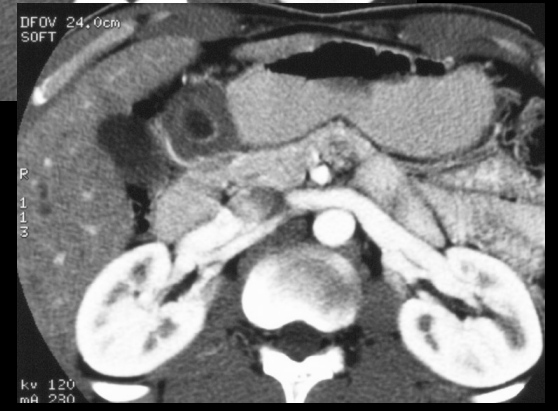
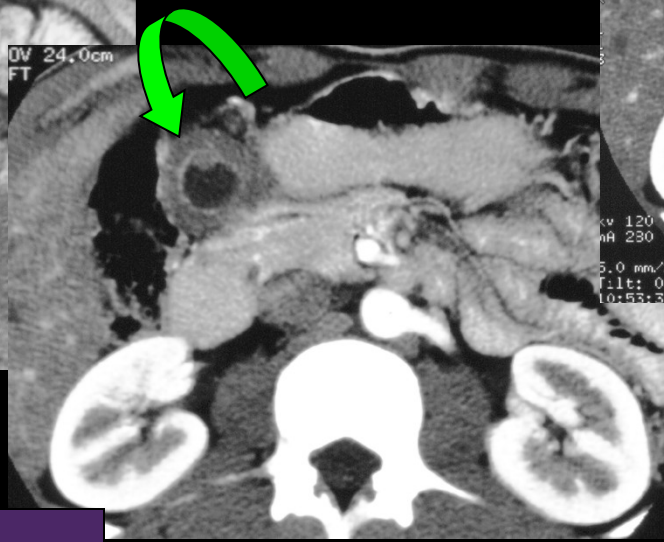
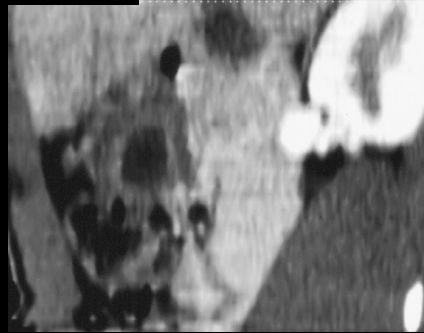
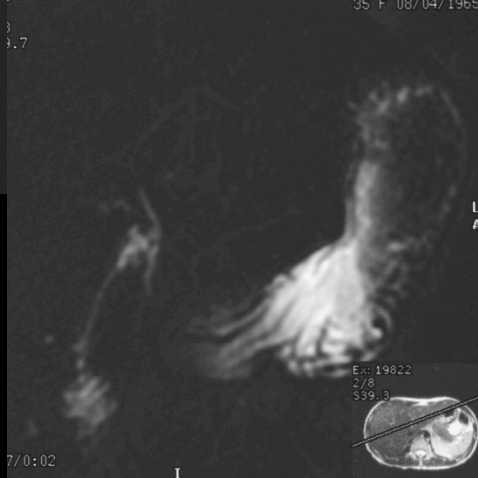
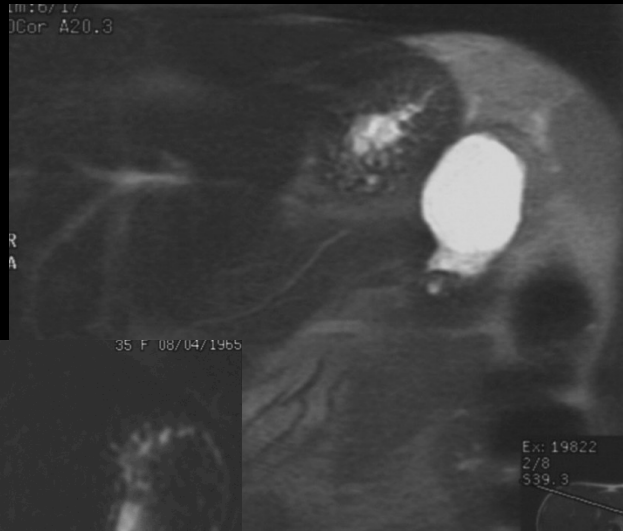
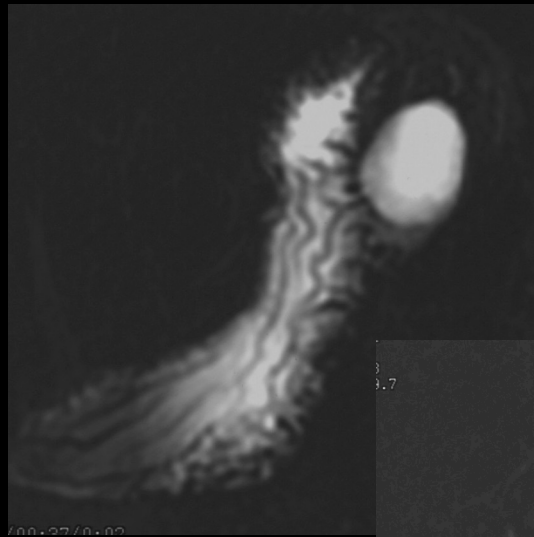
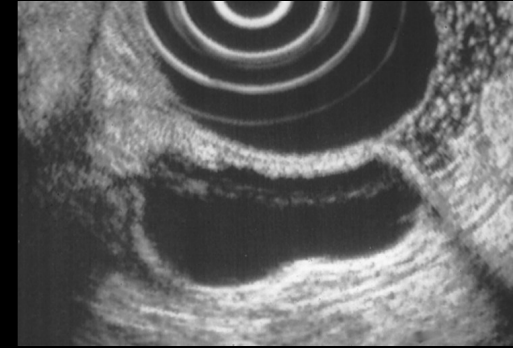
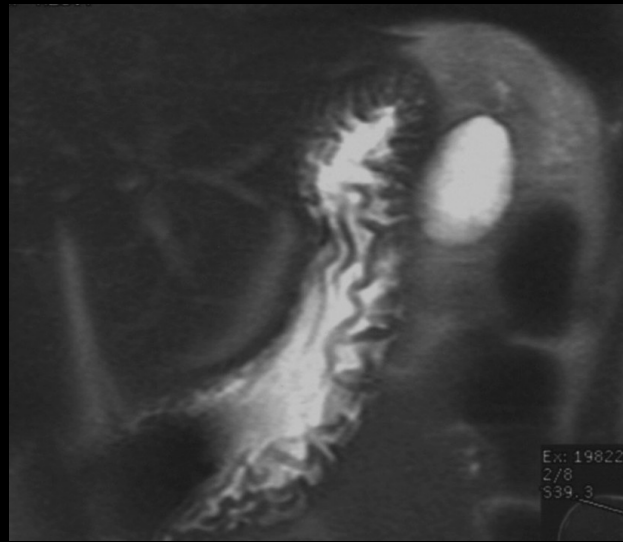
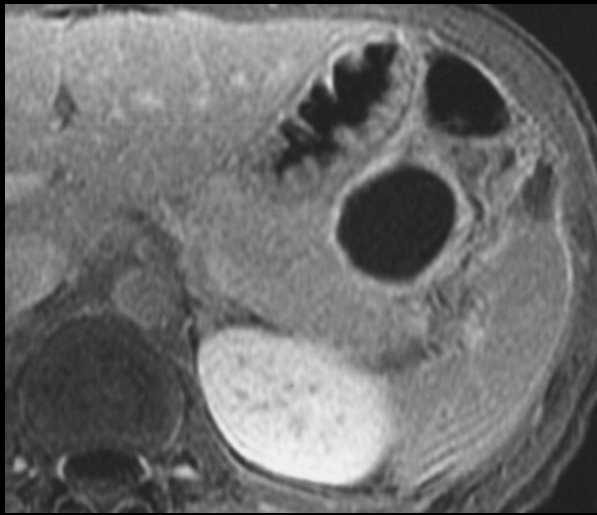


Jeune femme 26 ans ,vomissements sans perte de poids ; masse liquidienne épigastrique découverte à l'échographie



duplication gastrique



duplications gastriques

Echographie:

