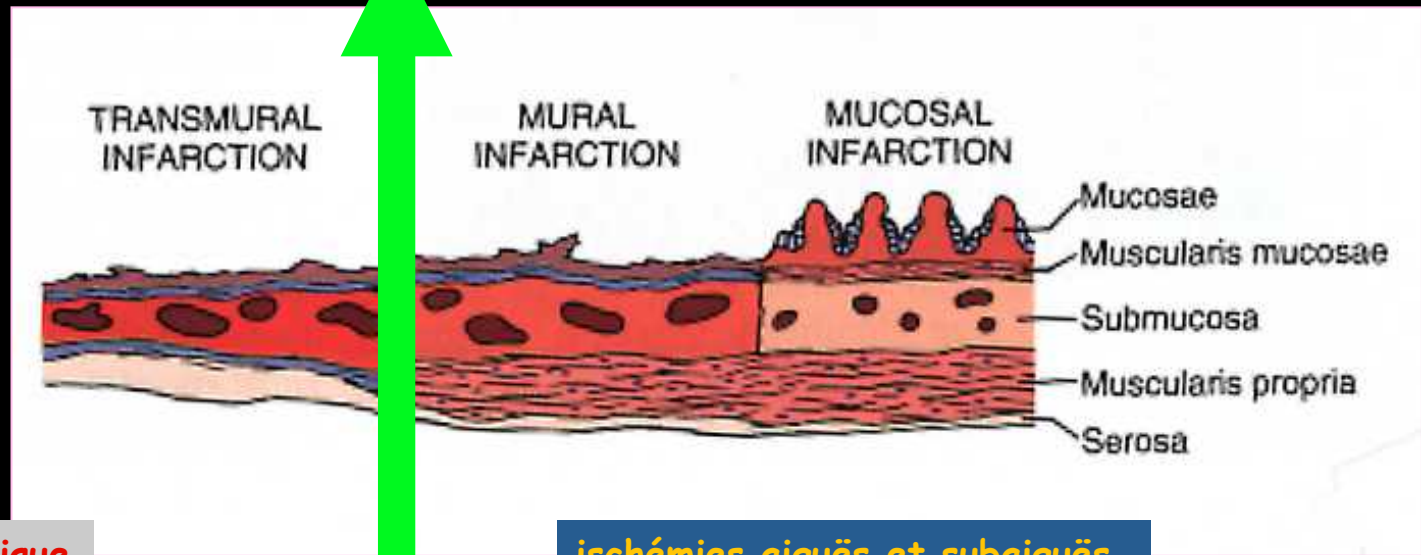
4.3a. ischémie artérielle aiguë

rat témoin 8^{ème} heure



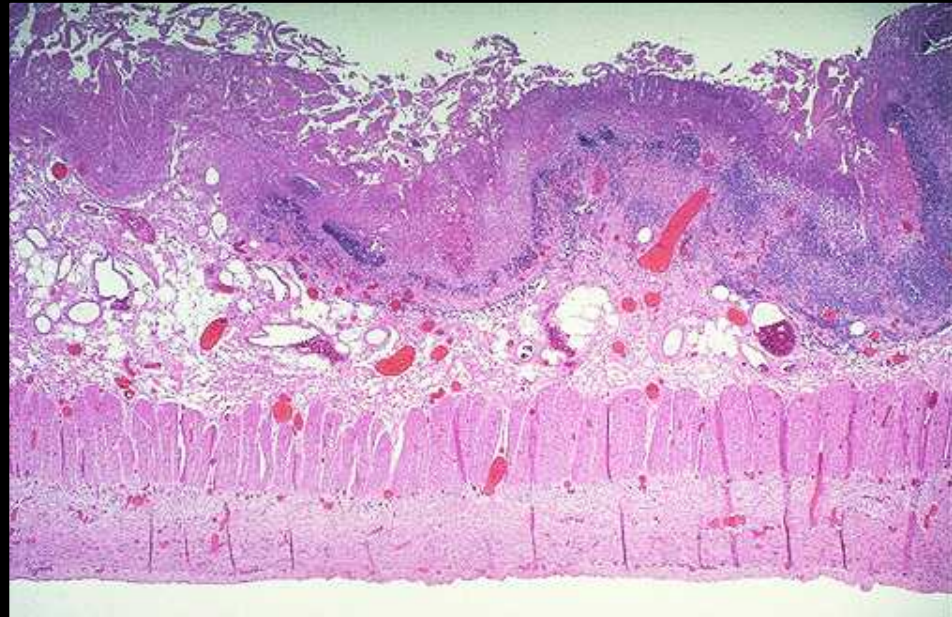
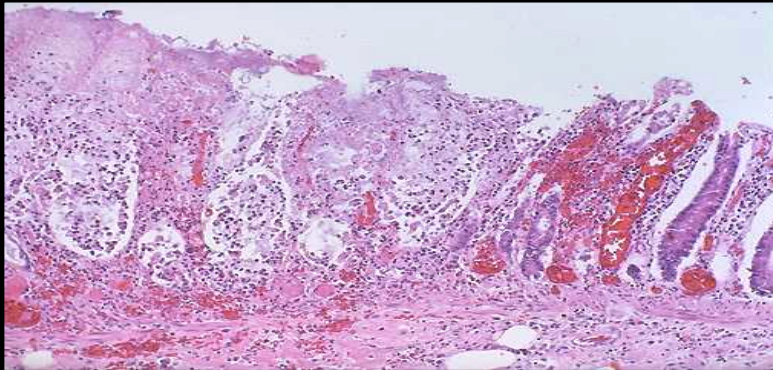
ischémie artérielle aiguë 8^{ème} heure





nécrose ischémique
irréversible

ischémies aiguës et subaiguës
potentiellement résolutives



ischémies artérielles aiguës et subaiguës ; étiologies

ischémies obstructives

embolies artérielles : TACFA +++, IDM, endocardites , paradoxales (foramen ovale perméable, defects septaux ...)

Dans les embolies de l'AMS , l'obstacle endoluminal est toujours distal +++++

thrombose in situ : athérome , **dissection aortique** propagée ou médialyse splanchnique

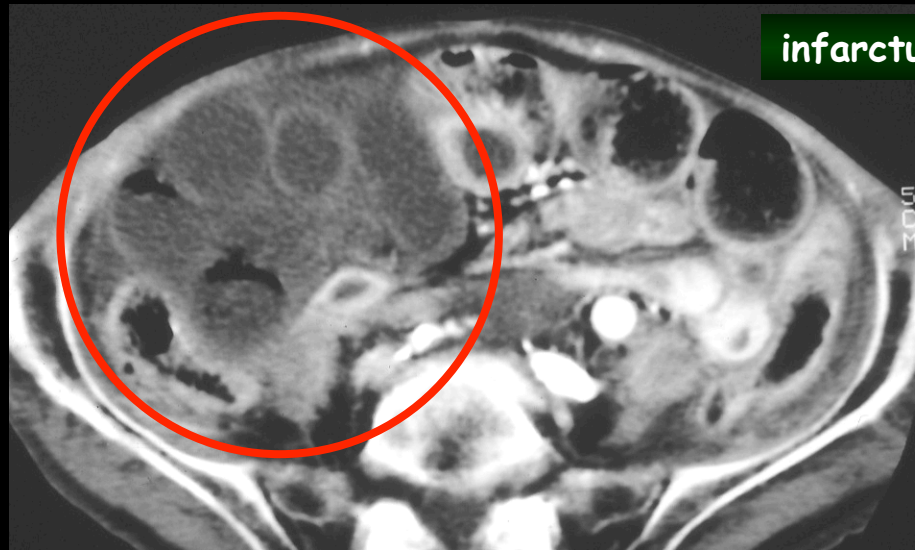
La thrombose de l'AMS est toujours proximale +++

ischémies non obstructives

bas débit circulatoire ++++++

infarctus transmural : 2 signes majeurs

- . paroi amincie
- . défaut de rehaussement persistant+++
= paroi « virtuelle »

