

US & Pancreas

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US & Pancreas: Why ?

- Not as a first line method
 - Low level for cancer detection
 - Unable to stage acute pancreatitis

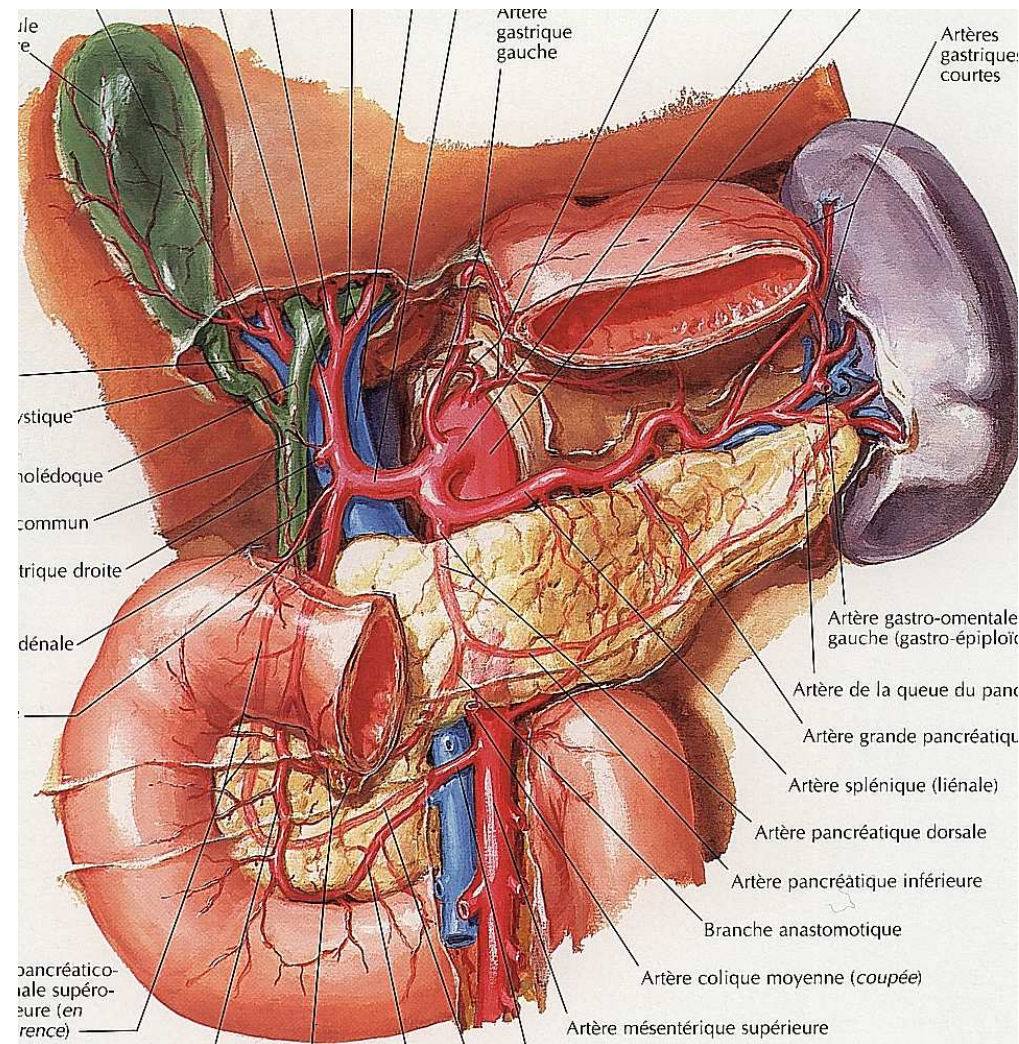
US & Pancreas: Why ?