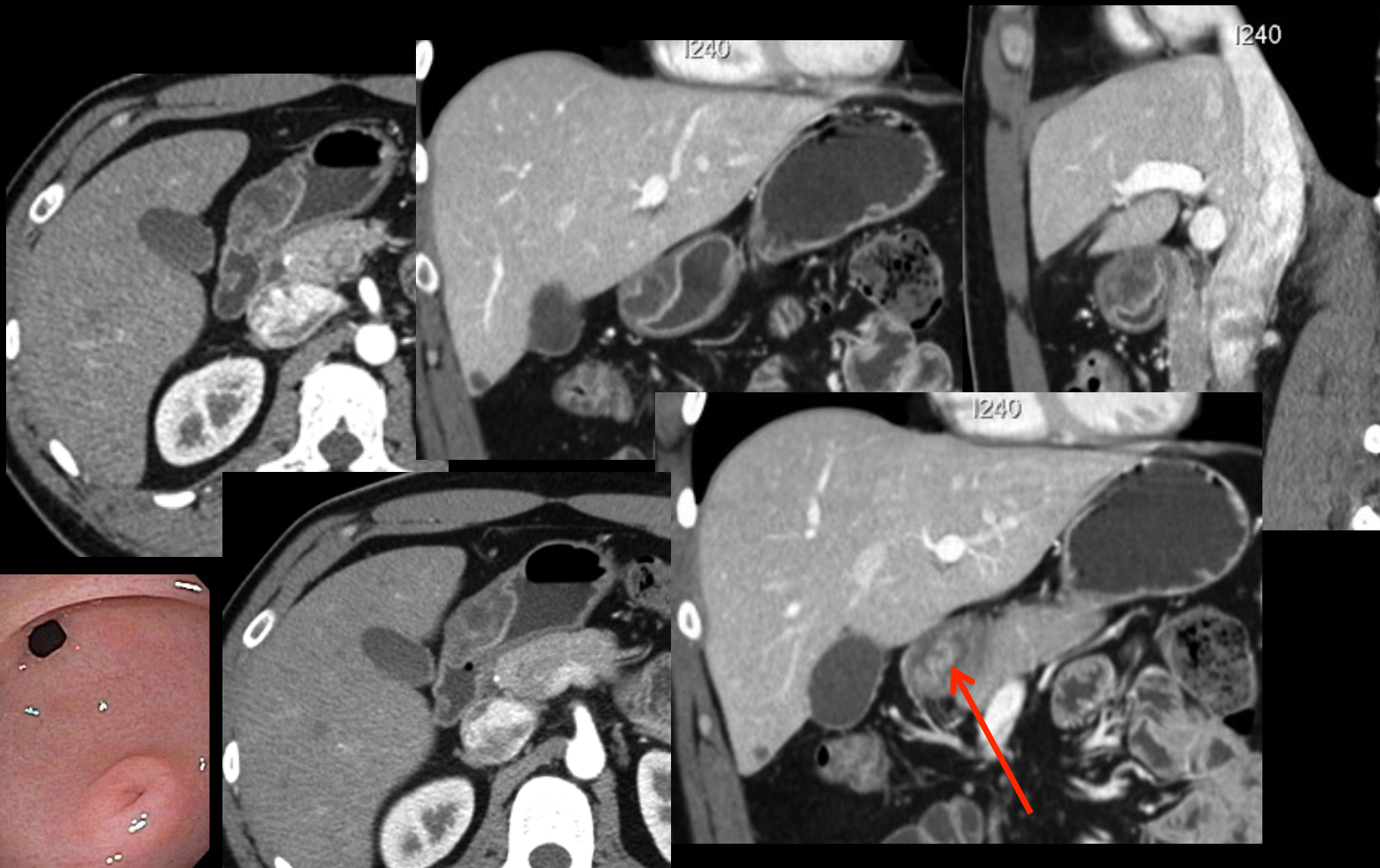
**Couches pariétales
Mouvements péristaltiques**



duplication antrale

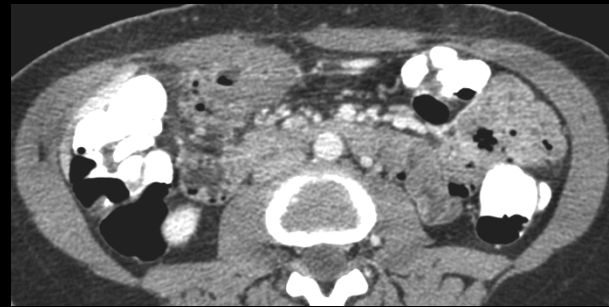
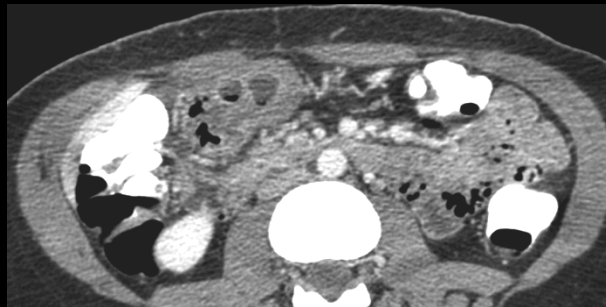
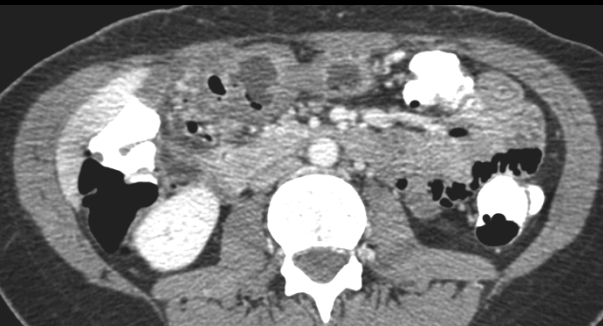
paroi = rehaussement identique paroi digestive

homme 31 ans ,douleurs épigastriques , dyspepsie .Présence d'un petit pertuis à l'endoscopie ,à la surface de la voussure

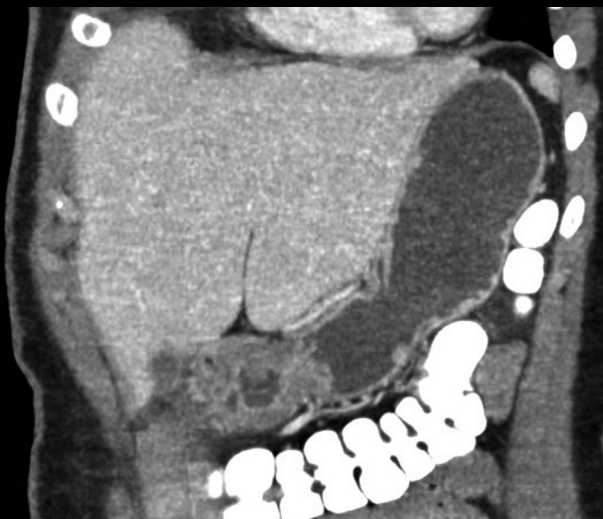


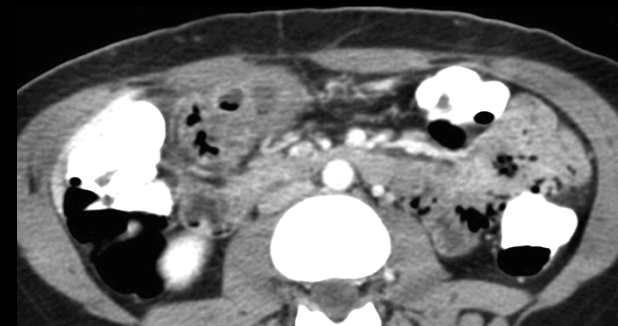
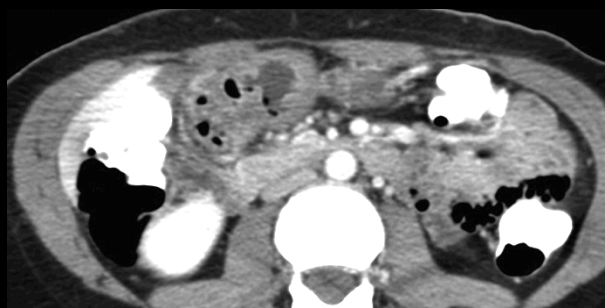
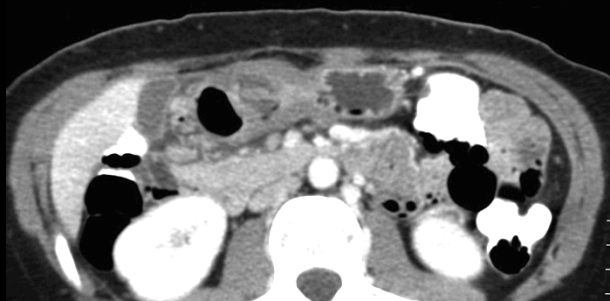
Pancréas ectopique antral

Jeune femme, 28 ans épigastralgies résistantes aux IPP ; les endoscopies avec biopsies multiples ne montrent pas d'éléments suspects de malignité



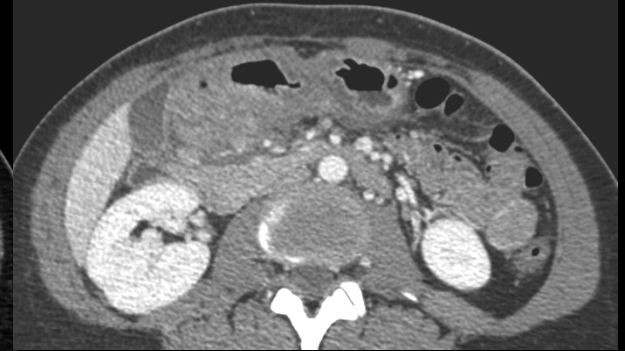
examen du 02 07 2007



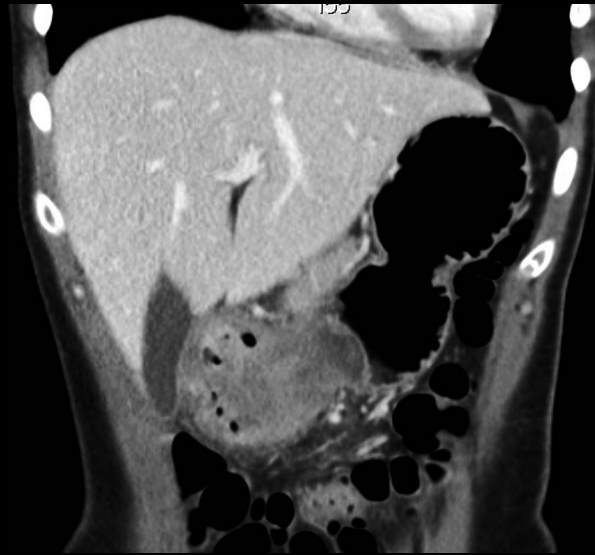
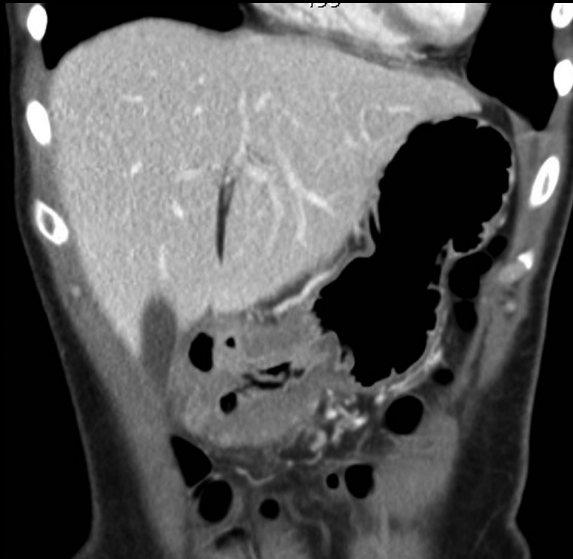