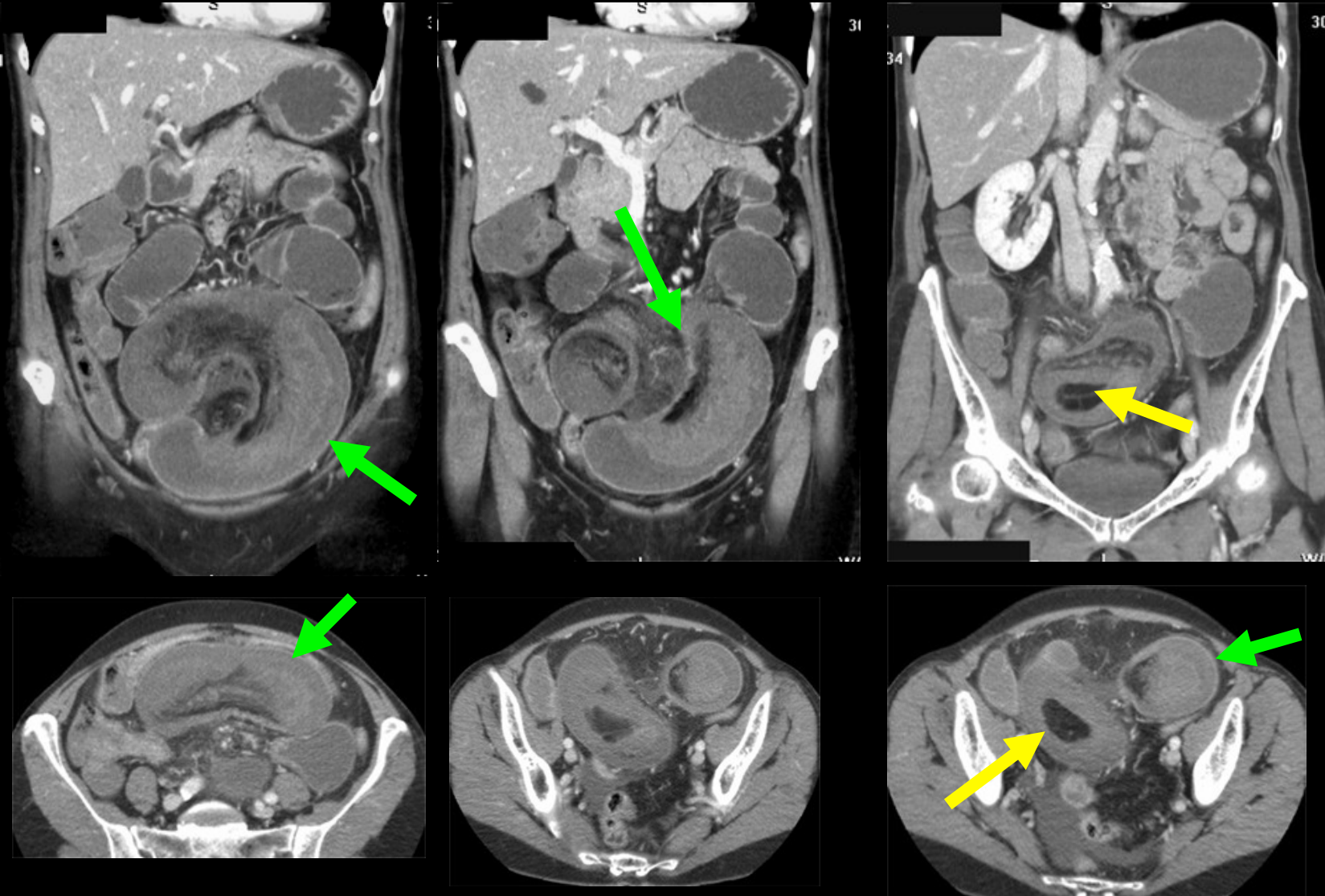


infarctus massif du territoire de l'AMS



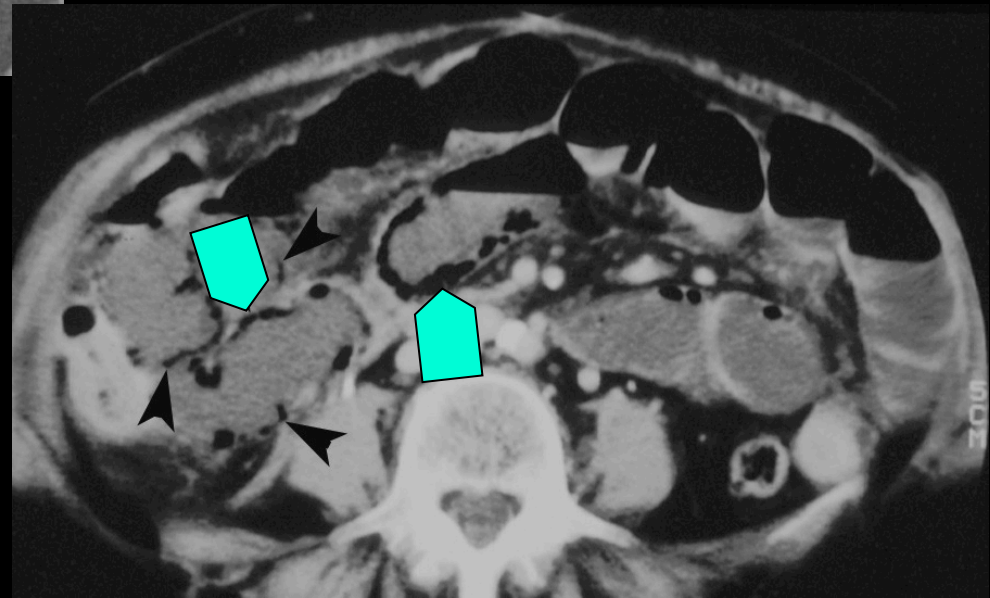
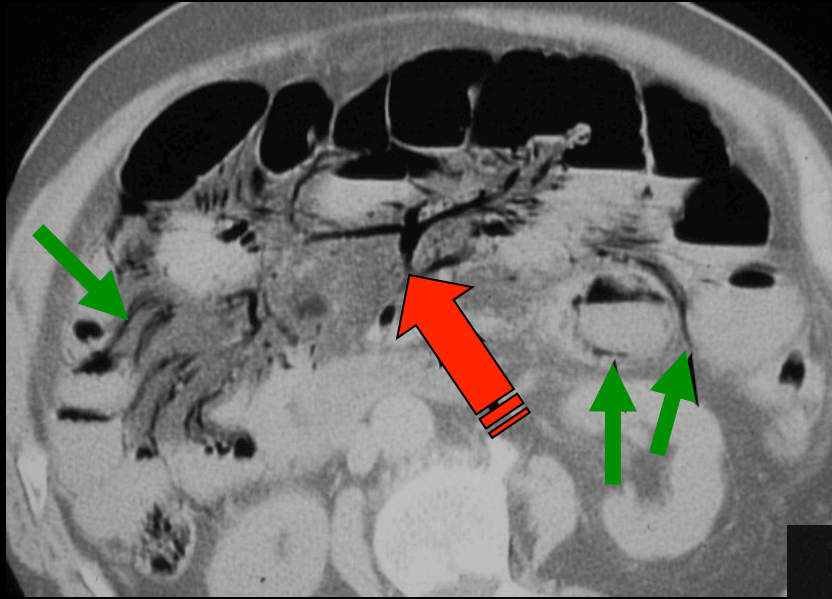
NB: pas ou peu d'épanchement liquidien péritonéal , sauf si perforation intestinale

la disparition de la stratification pariétale dans un contexte aigu signe la nécrose ischémique ++
+ et augure d'une résection des segments ischémiés



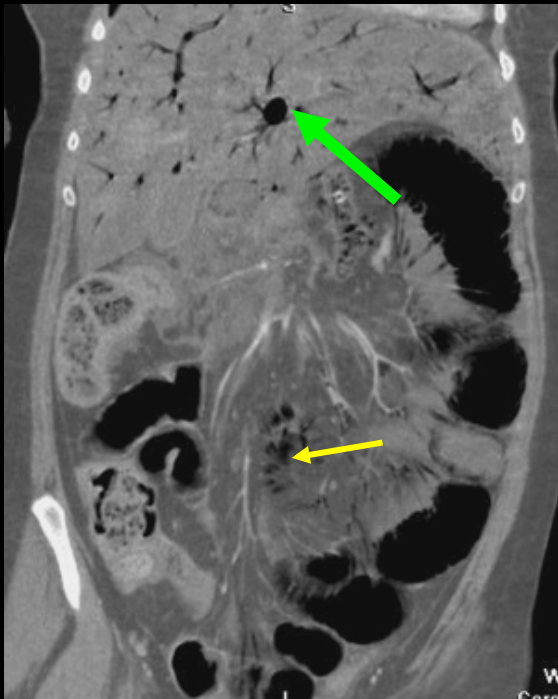
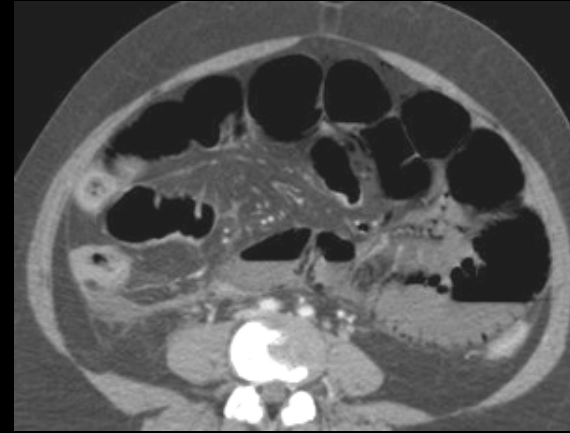
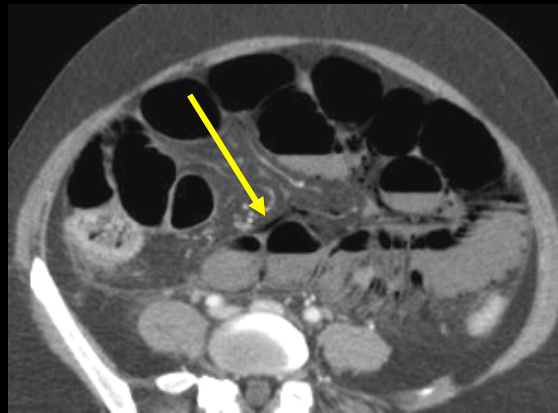
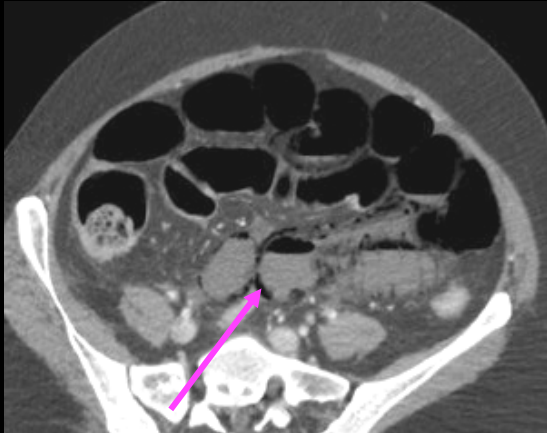
invagination intestinale aiguë sur lipome du grêle , nécrose ischémique de l'intussusceptum et de l'intussuscipiens

pneumatose intestinale et aéroportie
ne pas les attendre !!
délai d'apparition
parfois très court



infarctus intestino-mésentériques massifs du territoire de l'AMS

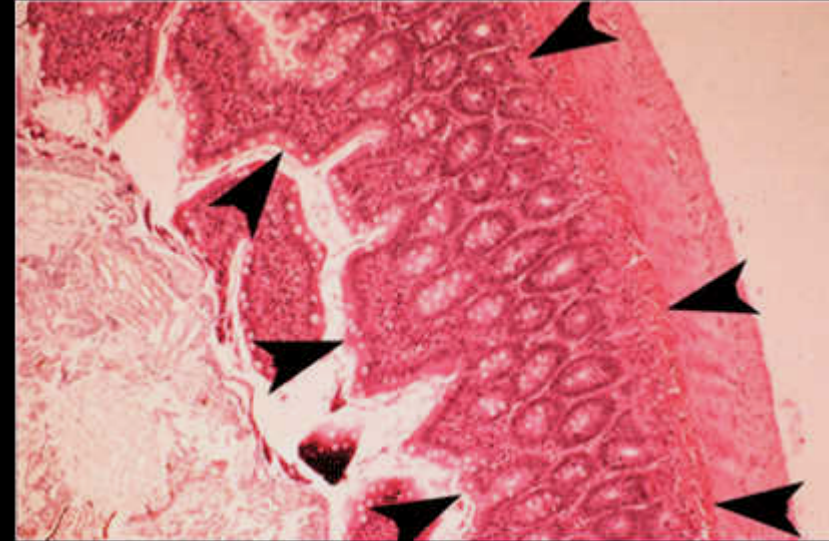
infarctus trans mural intestino-mésentérique.



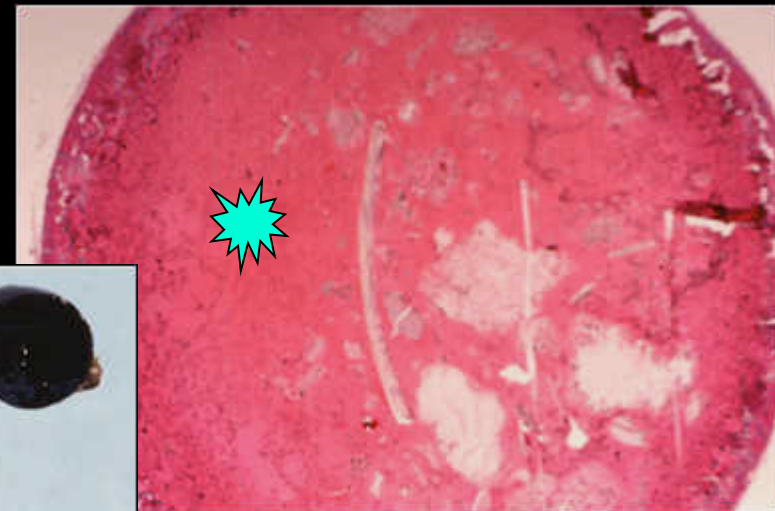
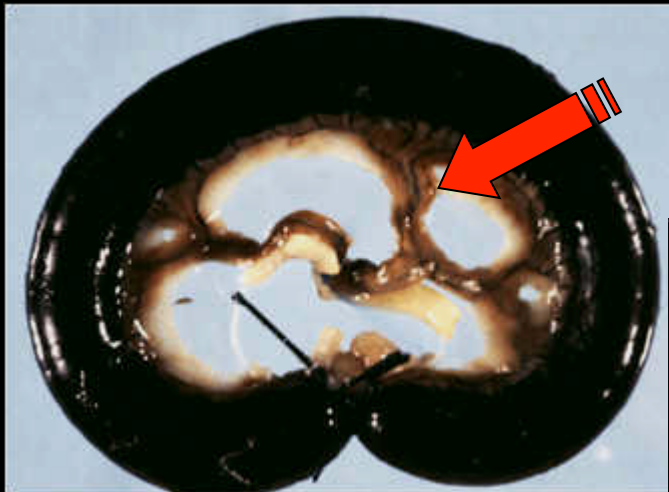
infarctus intestinal massif ; bas débit circulatoire ;
pneumatose pariétale ; aéromésentérie, aéroportie
vaisseaux mésentériques perméables ; mésentère normal : **entérocólite hémorragique**