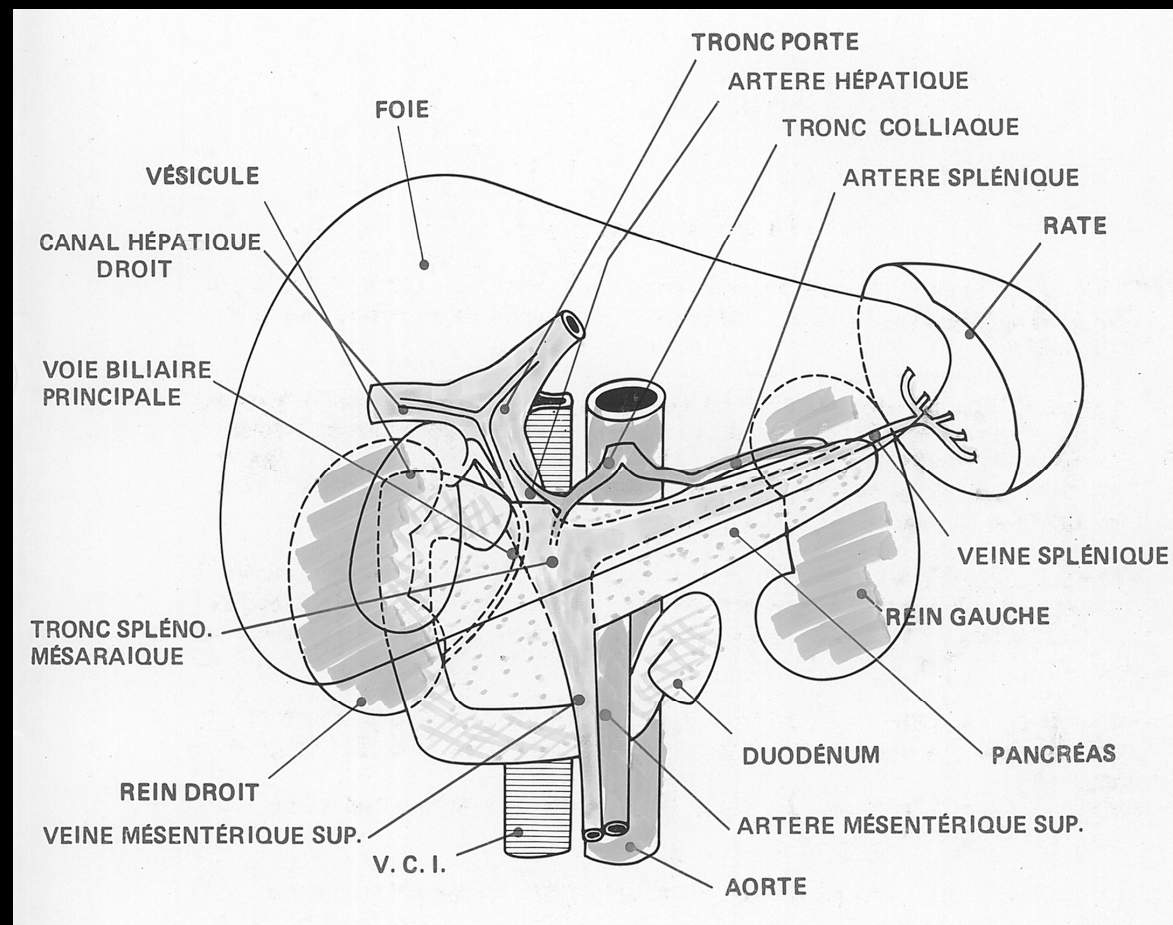
- Part of Upper abdomen US
- Need to be informed about key points
 - Echogenicity
 - Duct size
 - Masses

US & Pancreas: How to perform

- Fasting
- First part of upper abdomen examination
- Low frequency probe

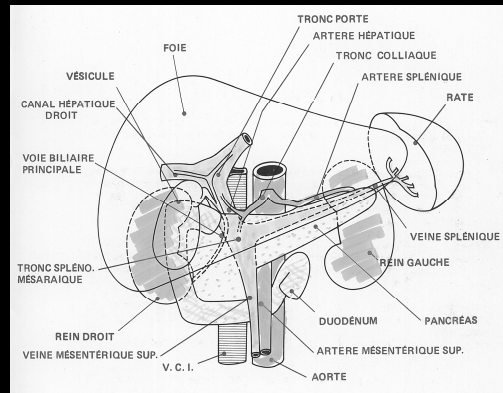
US & Pancreas: Anatomic landmarks



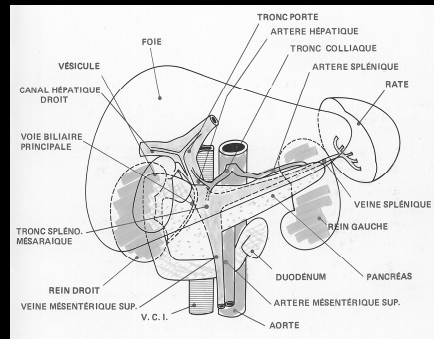




« Push your belly ! »