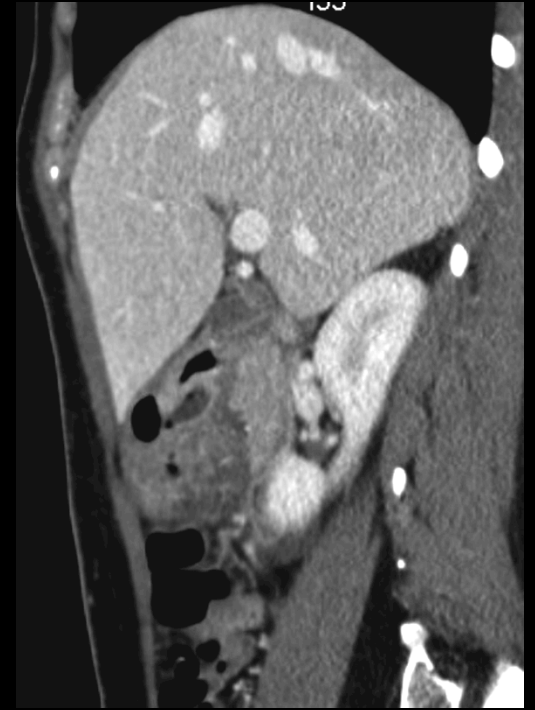
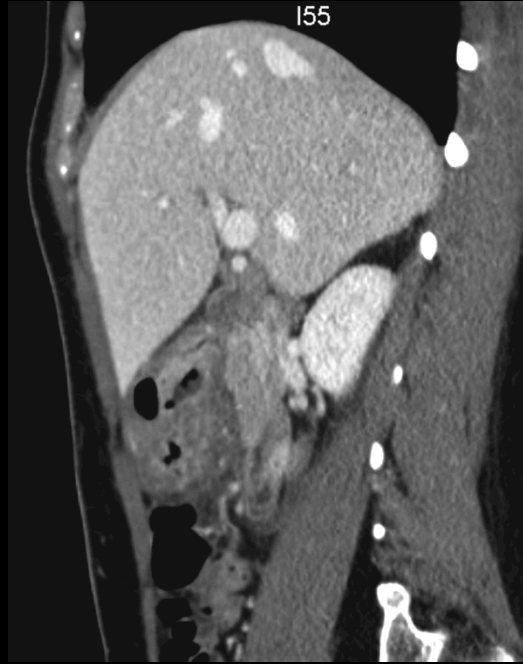
examen du 02 07 2007 (suite)

de multiples endoscopie avec biopsies ne montrant pas de lésions épithéliales malignes mais aboutissant au diagnostic de pseudotumeur inflammatoire gastrique (sans argument histologique précis de type cellules myo-épithéliales)



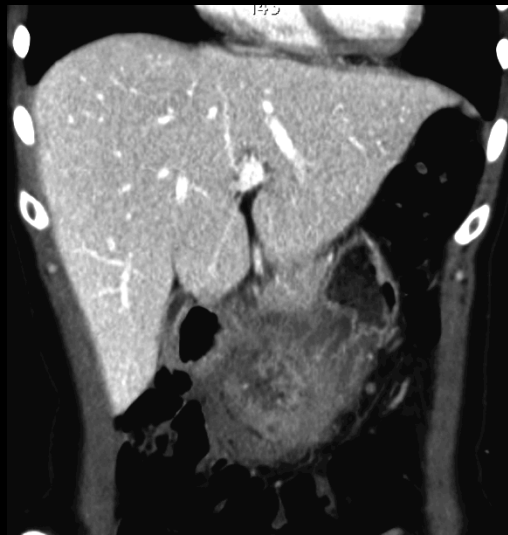
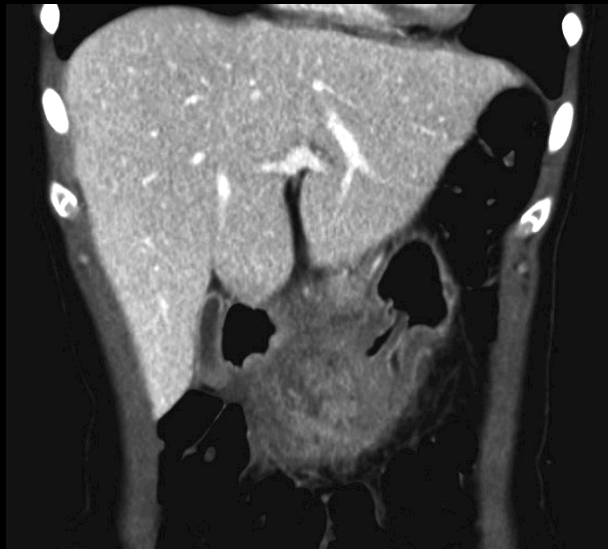
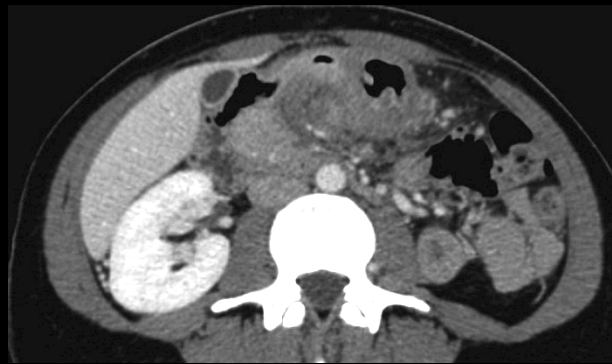
Examen du 05 06 2009