4.3b. ischémie veineuse aiguë

rat témoin 8^{ème} heure



ischémie veineuse 8^{ème} heure

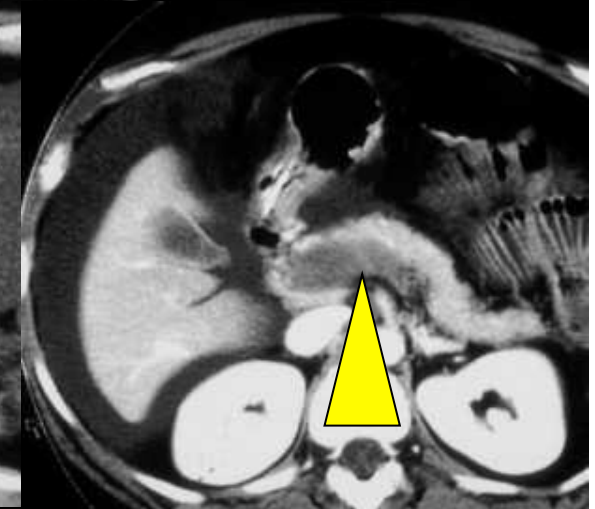
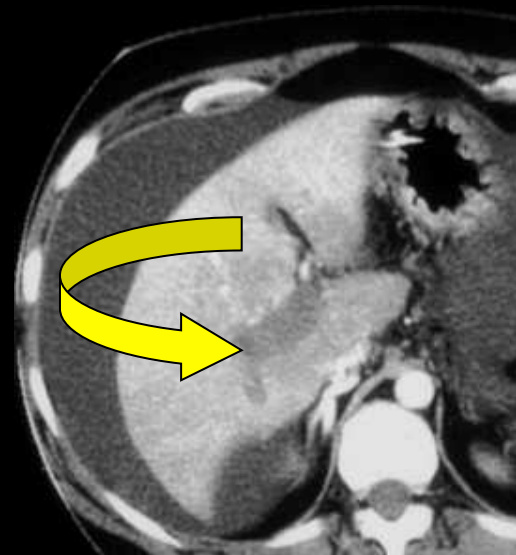
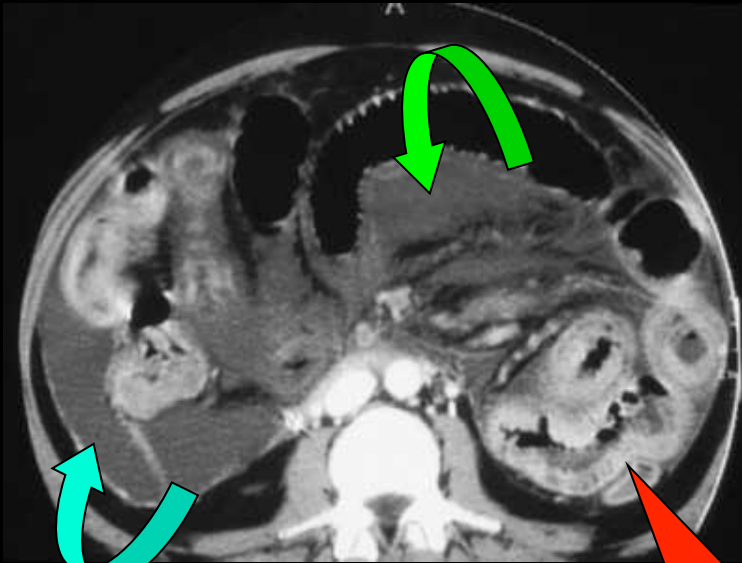




- . étendue des remaniements pariétaux
- . congestion du mésentère
- . épanchement liquidien péritonéal

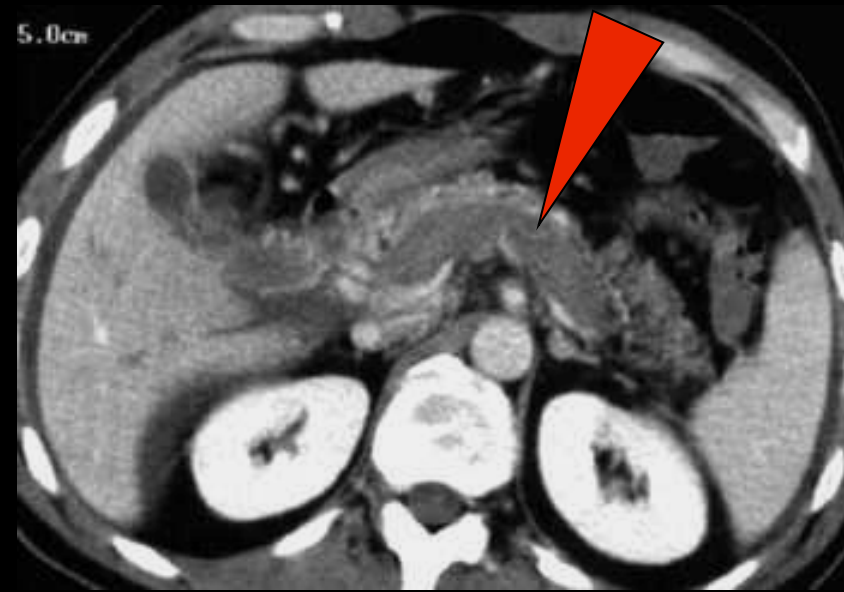
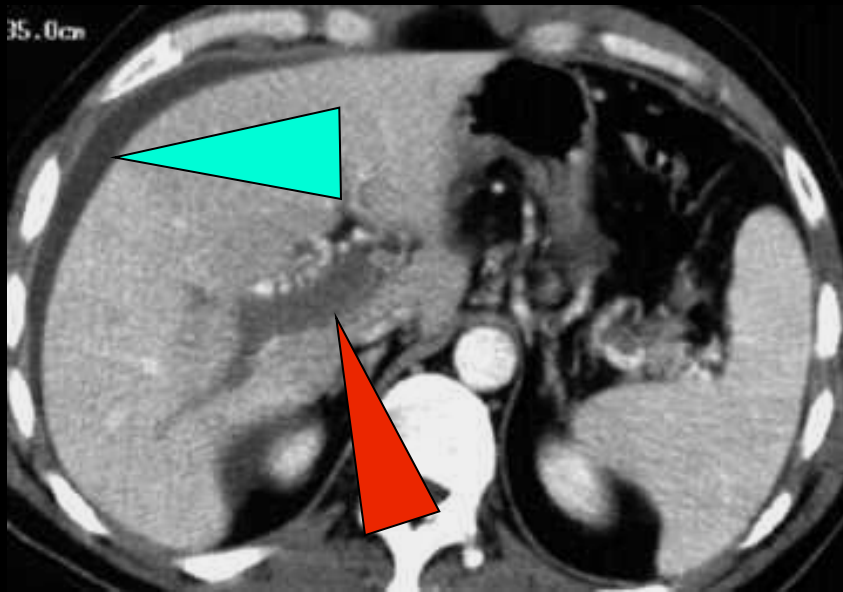
abondant

. thrombose tronculaire de l'axe veineux mésentérique ± portal



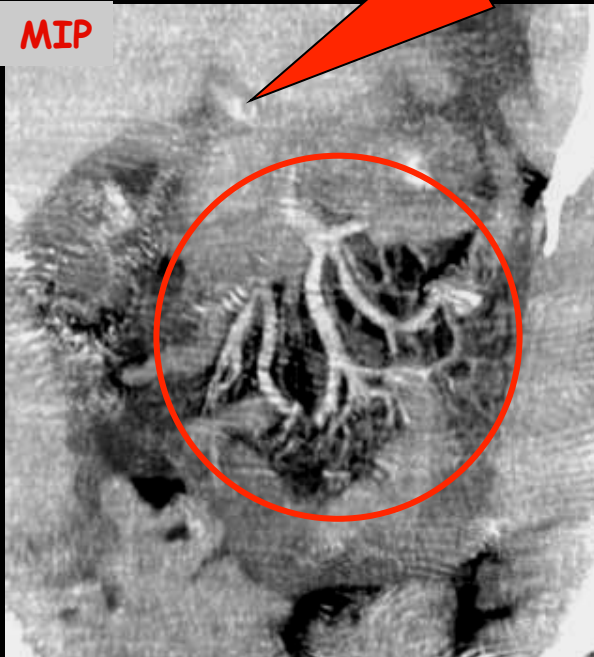


ischémie veineuse ; thrombose mésentérico-portale avant injection de PCI
caillot endoluminal spontanément hyperdense

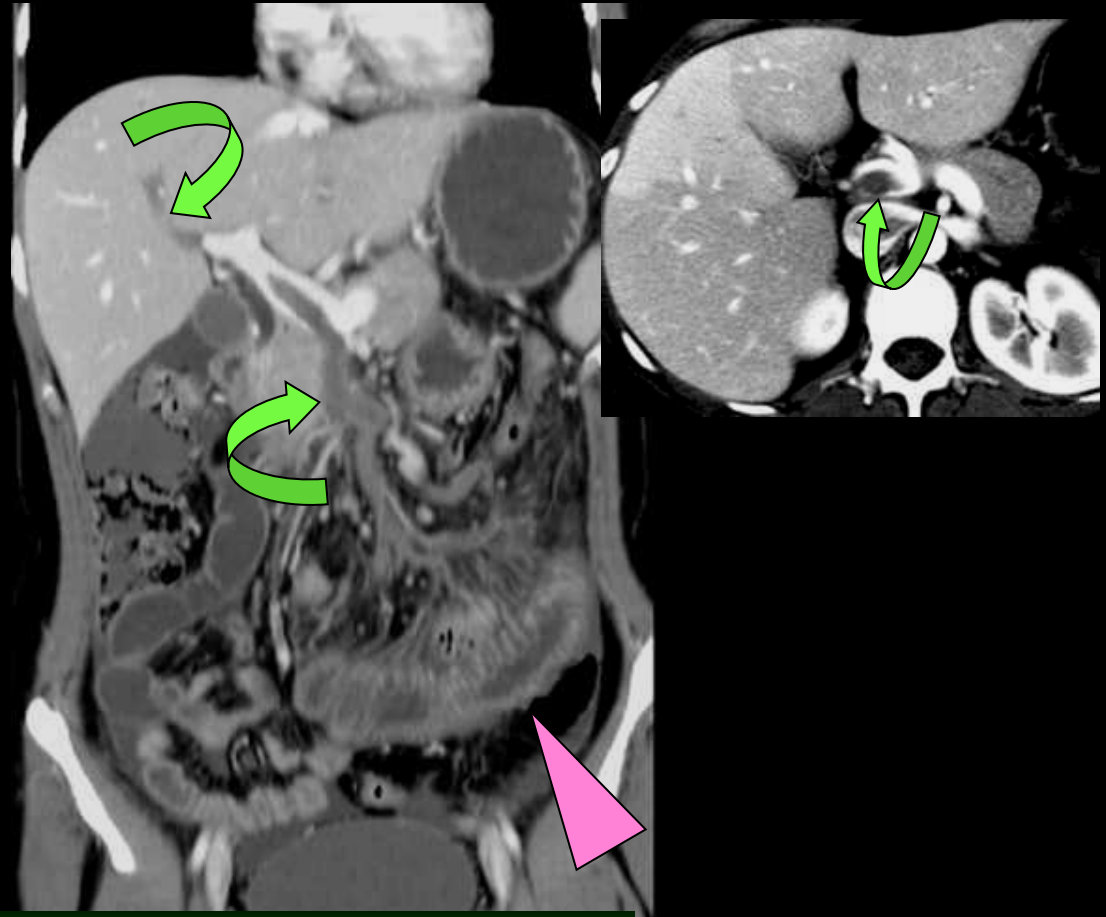


ischémie veineuse ; thrombose mésentérico-portale après injection

MIP

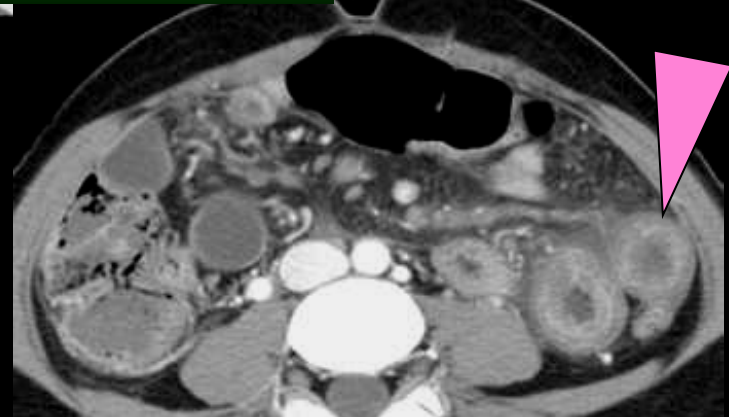
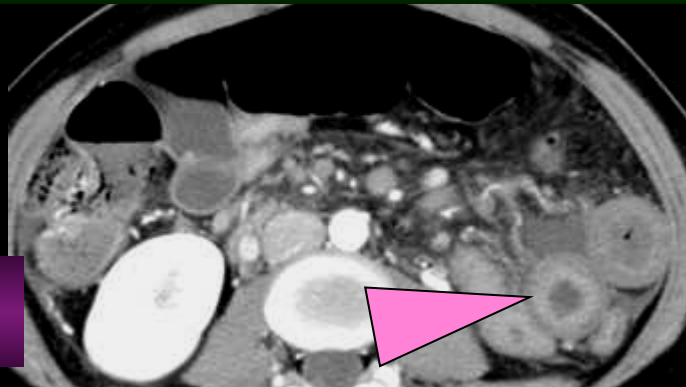


diagnostic sans injection de PC !!