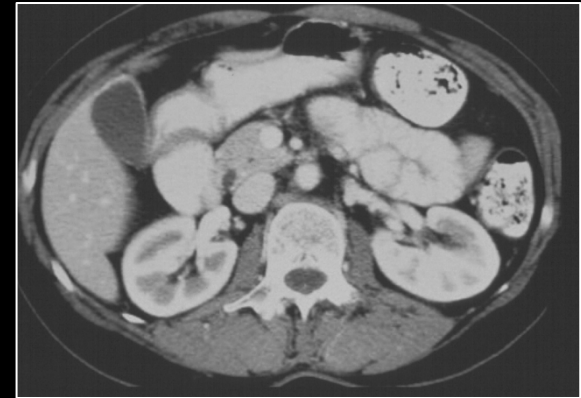
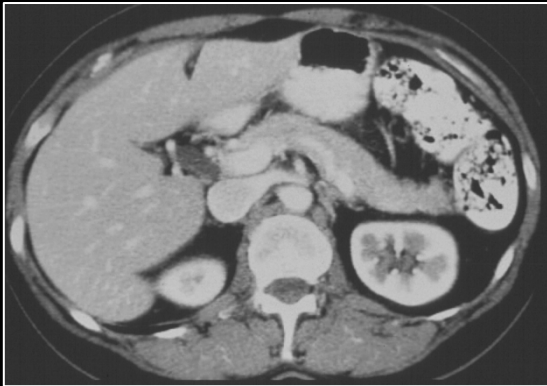
In Lecture accélérée de l'échographie, André
Bonnin et al, Maloine, 1984



seaux thorax/abdomen/pelvis



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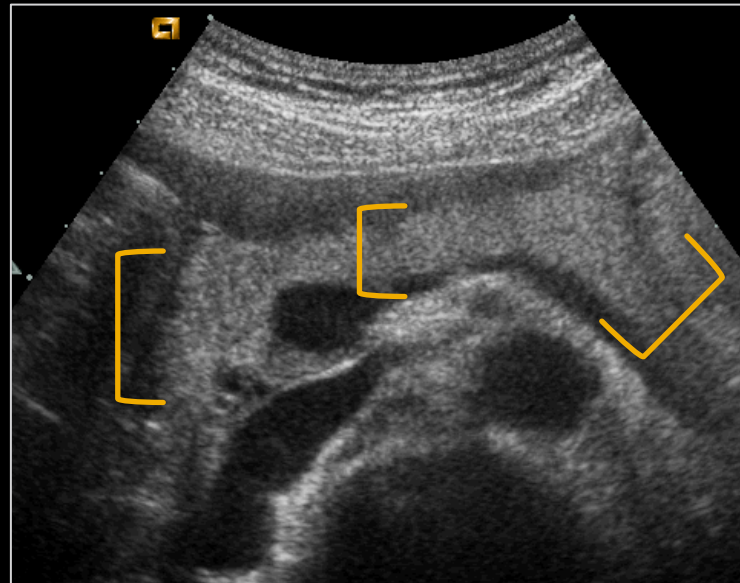
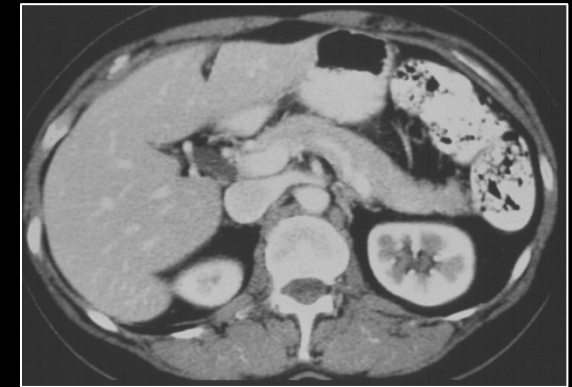
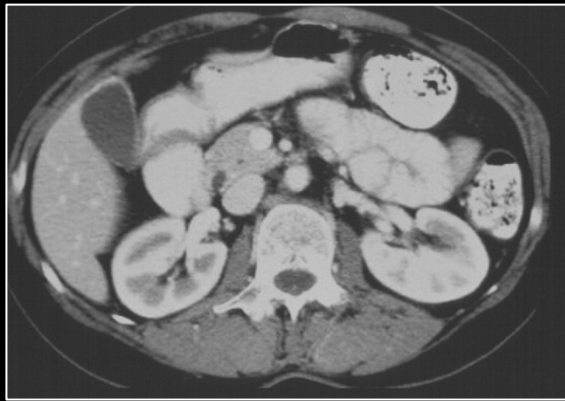


Size in adults (cm)