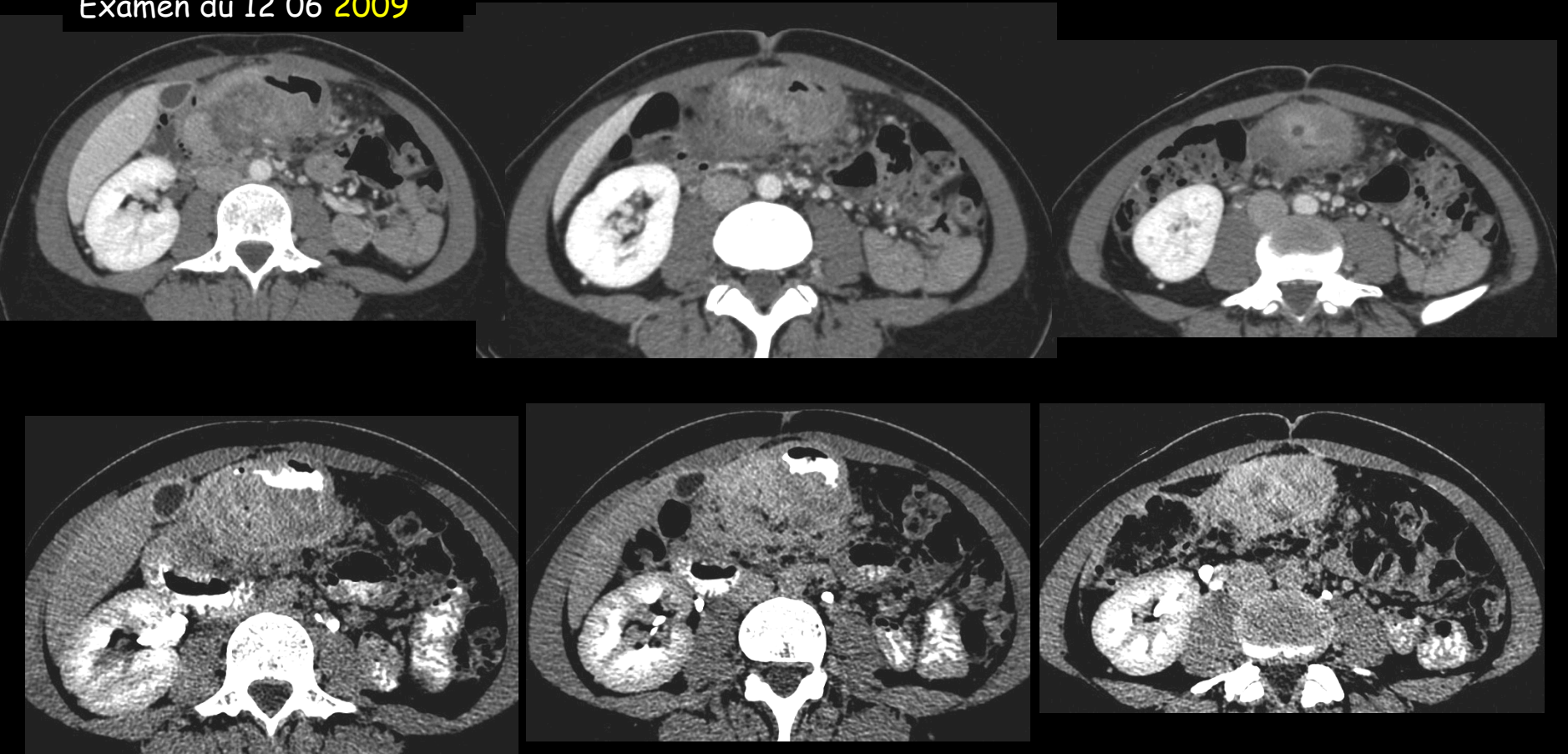


Examen du 05 06 2009

Examen du 12 06 2009

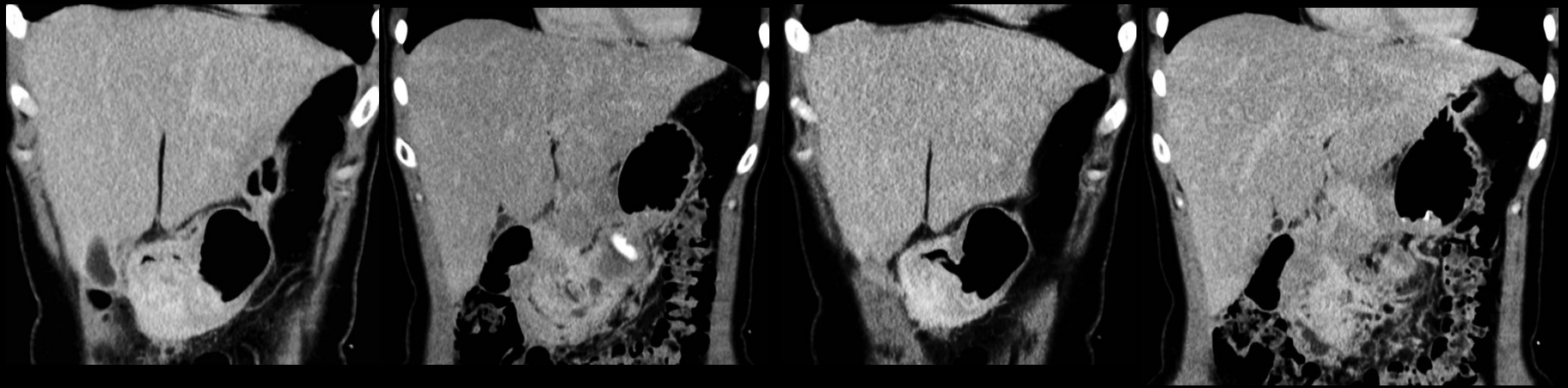


Examen du 12 06 2009



Après 2 ans d'évolution, au décours d'un épisode d'acutisation avec tableau pseudo-perforatif et retentissement sur l'état général, la patiente est opérée par gastrectomie des 2/3





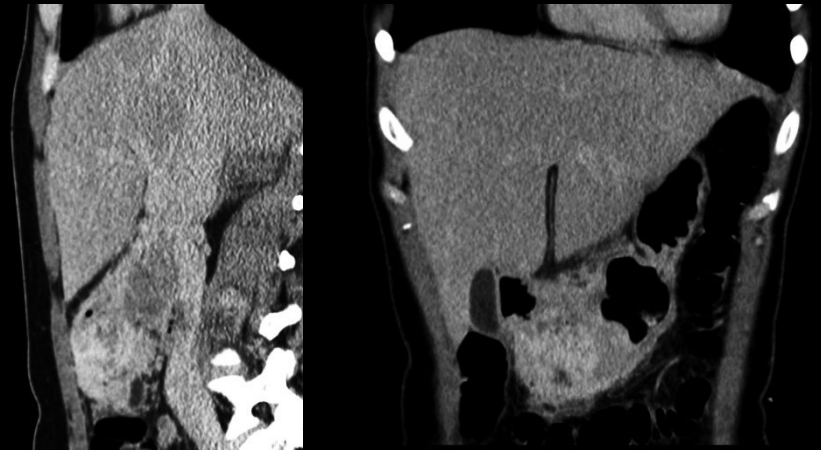
Hypothèses diagnostiques

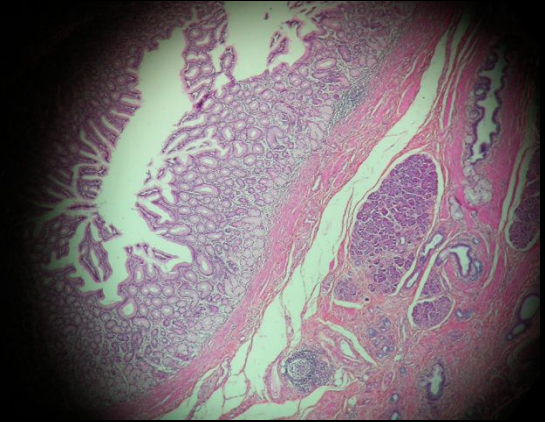
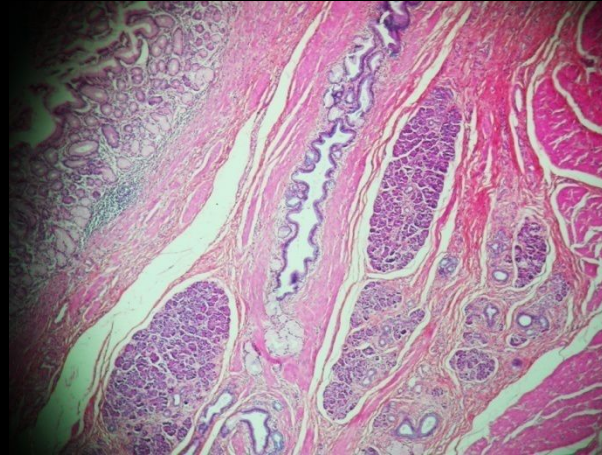
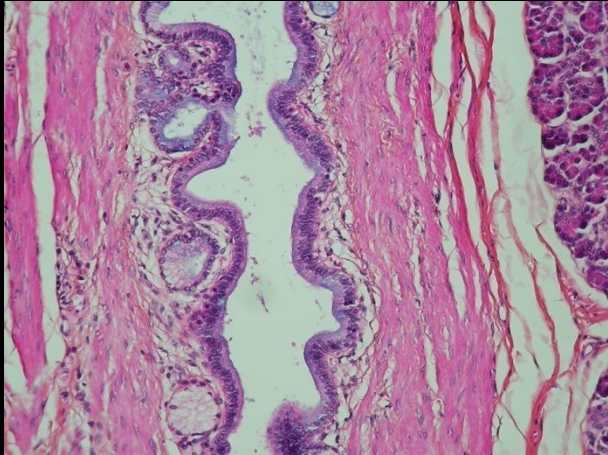
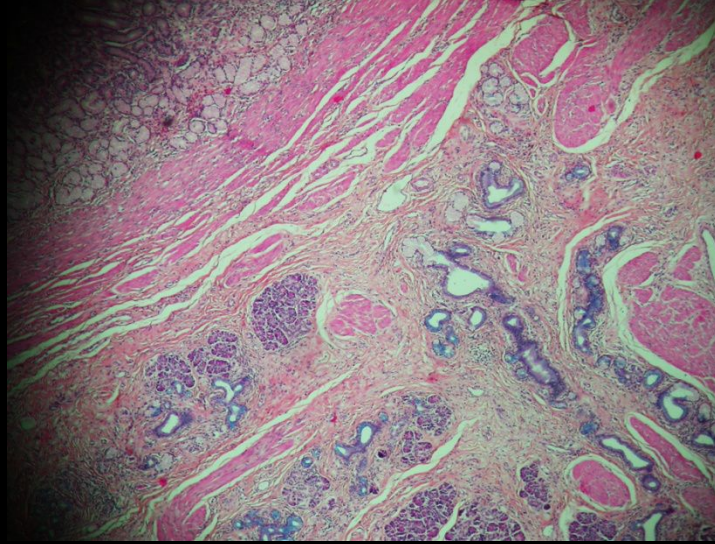
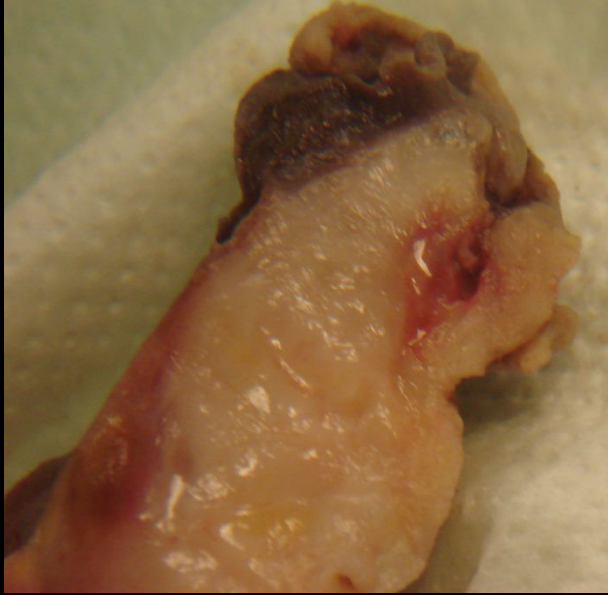
-LMNH
-adénocarcinome mucineux ou anaplasique
-pancréatite aiguë

-GIST
-plasmocytome extra osseux
-métastase pariétale de l'estomac

....