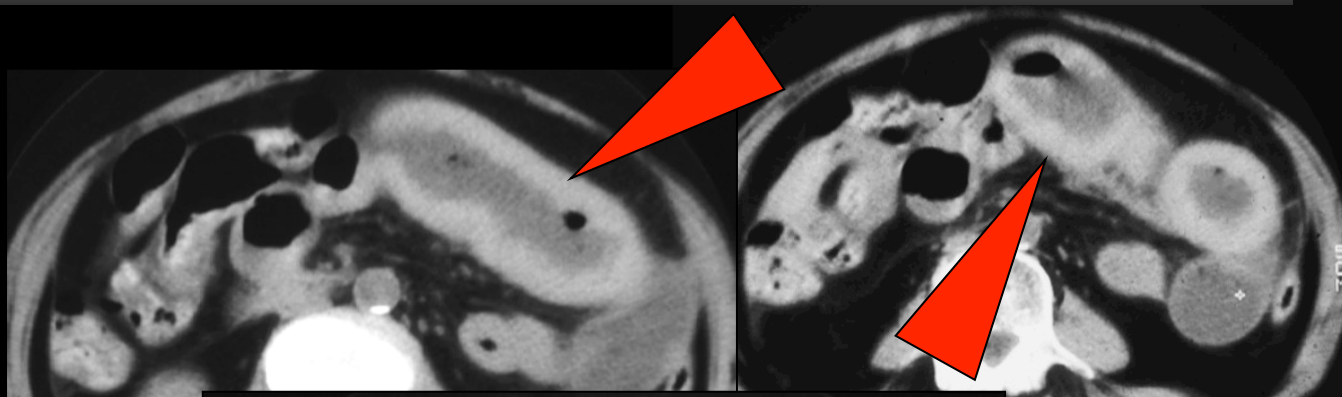


ischémie veineuse et thrombose portale intra hépatique

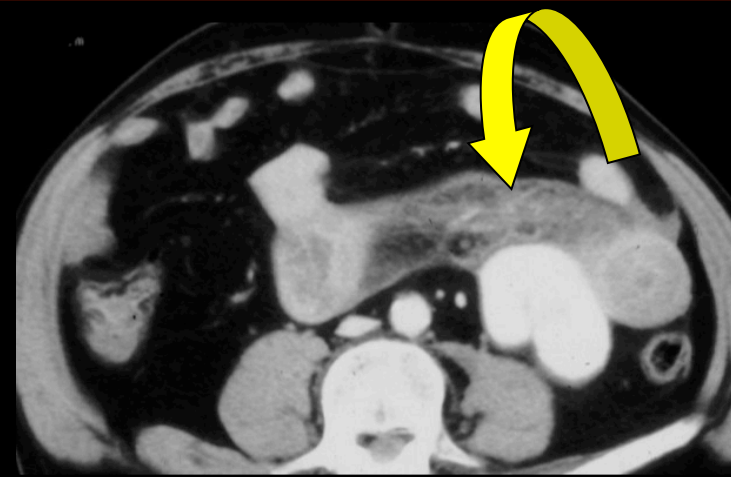
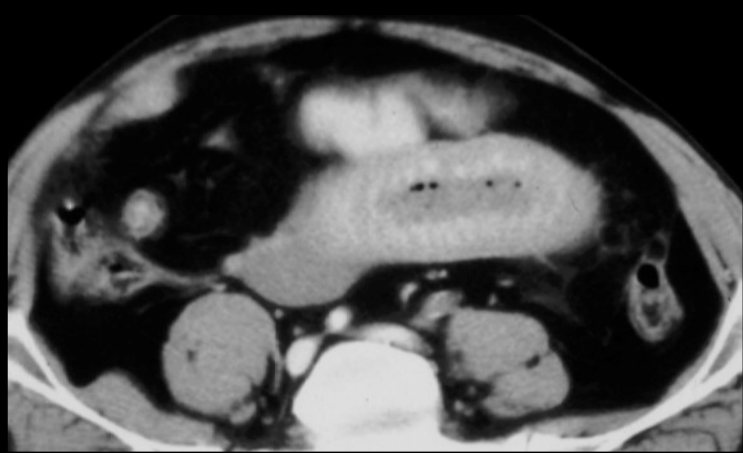
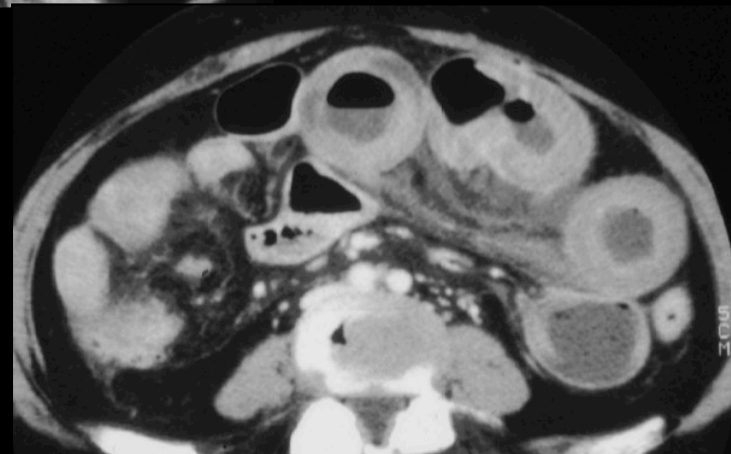
Obs. Y Menu
Hop Beaujon



diagnostic différentiel des ischémies veineuses

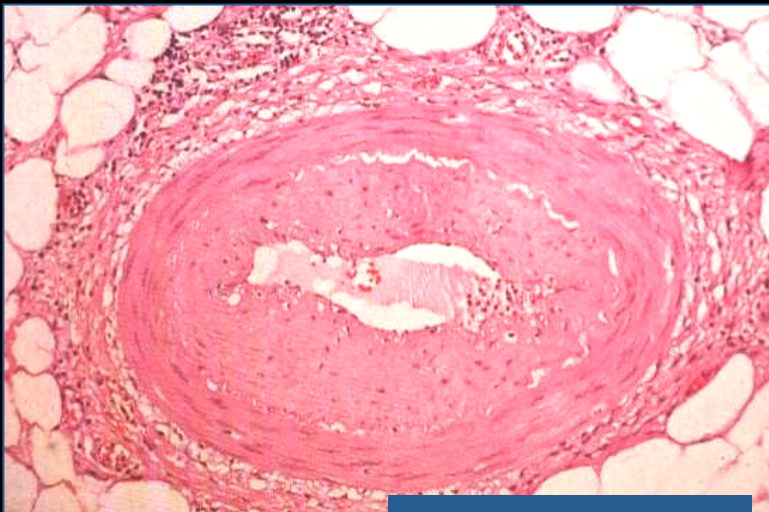


hématomes
Sous
AVK



4.3c. ischémies **subaiguës**

colite ischémique

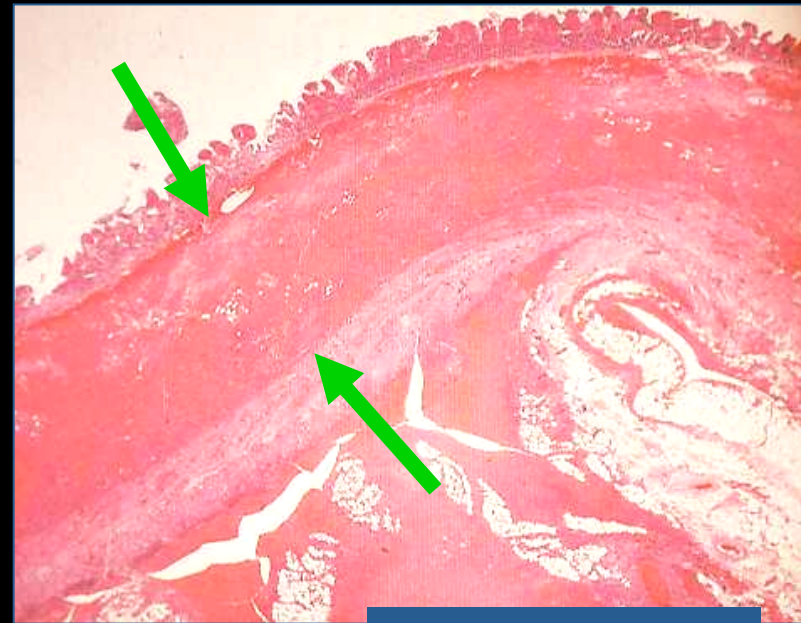


LEAD endartérite

intestino-mésentériques

athérome sténosant
vascularites
bas-débit

colites ischémiques



purpura rhumatoïde

Small-Vessel-Vasculitis

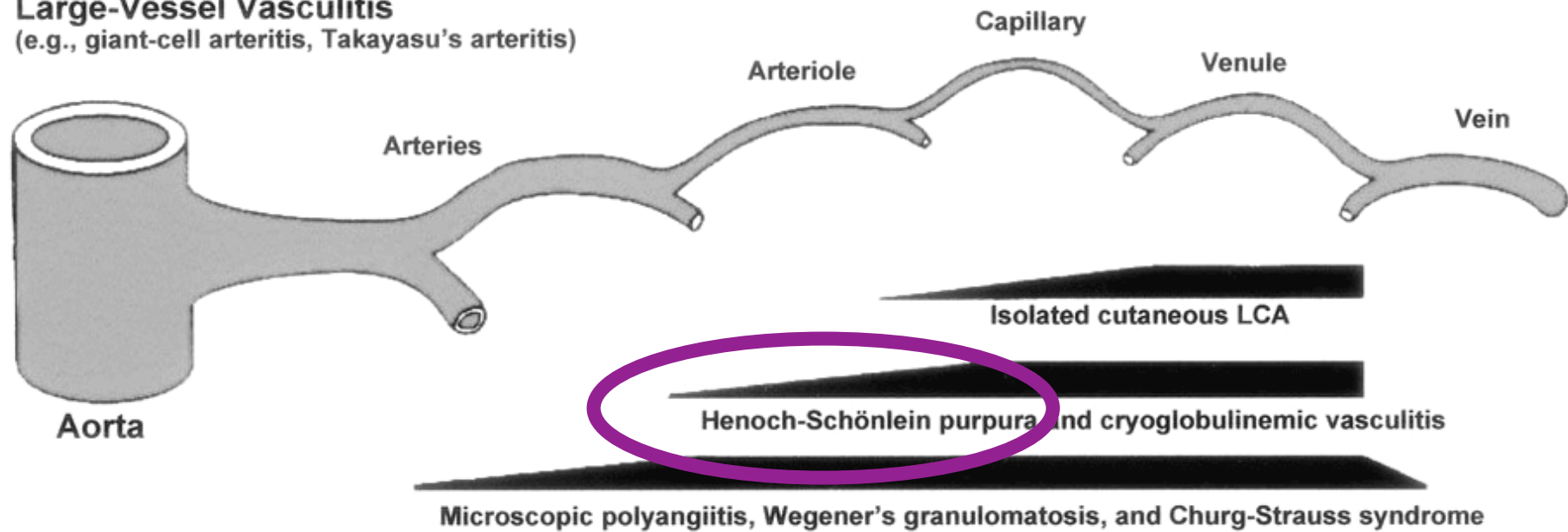
(e.g., microscopic polyangiitis, Wegener's granulomatosis)