2.5-3

1.5-2,5

1.5-2,5

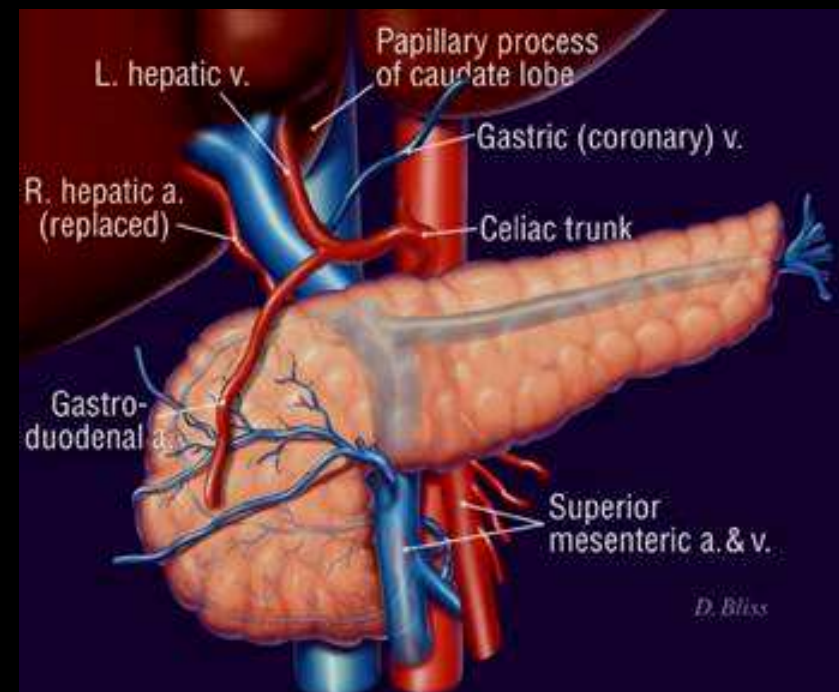


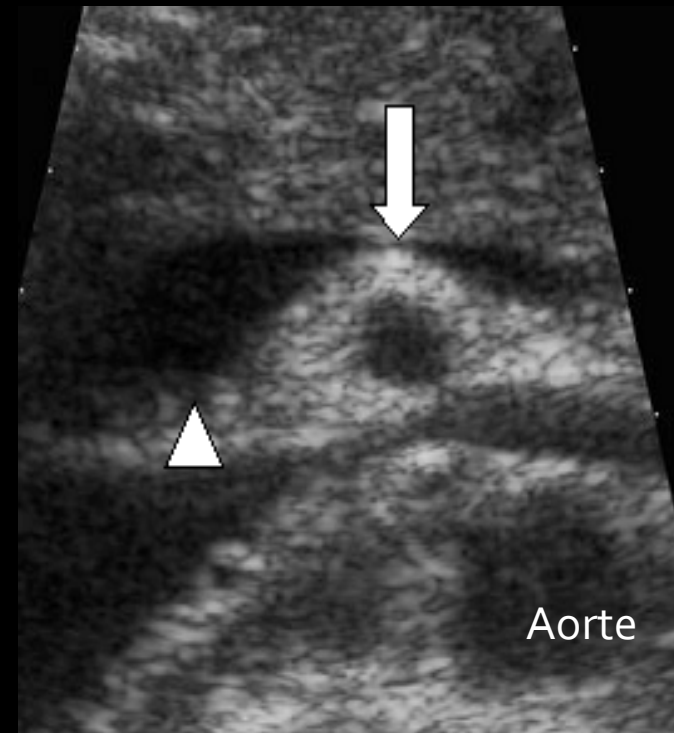
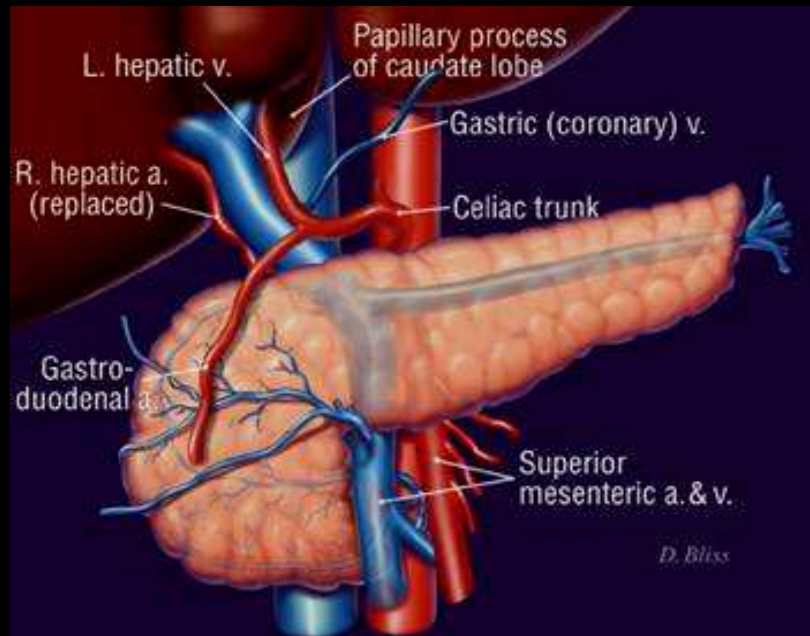
Size in adults (cm)