What else ;;; puisque cela cadre mal avec
plus de 2 ans d'évolution





Sur l'examen histologique de la pièce on aboutit au diagnostic de :

pancréatite chronique sur pancréas ectopique de la paroi antrale de l'estomac

JULY 2009

Ectopic Pancreas: CT Findings with Emphasis on Differentiation from Small Gastrointestinal Stromal Tumor and Leiomyoma¹

Radiology

Ji Young Kim, MD
Jeong Min Lee, MD
Kyung Won Kim, MD
Hee Sun Park, MD
Jin Young Choi, MD
Se Hyung Kim, MD
Min A Kim, MD
Jae Young Lee, MD
Joon Koo Han, MD
Byung Ihn Choi, MD

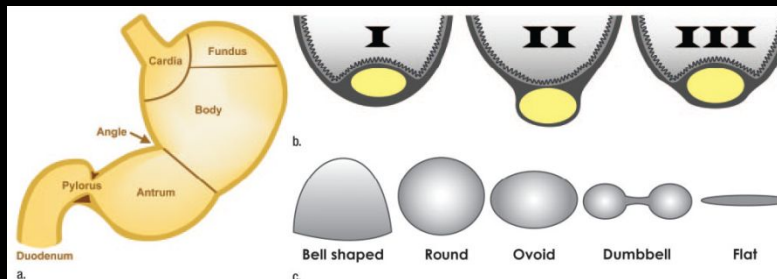
Purpose:

To describe the computed tomographic (CT) findings of ectopic pancreas and to identify the features that differentiate it from other similarly manifesting gastric submucosal tumors such as gastrointestinal stromal tumor (GIST) and leiomyoma, which are the most common gastrointestinal submucosal tumors.

Materials and Methods:

This retrospective study was approved by the institutional review board and did not require informed consent. CT images of pathologically proved ectopic pancreases ($n = 14$), GISTs ($n = 22$), and leiomyomas ($n = 7$) in the

Série rétrospective : 14 pancréas ectopiques gastriques ou duodénaux, 33 GIST, 7 léiomyomes en 6 ans, et, dans le même temps 16 carcinoïdes, 9 schwannomes et 5 lipomes. Toutes ces lésions mesurant moins de 4 cm de diamètre maximal.



Categoric Data: CT Findings in Ectopic Pancreas, GIST, and Leiomyoma

CT Finding	Ectopic Pancreas (n = 14)	GIST (n = 33)	Leiomyoma (n = 7)	P Value*
Location				<.001
Cardia	0	2 (6)	6 (86)	
Fundus	0	9 (27)	0	
Body	1 (7)	13 (39)	0	
Angle	1 (7)	3 (9)	0	
Antrum	7 (50)	5 (15)	1 (14)	
Pylorus	1 (7)	0	0	
Duodenum	4 (29)	1 (3)	0	
Contour				.009
Bell shaped	2 (14)	0	1 (14)	
Round	2 (14)	13 (39)	4 (57)	
Ovoid	6 (43)	17 (52)	2 (29)	
Dumbbell	1 (7)	3 (9)	0	
Flat	3 (21)	0	0	
Growth pattern				.043
Endoluminal	12 (86)	16 (48)	4 (57)	
Exophytic or mixed	2 (14)	17 (52)	3 (43)	
Border				<.001
Ill defined	10 (71)	2 (6)	0	
Well defined	4 (29)	31 (94)	7 (100)	
Enhancement pattern				.282
Heterogeneous	10 (71)	18 (55)	2 (29)	
Homogeneous	4 (29)	15 (45)	5 (71)	
Enhancement grade				.087
Low	2 (14)	6 (18)	4 (57)	
Intermediate	0	6 (18)	2 (29)	
High	12 (86)	21 (64)	1 (14)	
Surface dimple	2 (14)	3 (9)	1 (14)	.956
Prominent enhancement of overlying mucosa	4 (29)	0	0	.004
Low intraluminal attenuation	2 (14)	8 (24)	0	.941

Note.—Data are numbers of patients, with percentages in parentheses. Percentages may not add up to 100% because of rounding.

* Between ectopic pancreas and other tumors (GIST and leiomyoma); calculated with χ^2 test.

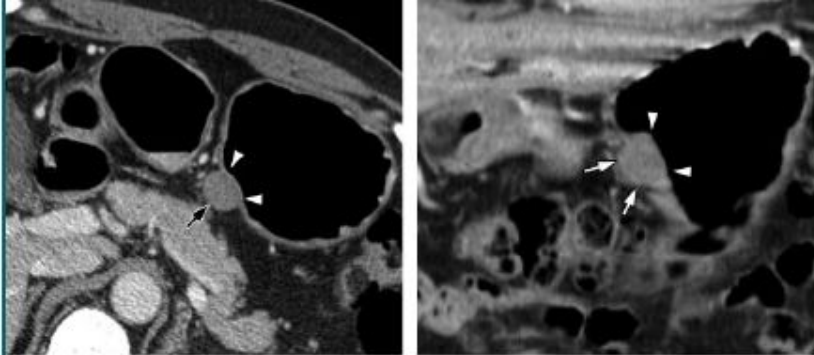


Figure 3: Benign GIST in gastric upper body in 61-year-old man. (a) Transverse and (b) coronal CT scans show a well-defined, homogeneously low-attenuating ovoid mass (arrow in a and arrows in b) in the gastric upper body. The lesion shows a mixed growth pattern. The overlying mucosa (arrowheads) seems to be intact, suggesting a submucosal lesion. However, the overlying mucosa does not prominently enhance compared with the adjacent normal mucosa. The LD/SD ratio of this lesion was 1.22 (2.2/1.8 cm).

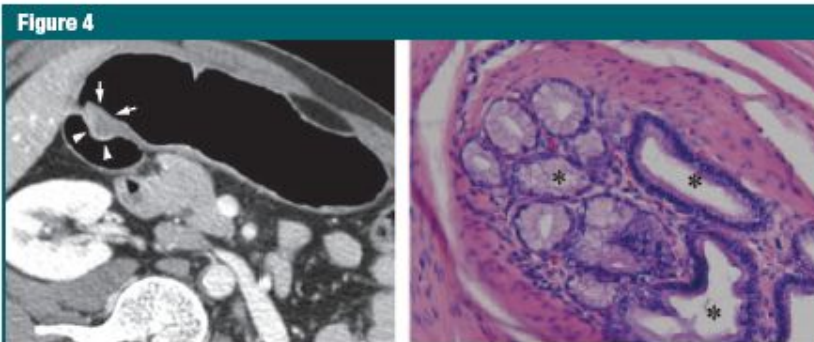


Figure 4: Ectopic pancreas at gastric antrum in 51-year-old man. (a) Transverse contrast-enhanced CT scan shows an ill-defined flat-ovoid 1.4-cm endoluminal submucosal mass (arrows) in the anterior wall of the gastric prepyloric antrum. The lesion shows heterogeneous enhancement and lower attenuation than back muscle, and the LD/SD ratio was 1.56 (1.4/0.9 cm). Note the prominent enhancement and mild thickening of the overlying mucosal layer (arrowheads). (b, c) Photomicrographs show marked gastritis of (b) the overlying gastric mucosa and (c) the mass, which predominantly consists of ducts (*). (Hematoxylin-eosin stain; original magnification, $\times 20$ in b and $\times 10$ in c.)

2 éléments sémiologiques statistiquement significatifs :

-le **rehaussement de la muqueuse sus jacente** est plus important pour pancréas ectopique et GIST que pour les léiomyomes

-le rapport diamètre maxi / diamètre mini est supérieur à 1,4 pour les pancréas ectopiques

mais également : 50% de **localisations antrales** pour les pancréas ectopiques versus 15 % des GIST et 14% des léiomyomes ; mauvaise définition des limites ; rehaussement de la lésion lié à sa structure histologique ++++

3 types histologiques :

-prédominance d'acinis pancréatiques 27%

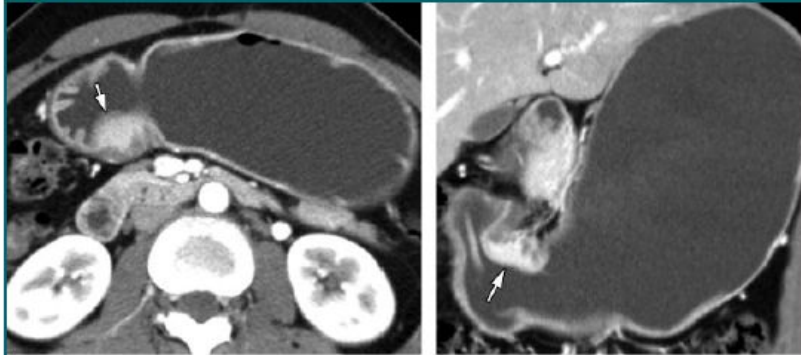
-prédominance canalaire 9%

-mixtes 64%

Le rehaussement majoré est le fait des formes à prédominance acinaire, tandis que les formes canalaire se rehaussent moins que la pancréas normal

Les léiomyomes siègent préférentiellement dans la région du cardia (86%) ; ils se rehaussent modetement , de façon homogène .