Medium-Sized-Vessel Vasculitis

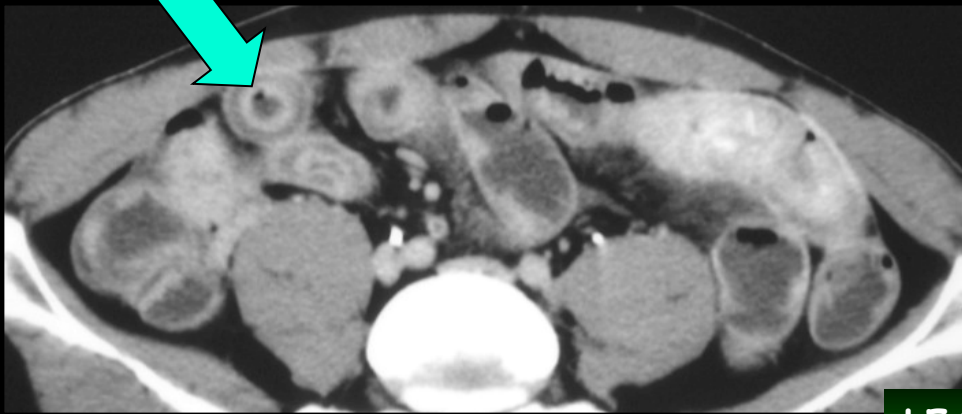
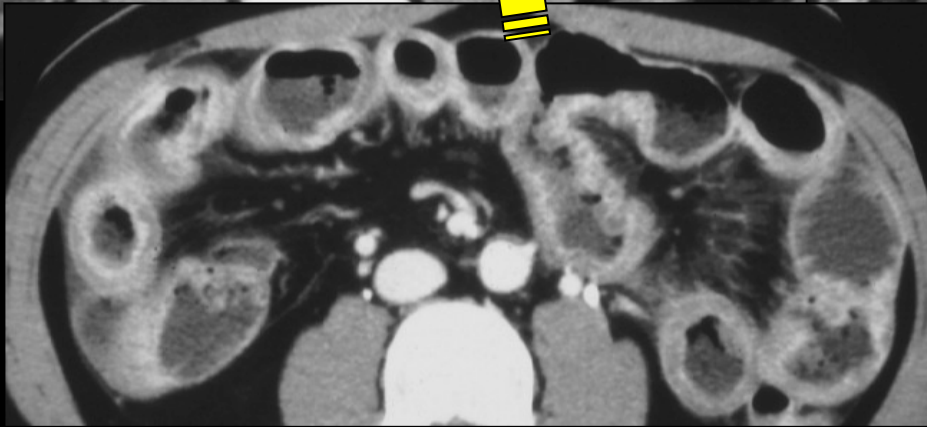
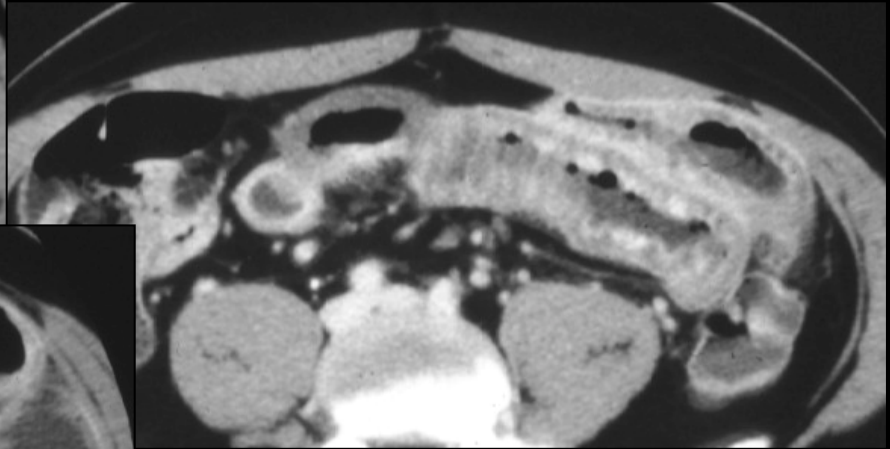
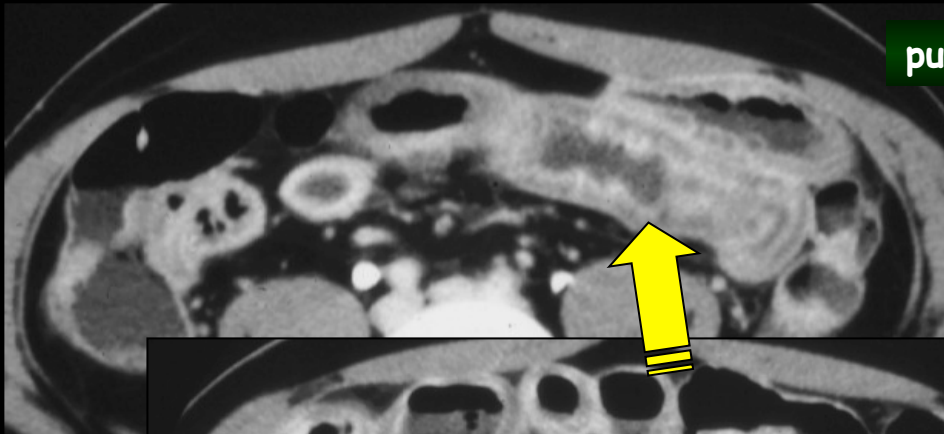
(e.g., polyarteritis nodosa, Kawasaki's disease)

Large-Vessel Vasculitis

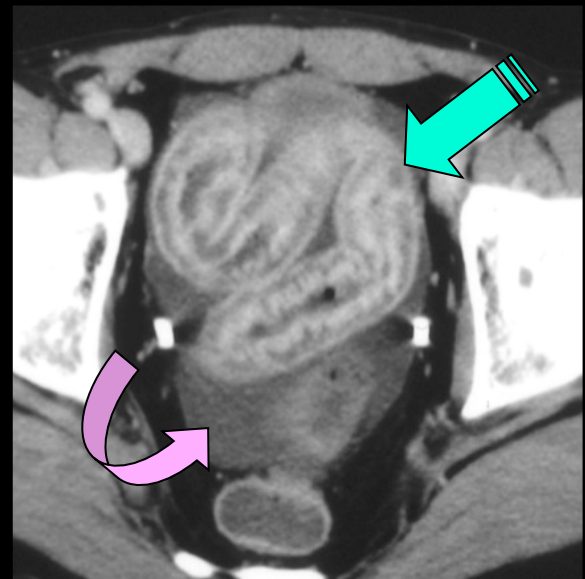
(e.g., giant-cell arteritis, Takayasu's arteritis)



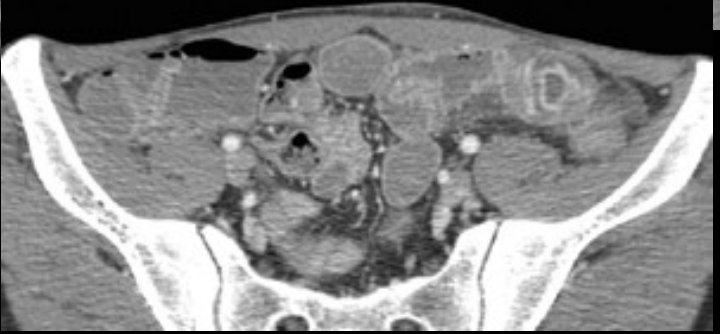
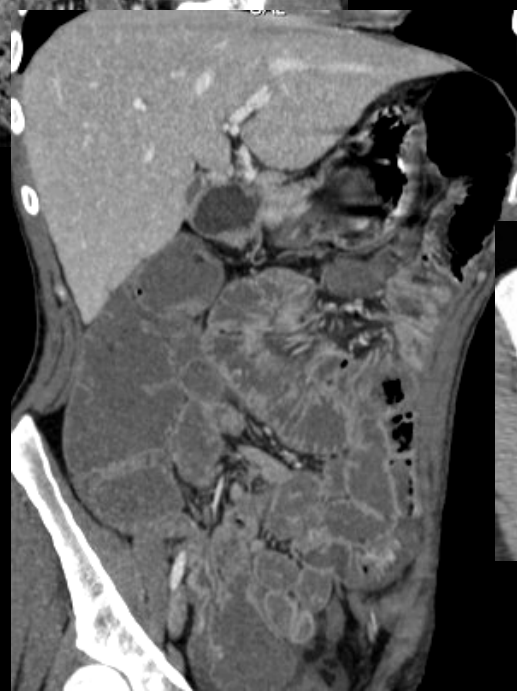
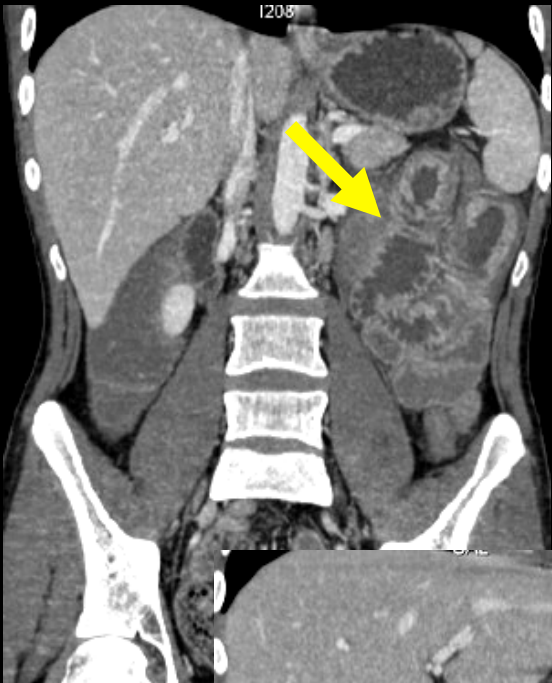
purpura rhumatoïde



LEAD



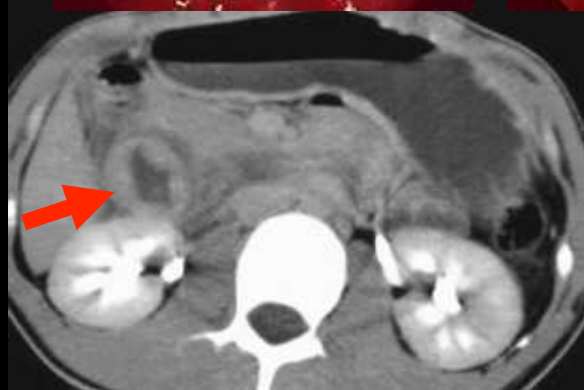
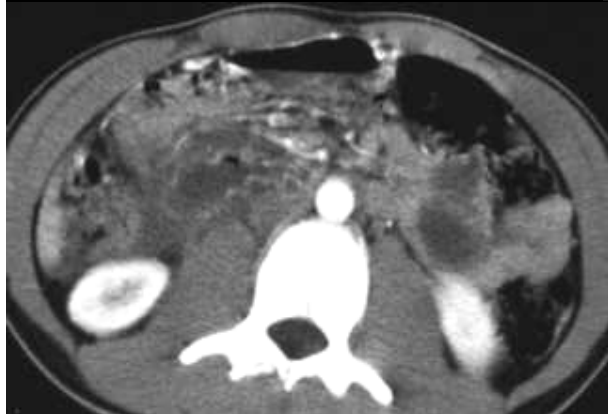
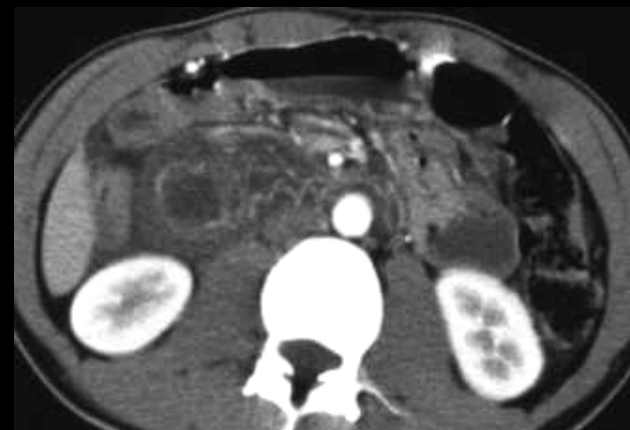
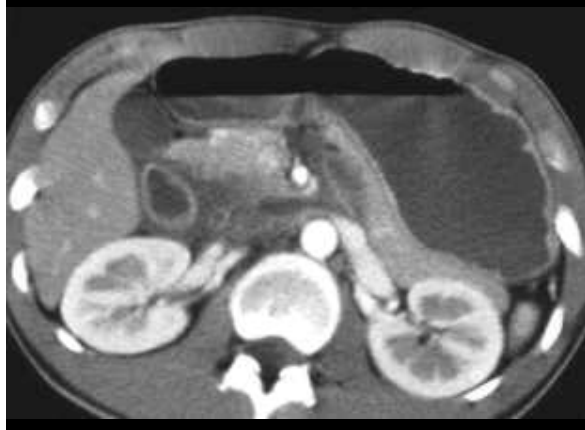
homme 25 ans douleurs abdominales