2.5-3

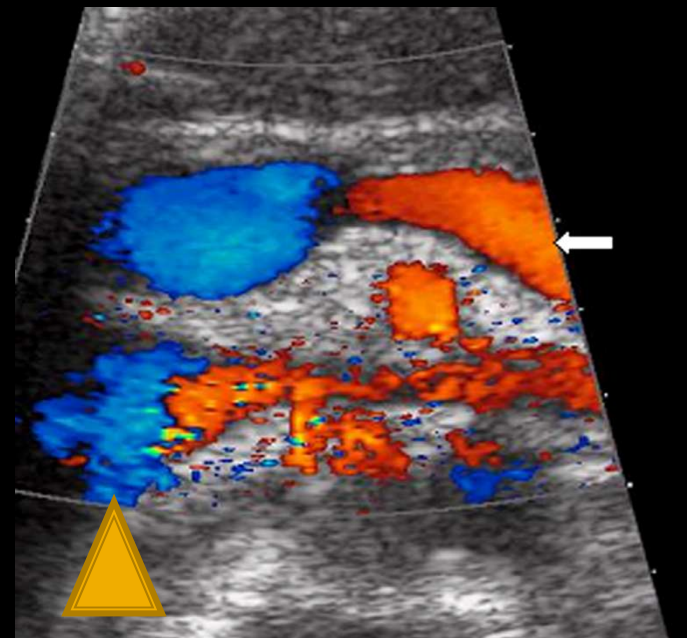
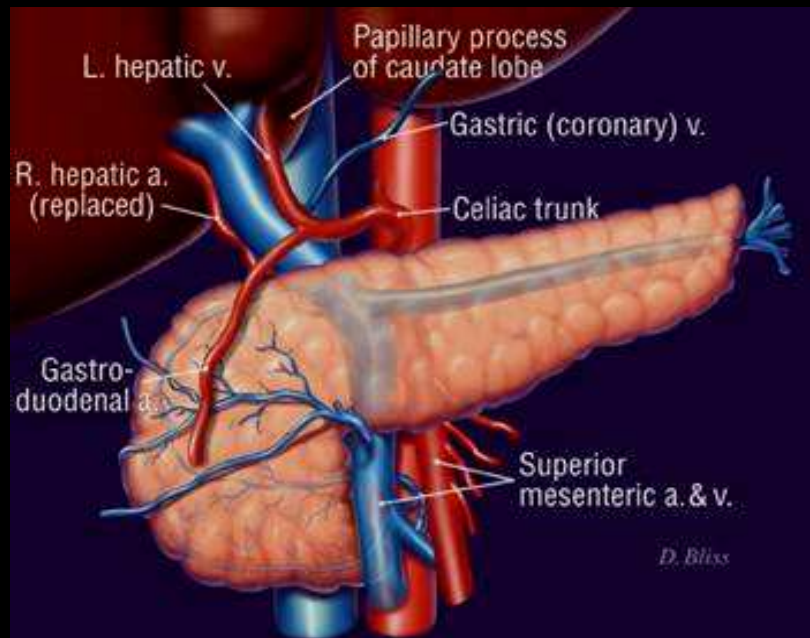
1.5-2,5

1.5-2,5





- US : transverse section of the pancreas :
- Portal Vein (arrowhead)
 - Superior Mesenteric Artery (arrow)