Figure 5



a. **b.**
Figure 5: Ectopic pancreas in gastric antrum in 45-year-old woman. (a) Transverse and (b) coronal CT scans show an ill-defined ovoid endoluminal submucosal mass (arrow) in the gastric antrum. The lesion shows homogeneous enhancement and higher attenuation than the pancreas, and the LD/SD ratio was 1.05 (2.3/2.2 cm).

Table 2

Quantitative Image Analysis Results for Three Types of Gastric Submucosal Tumor

CT Finding	Ectopic Pancreas (n = 14)	GIST (n = 33)	Leiomyoma (n = 7)	P Value*
LD (mm)	18.4 ± 5.31	28.9 ± 6.93	29 ± 10.38	...
SD (mm)	12.6 ± 4.68	23.67 ± 6.26	23.0 ± 9.26	...
LD/SD ratio	1.52 ± 0.37	1.25 ± 0.30	1.33 ± 0.3	.004
CT attenuation value (HU)	106.07 ± 30.37	98.1 ± 42.11	57.3 ± 19.13	.229

Note.—Data are means ± standard deviations.

* Between ectopic pancreas and other tumors (GIST and leiomyoma); calculated with Student t test.

Figure 6

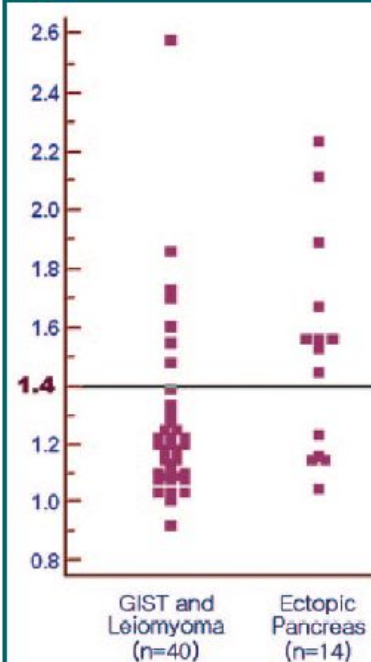


Figure 6: Graph shows LD/SD ratios (along y-axis) for ectopic pancreas and the other two submucosal tumors (GIST and leiomyoma). When 1.4 was used as the cutoff value for the LD/SD ratio of the lesion, a sensitivity of 64.3% and a specificity of 82.5% were achieved for the differential diagnosis of ectopic pancreas and the two gastric submucosal tumors.

Complications décrites :

- pancréatites
- pseudokystes
- insulinomes
- adénocarcinomes

à l'origine de douleurs abdominales , d'hémorragies digestives et d'occlusions intestinales

Pseudocyst Formation in Gastric Ectopic Pancreas

Keith C Mulholland¹, William D Wallace¹, Emmanuel Epanomeritakis², Stephen R Hall³

¹Department of Surgery, Institute of Clinical Science, Queen's University; ²Department of Surgery and ³Department of Radiology, Craigavon Area Hospital, Belfast, Northern Ireland

ABSTRACT

Context It is rare for ectopic pancreatic tissue to cause symptoms or require treatment, however diseases of normal pancreas may also occur in ectopic pancreas tissue.

Case report This report describes the clinical, endoscopic, radiologic and histologic features of a pseudocyst occurring in gastric ectopic pancreas in a 19-year-old man. The difficulty and implications of making an accurate pre-operative diagnosis are highlighted.

Conclusion Ectopic pancreatic tissue, although rare, should be considered in the differential diagnosis of a submucosal gastric mass.

19 ans dyspepsie résistante aux
IPP: pancréatite avec
pseudokyste à l'examen
anatomopathologique

Incidence : de 0.2% dans une
série coeliochirurgicale à 13 %
dans une série autopsique.

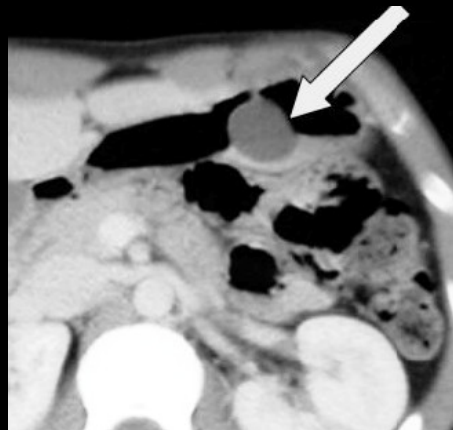
Principaux sites :

.estomac 24 - 38 %

.duodenum 9 - 36%

.jejunum 0.5 - 27%

mais aussi : Meckel , voies
biliaires , foie , rate , mésentère





Éléments caractéristiques :

- .nodule sous muqueux antral , ombiliqué
- .se rehaussant comme le pancréas normal
- .biopsies endoscopiques négatives

Complications des pancréas ectopiques :

- .pancréatite aiguë
- .pseudokyste rare
- .cancérisation 15 cas

.....

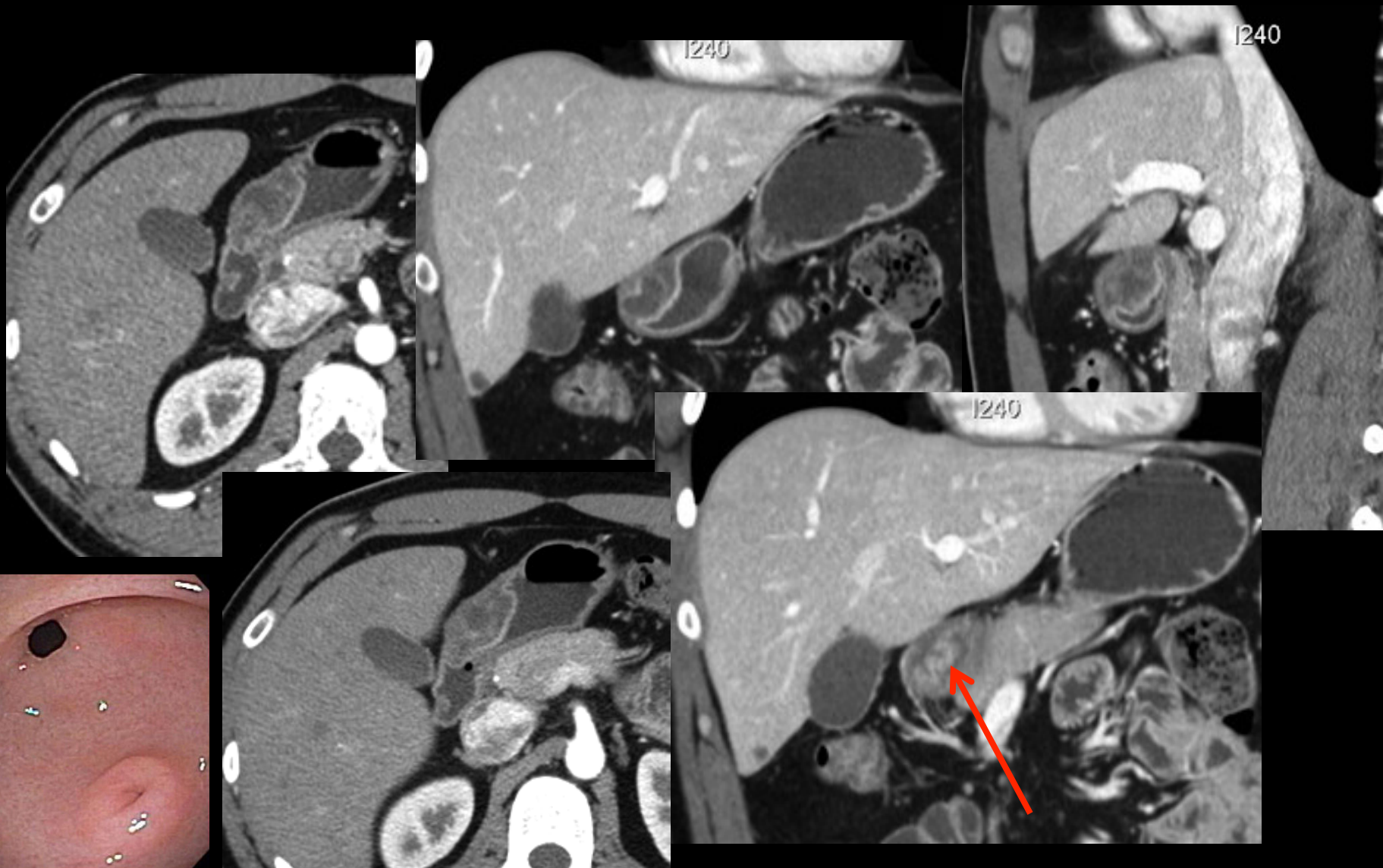
Diagnostic différentiel d'une lésion sous muqueuse :

- .tumeur stromale (GIST)
- .tumeurs gastrointestinales du système nerveux autonome (GANT)
- .lymphome
- .carcinoïde
- .duplication