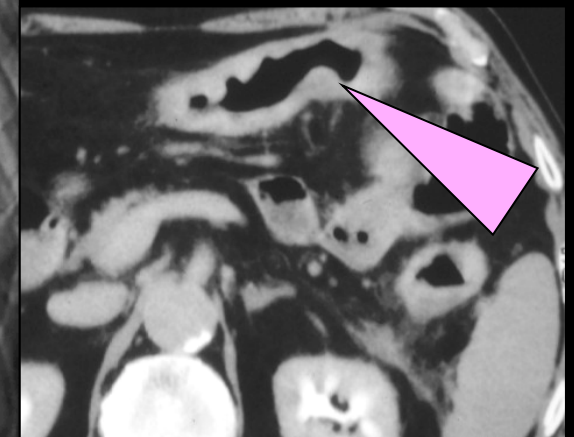
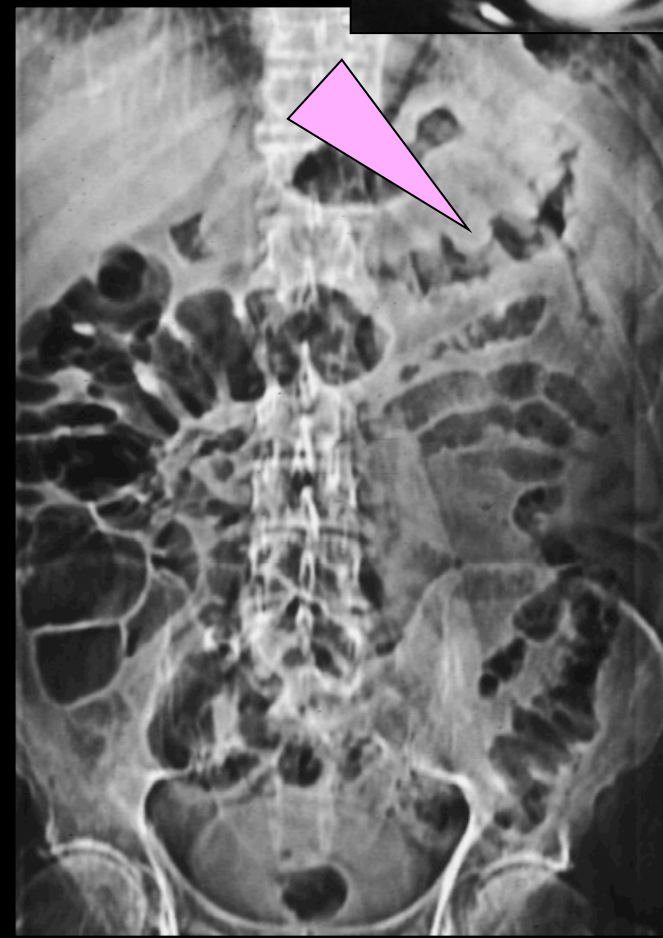
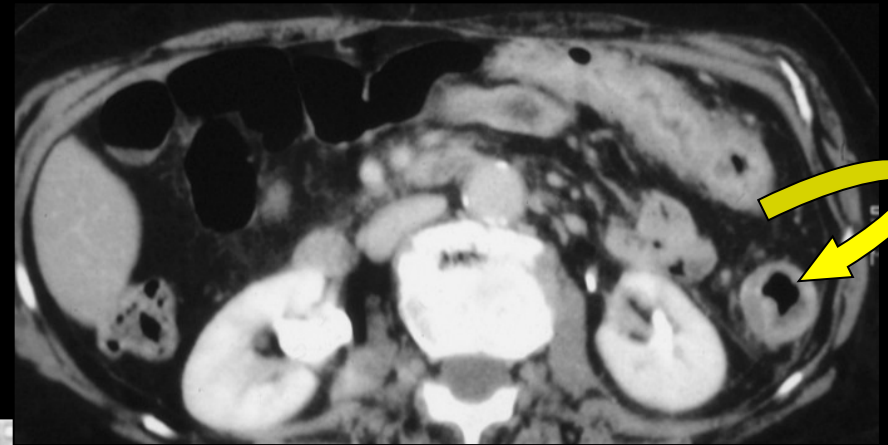
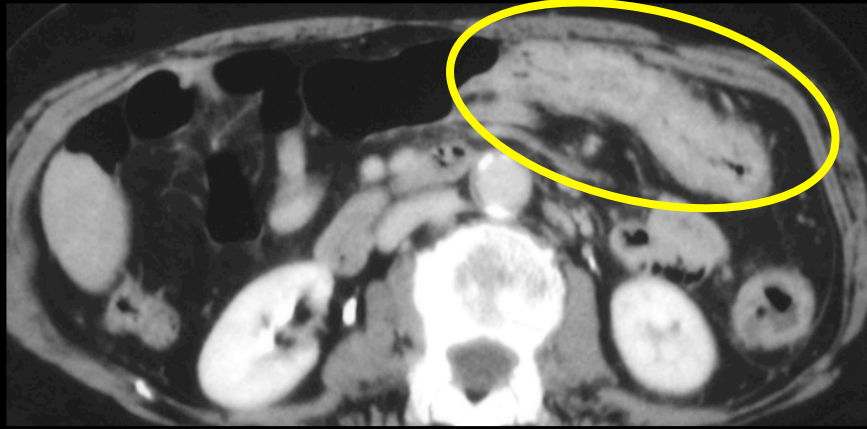
purpura rhumatoïde

hyperperméabilité capillaire

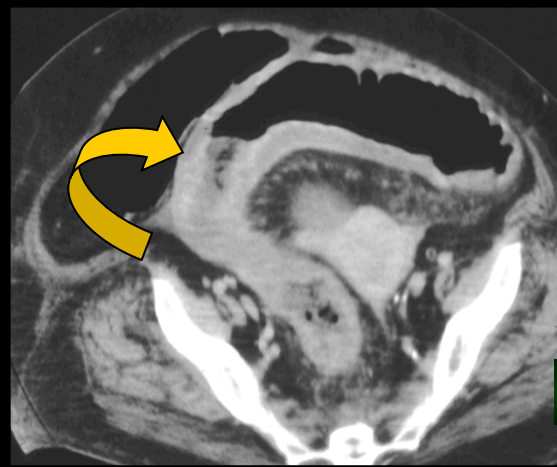
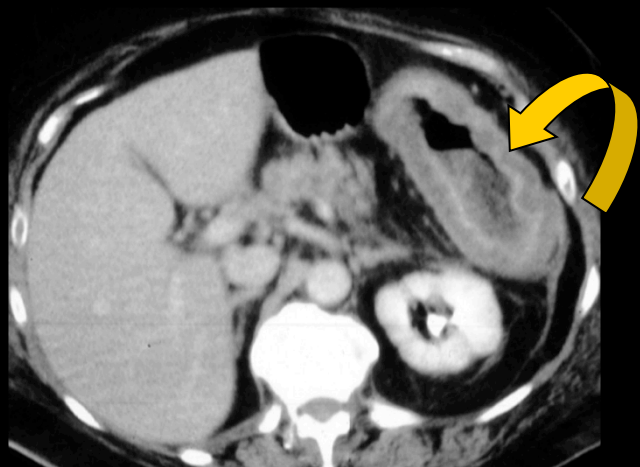
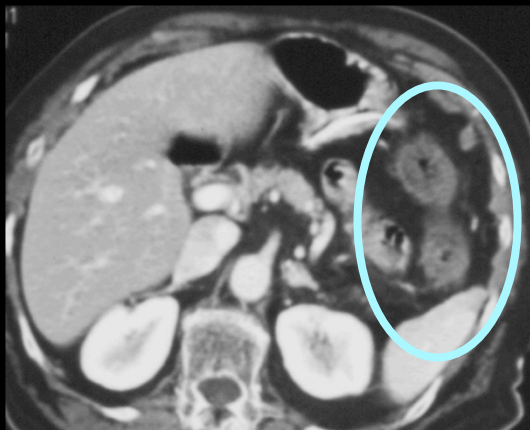
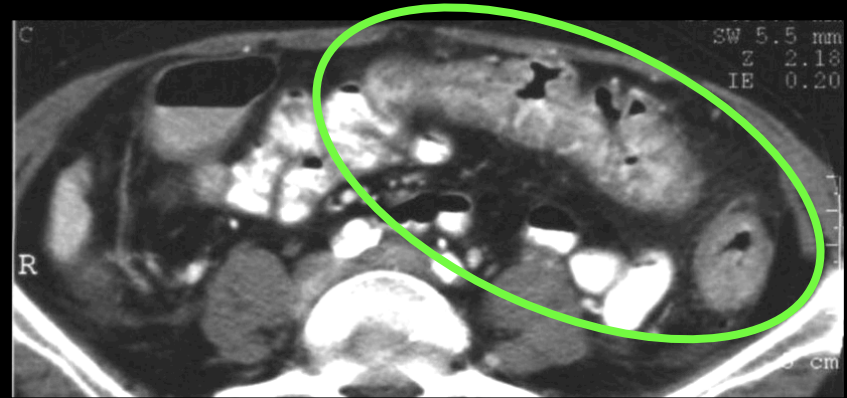
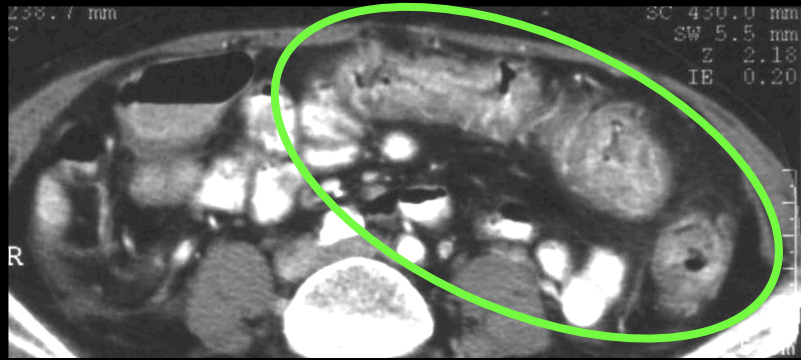
homme 27 ans, douleurs abdominales ,fièvre arthralgies



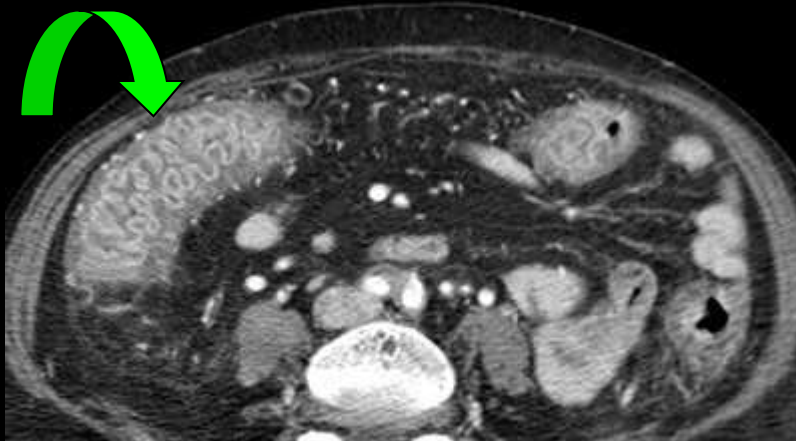
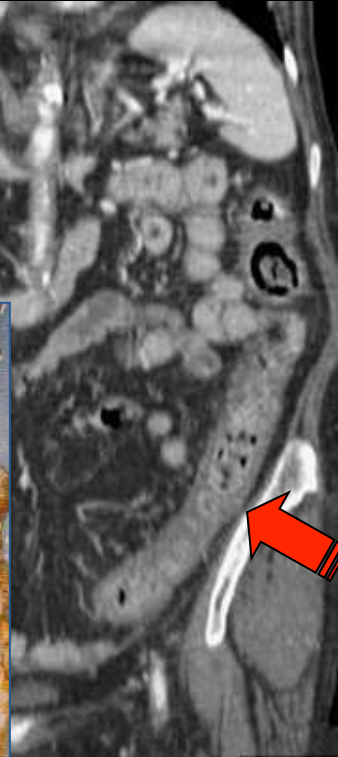
purpura rhumatoïde