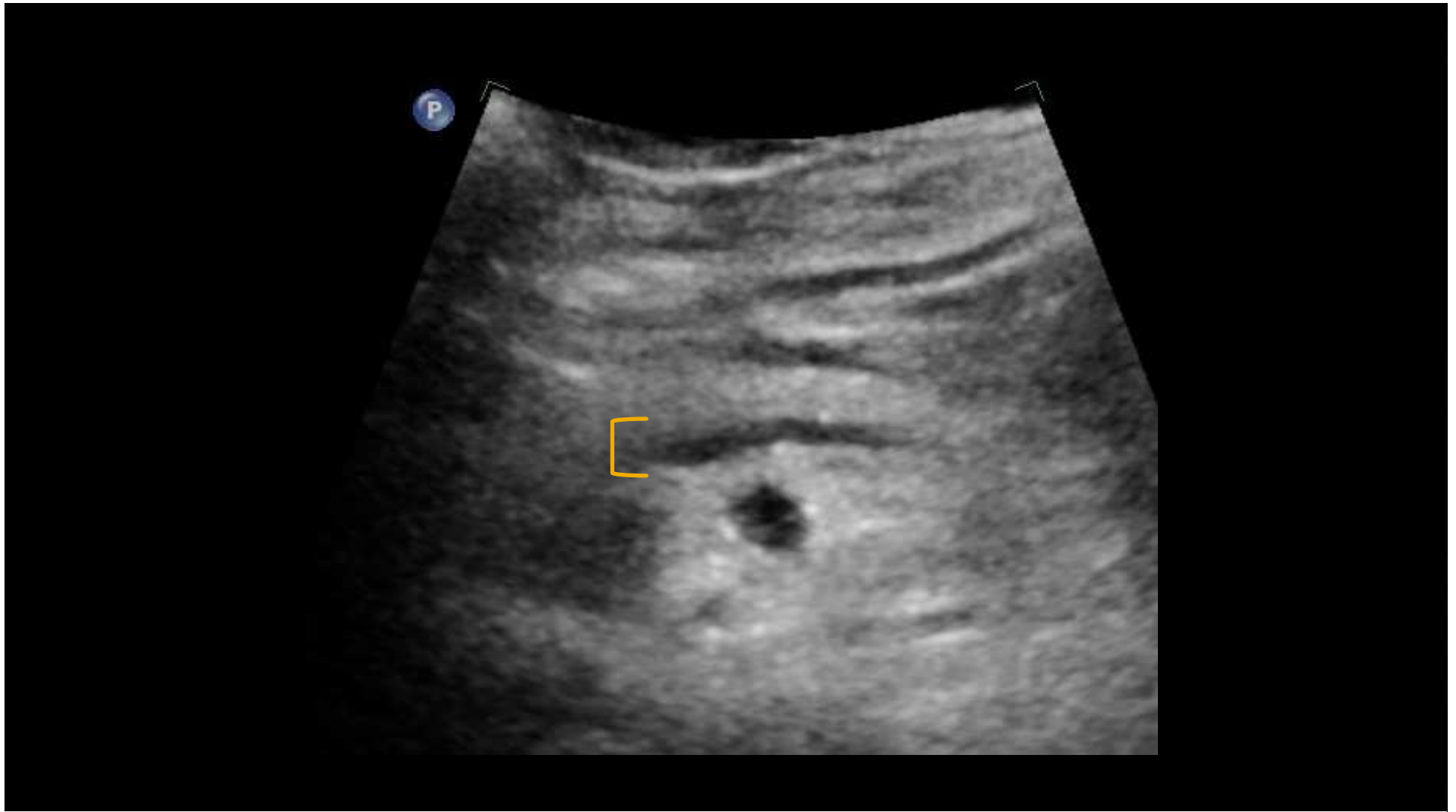


Color Doppler , tranvserse section of the pancreas

- Splenic Vein (arrow)
- Inferior vena cava (arrowhead)