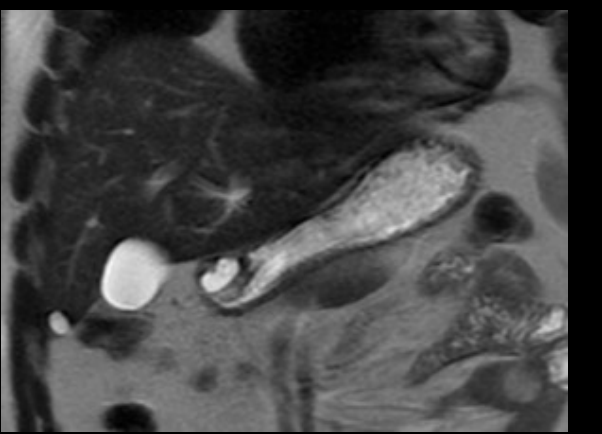
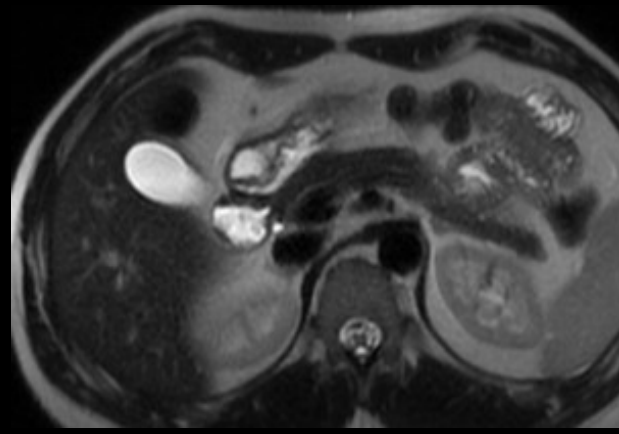
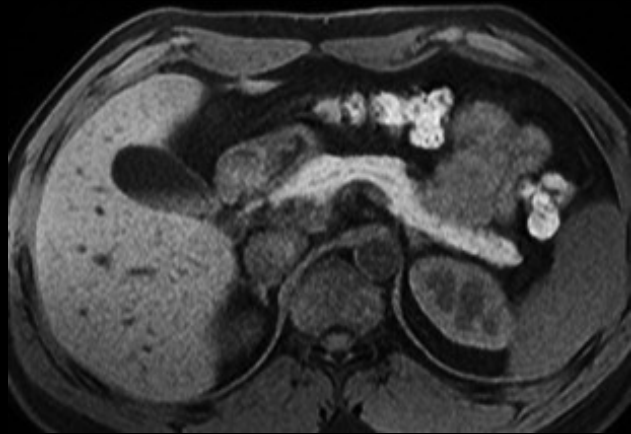
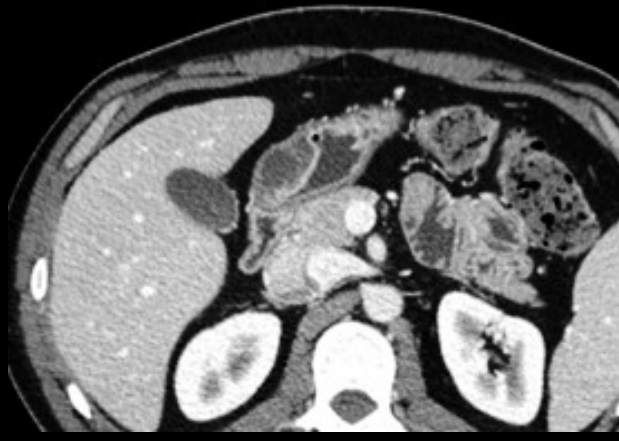
pancréas ectopique
pylorique

homme 31 ans ,douleurs épigastriques , dyspepsie .Présence d' un petit pertuis à l' endoscopie ,à la surface de la voussure



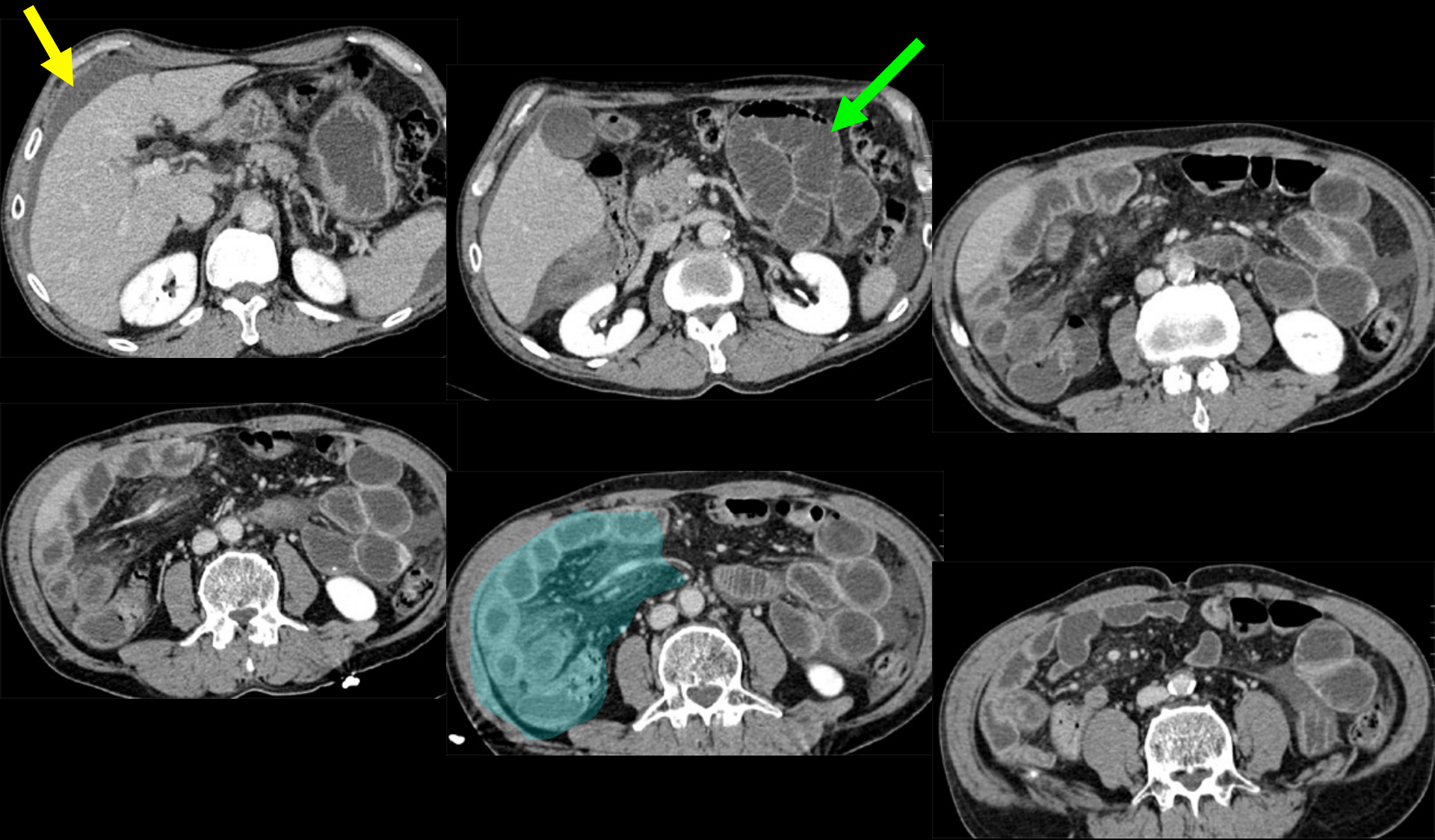
Pancréas ectopique antral

Homme 33 ans , douleurs épigastriques persistantes résistantes aux IPP ;
l'endoscopie montre une tumeur sous muqueuse antrale



Diagnostic de présomption : dystrophie
kystique ou pseudokyste sur pancréas
ectopique antral (ou duplication...???)

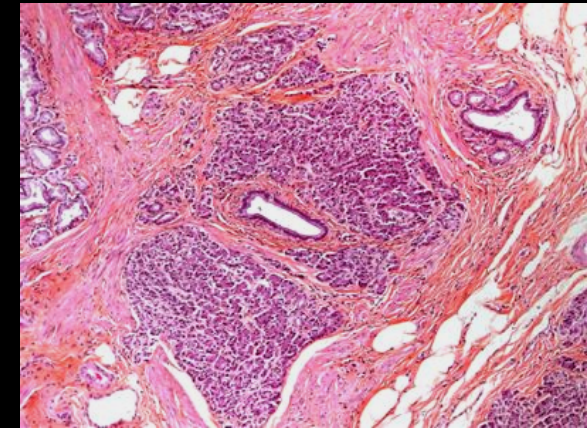
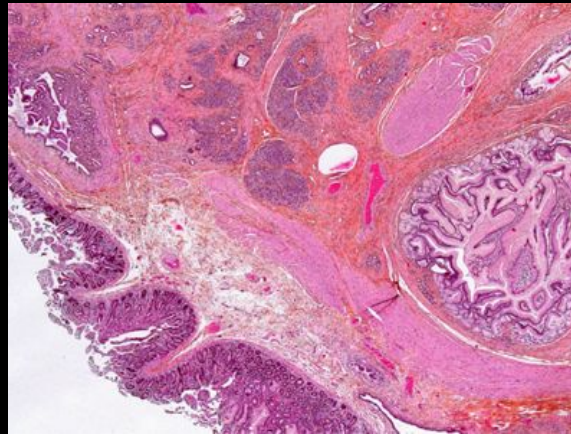
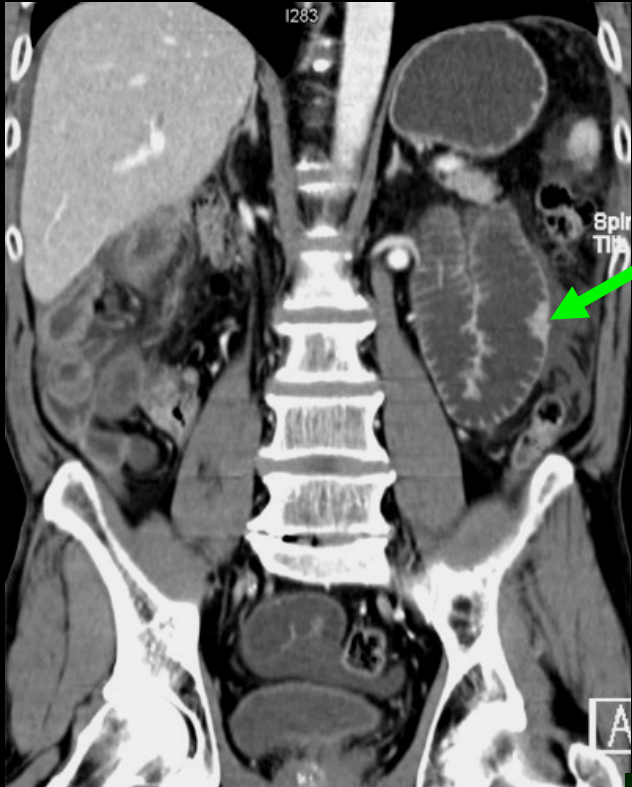
patient de 59 ans ;douleurs abdominales, vomissements ; antécédent d'appendicectomie