colites
ischémiques



colites ischémiques

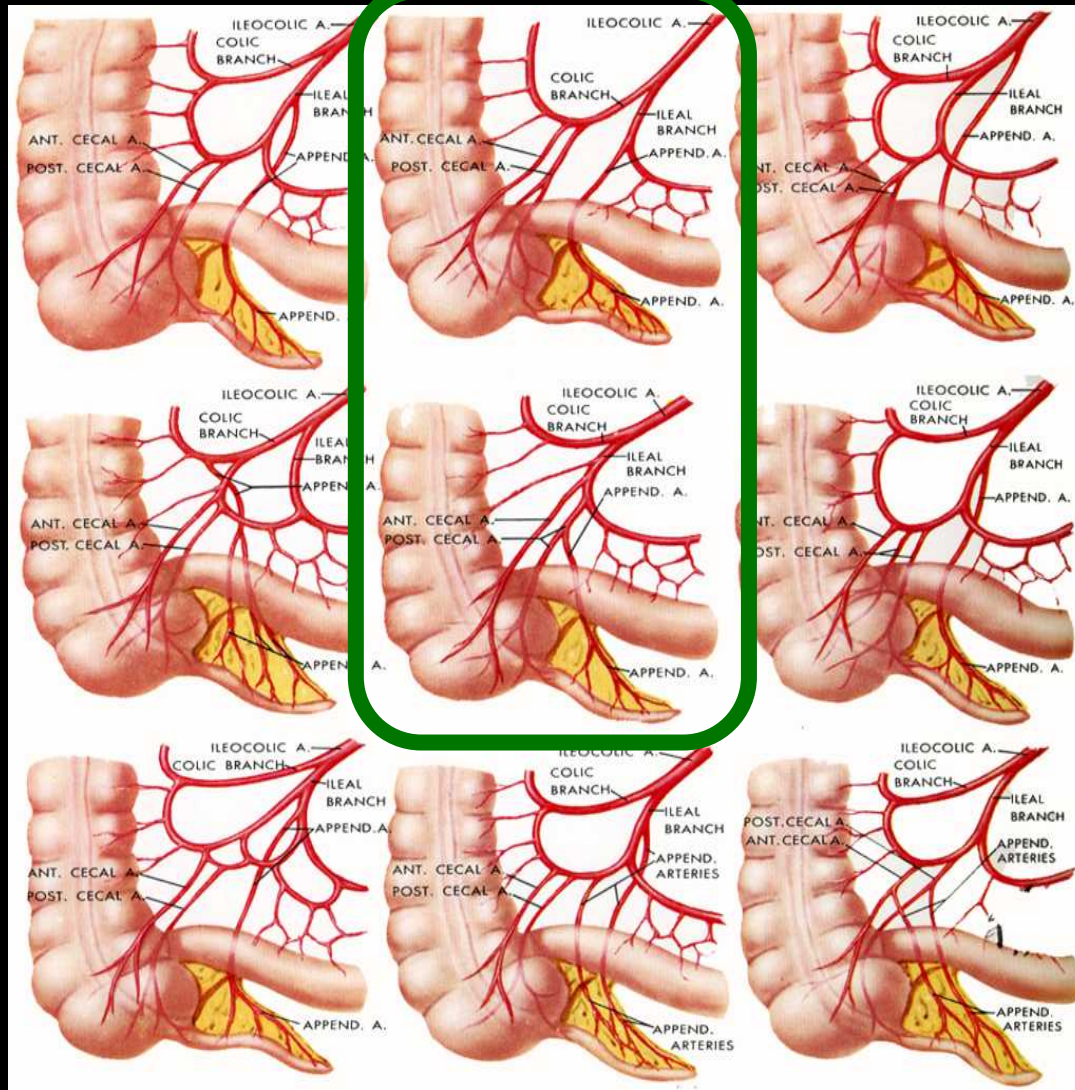


pan colite aiguë
colite pseudo-
membraneuse
(clostridium difficile)
concertina-like aspect





ischémies coliques segmentaires droites

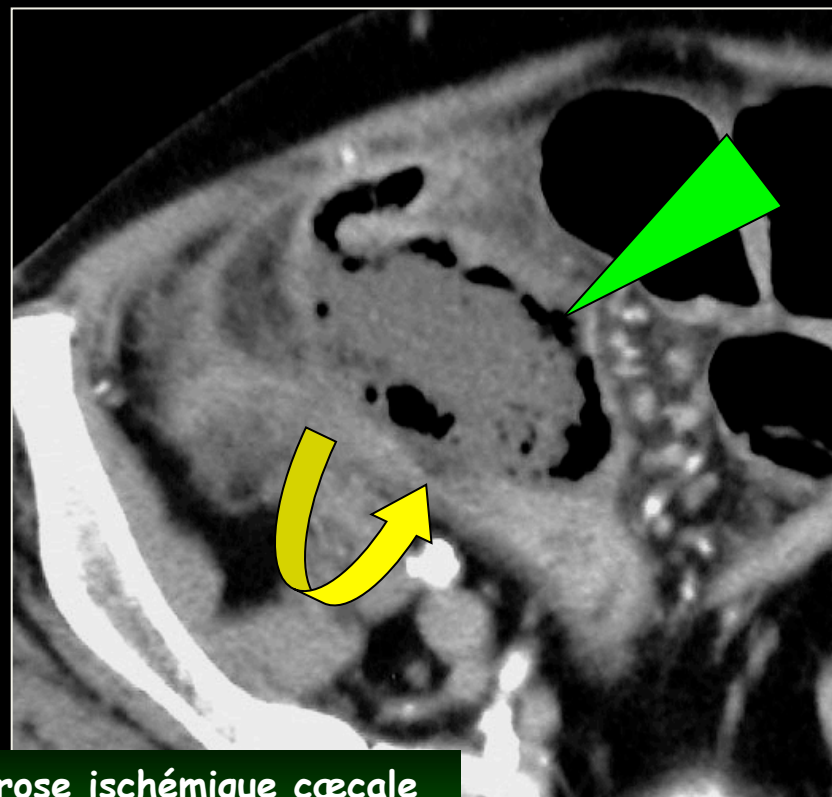
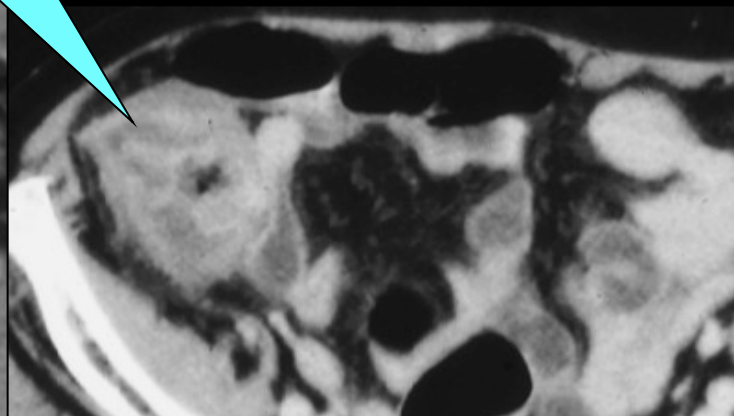


facteurs anatomiques prédisposants :

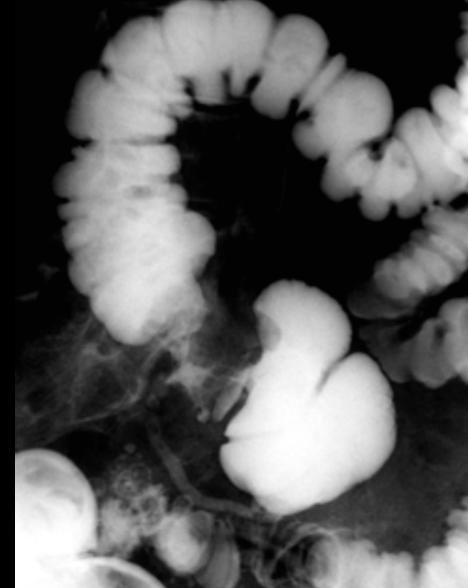
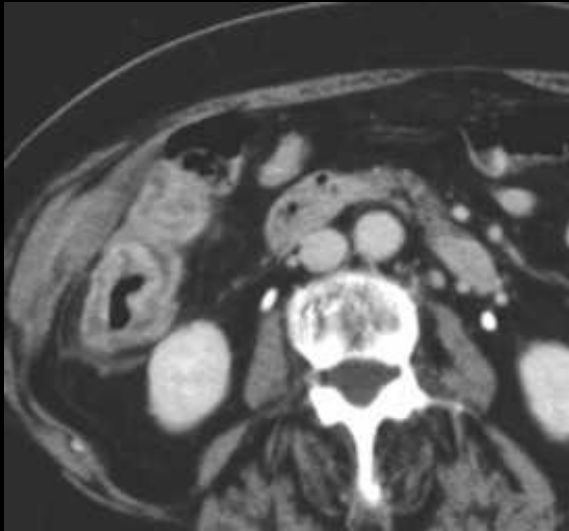
- longueur des vaisseaux droits du caecum
- diamètre du caecum (loi de Laplace)
- présence d'arcades anastomotiques entre artères iéales ,caecales et coliques droites



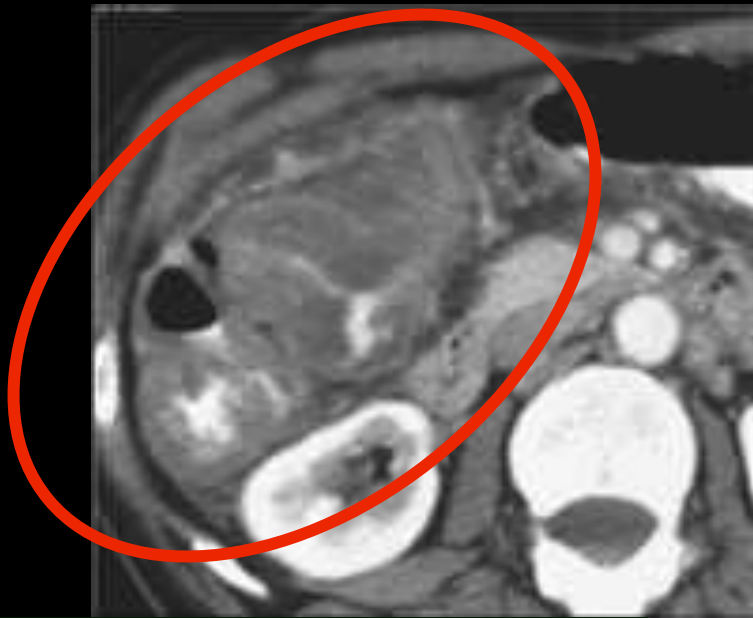
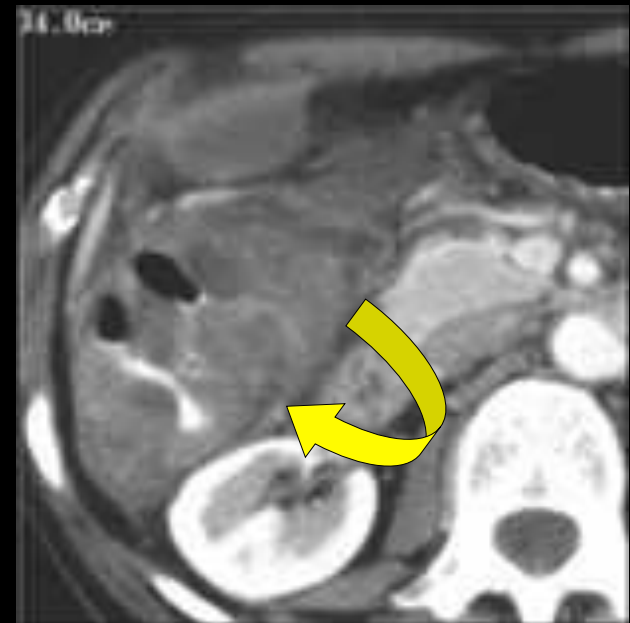
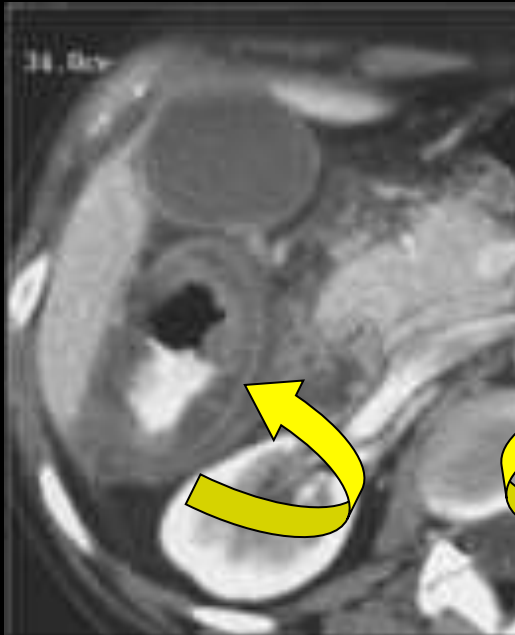
ischémies subaiguës cæcales



nécrose ischémique cæcale
"perforée bouchée".