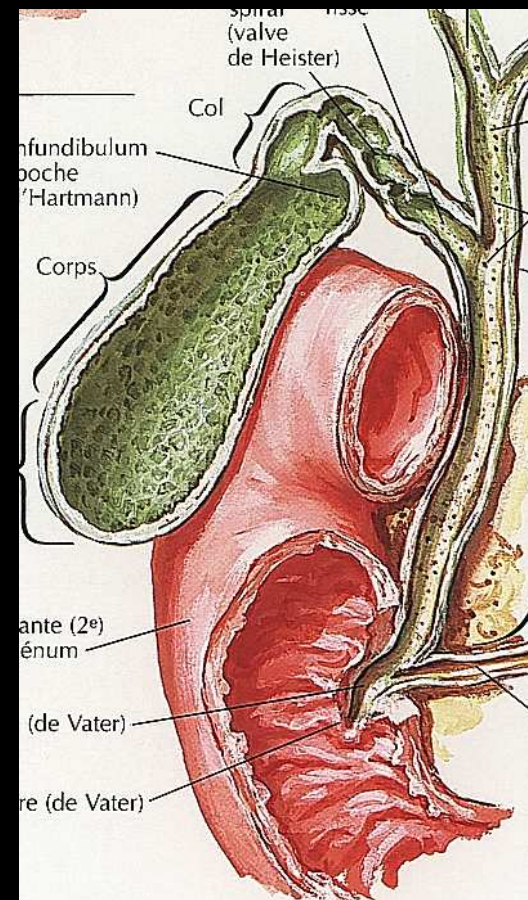


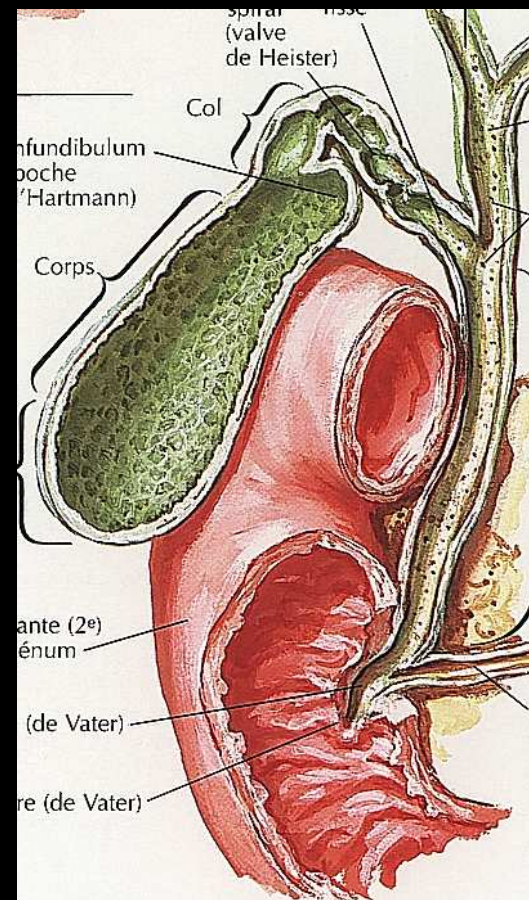
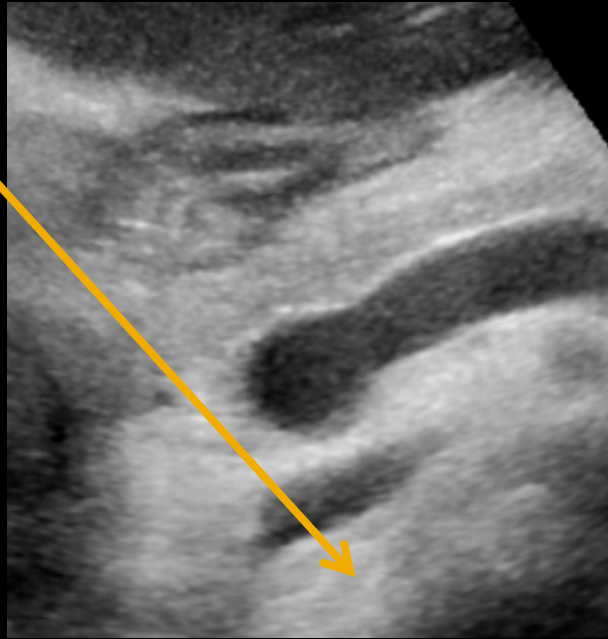
Size in adults (cm) = 2 mm