ouvrez l'œil !...ouvrez même les deux yeux

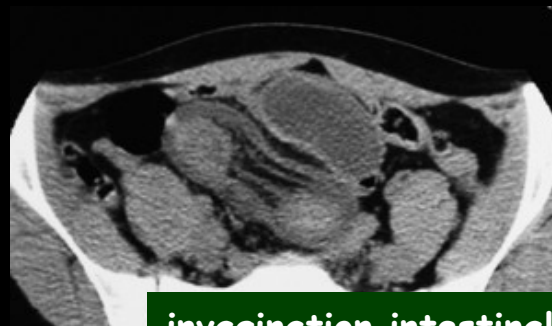
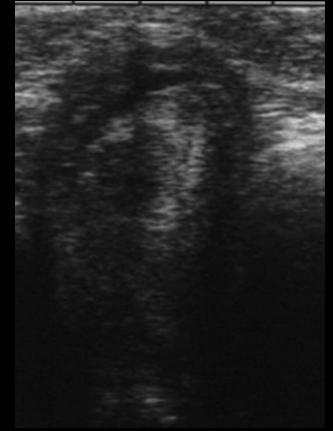
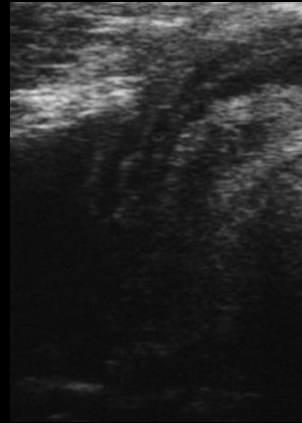
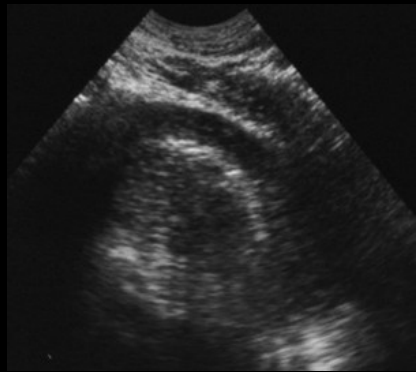
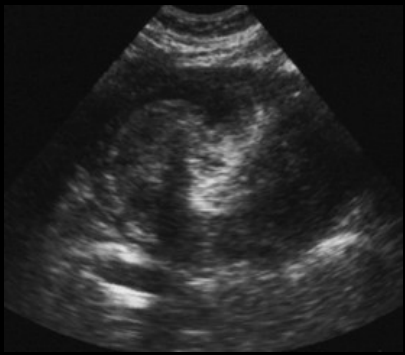
what else



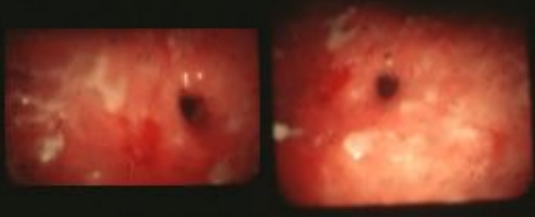
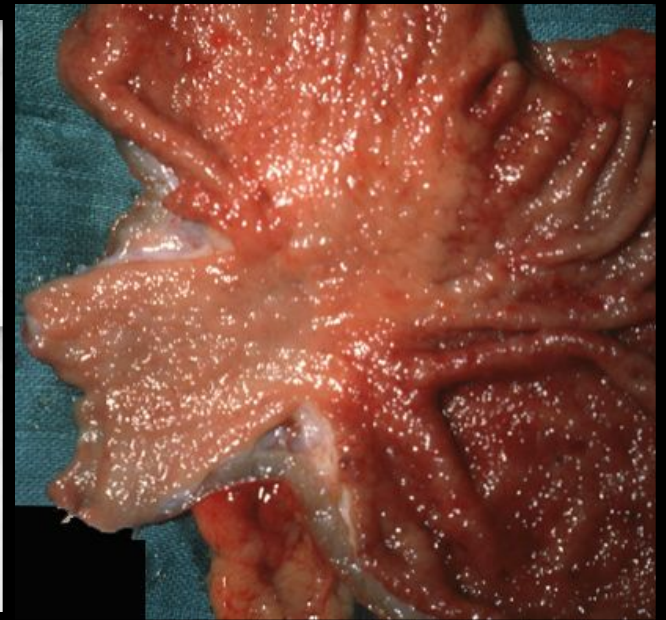
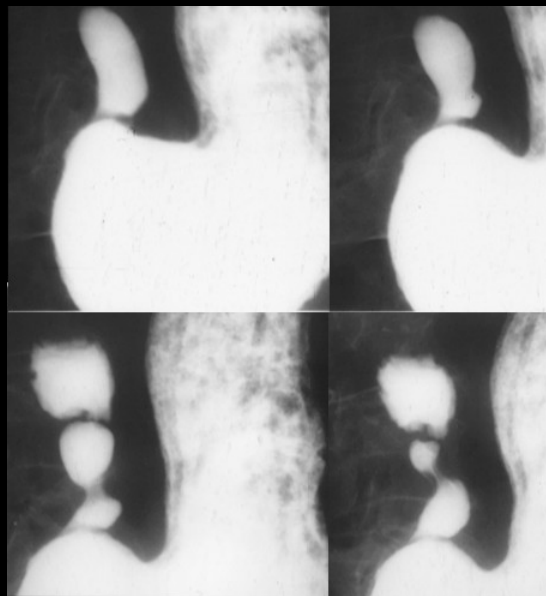
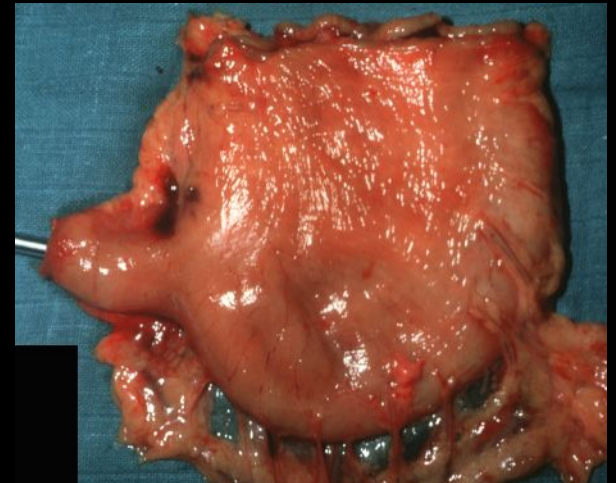
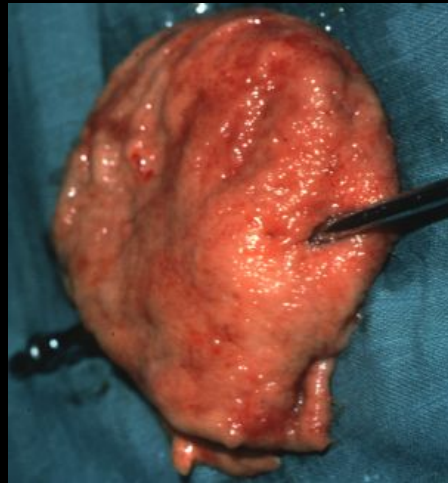


hétérotopie pancréatique ou pancréas aberrant de la paroi jéjunale (type exocrine, endocrine et canalaire)

Jeune femme 23 ans , occlusion intestinale aiguë



invagination intestinale aiguë révélatrice d'un pancréas ectopique de la paroi jéjunale



diaphragme antral congénital (diagnostic différentiel sténose post ulcéreuse)

take home message

-les **dysembryoplasie gastriques découvertes chez l'adulte ne sont pas exceptionnelles** . Elles sont développées sous une muqueuse saine et comportent souvent des contingents liquidiens , mucineux , parfois calcifiés . L'imagerie en coupes apporte beaucoup pour leur caractérisation , surtout pour les zones liquidiennes (écho endoscopie, IRM++)

-le **pancréas ectopique de la paroi antrale** est facilement reconnu en endoscopie par le méat de son petit canal excréteur

-les **complications pancréatitiques sur pancreas aberrant de la paroi gastrique** peuvent être à l'origine de tableaux pseudo-tumoraux posant de gros problèmes diagnostiques