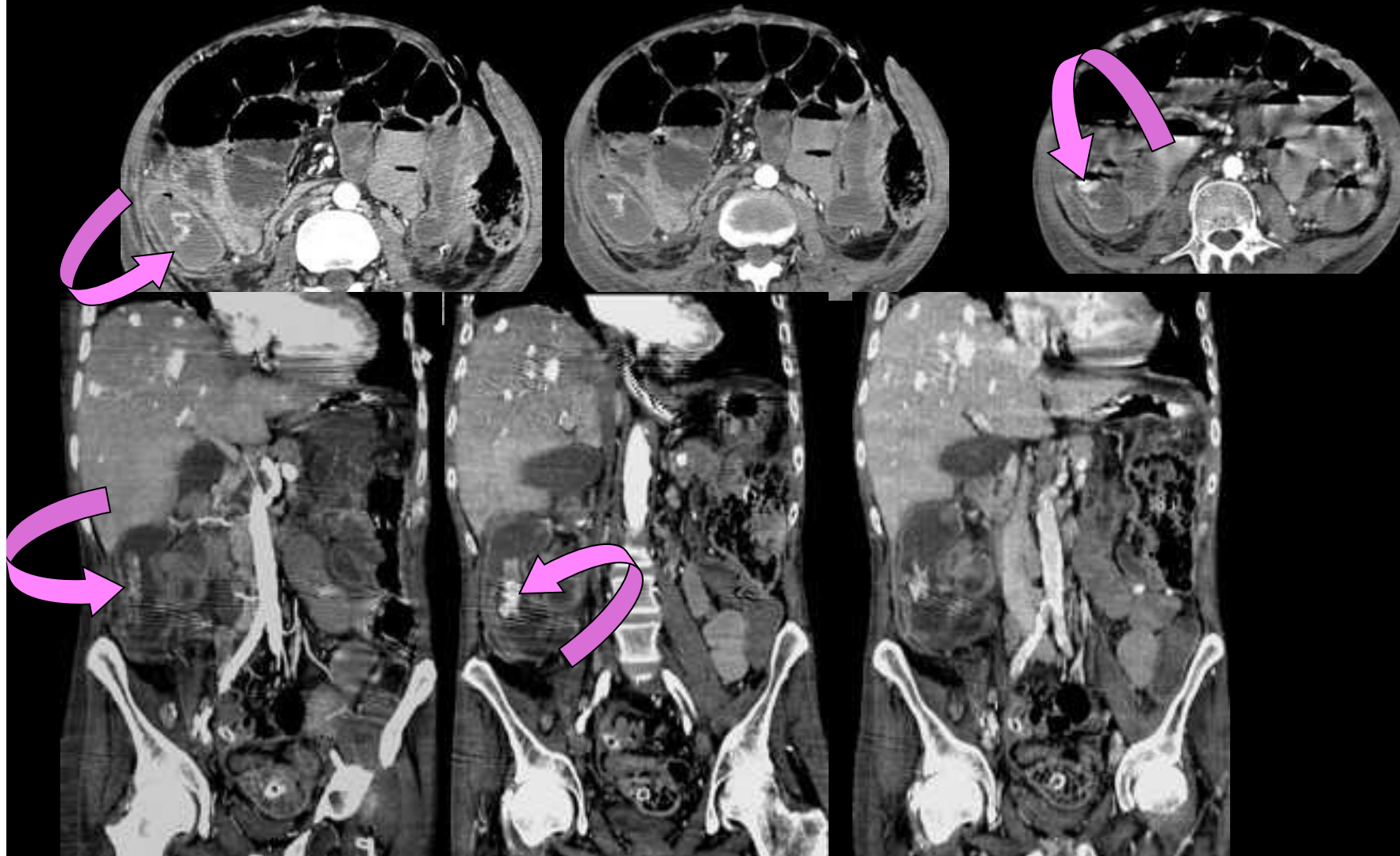


ischémie subaiguë segmentaire du colon
ascendant ; aspect pseudo-tumoral

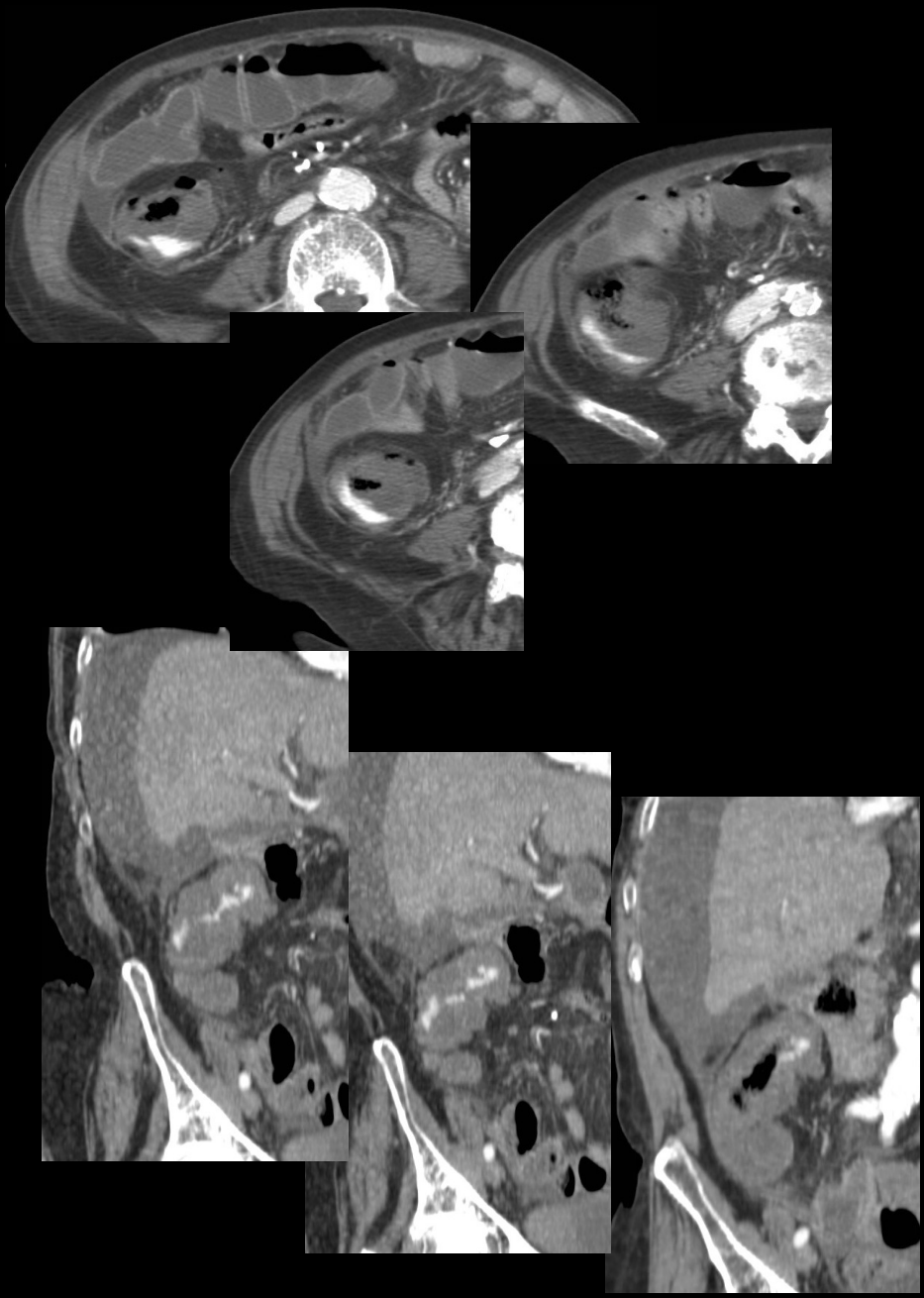


ischémie colique droite pseudo-tumorale

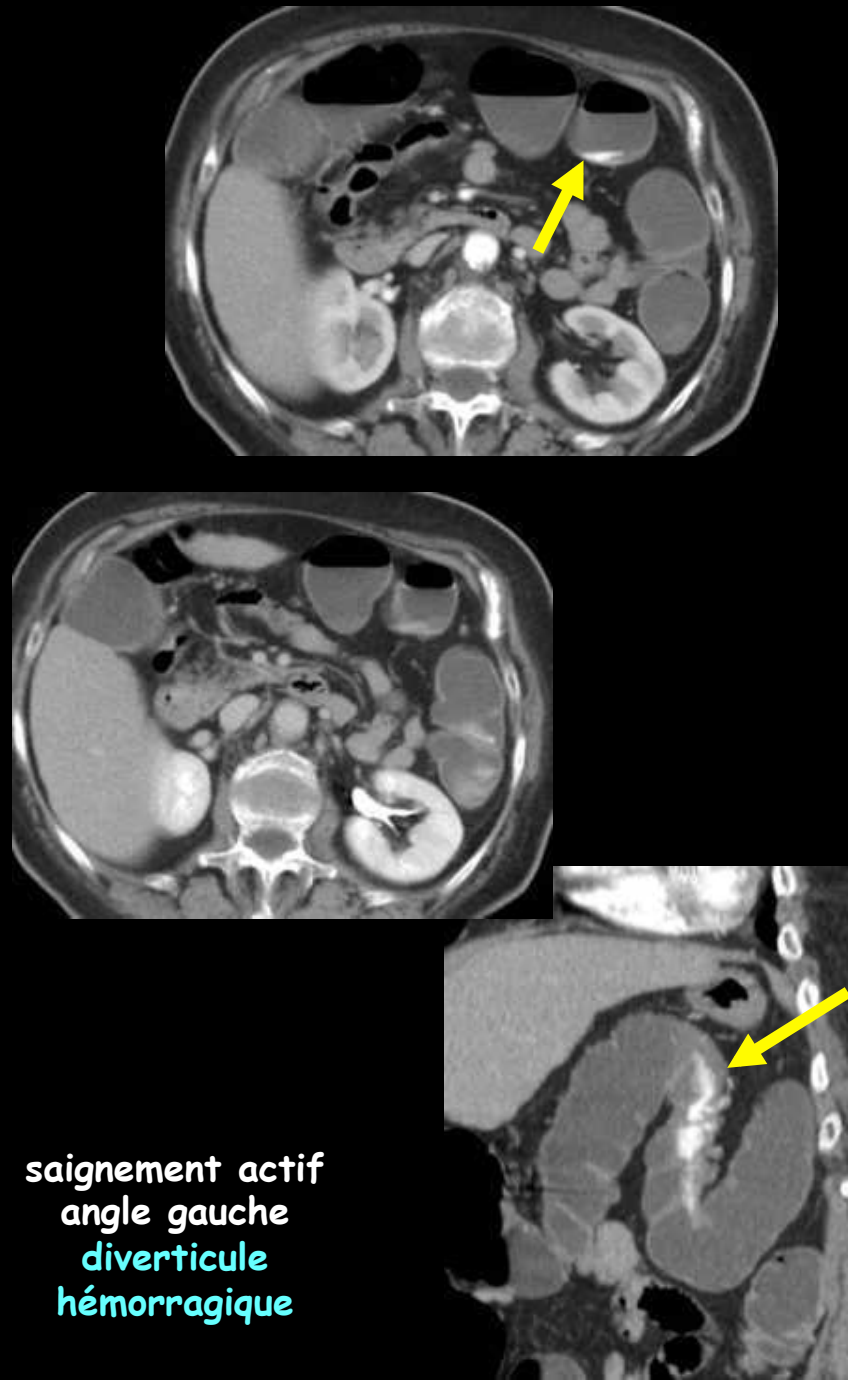
4.4 hémorragies digestives basses



angiodysplasie cœcale hémorragique



saignement actif colique droit; **angiodyplasie**



saignement actif
angle gauche
diverticule
hémorragique

à suivre