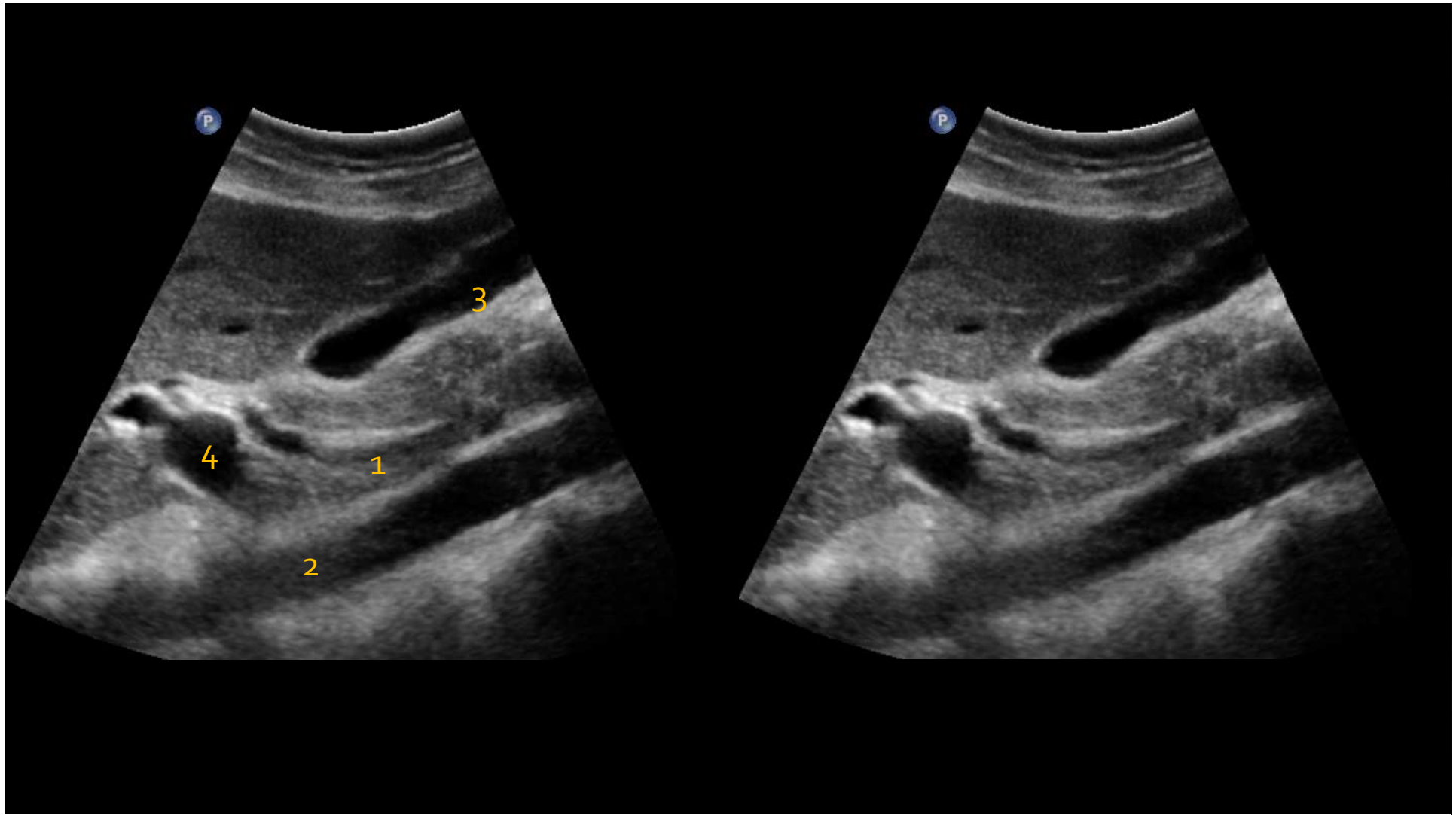


Size in adults (cm)

= 2 mm; 3-4 mm shortly after a meal



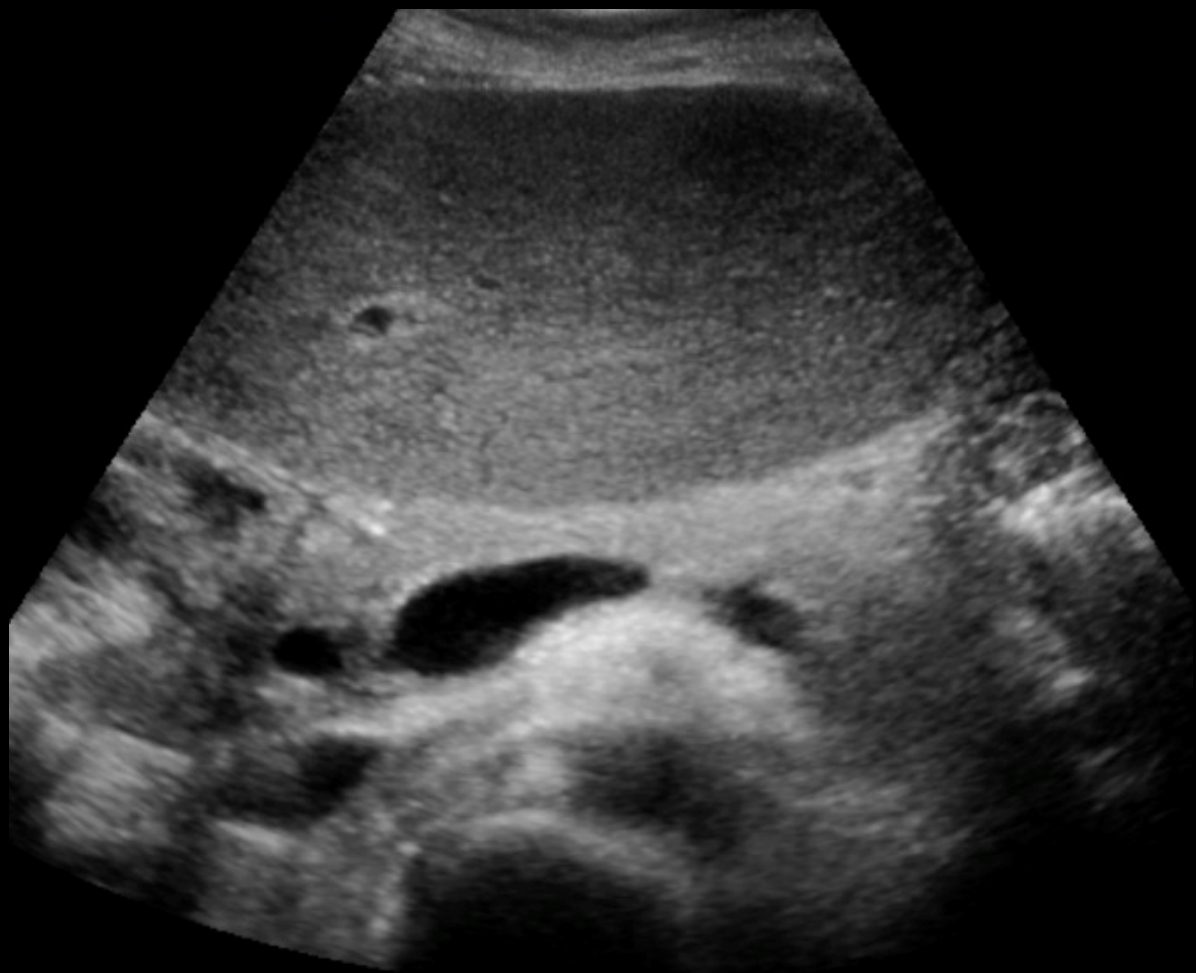


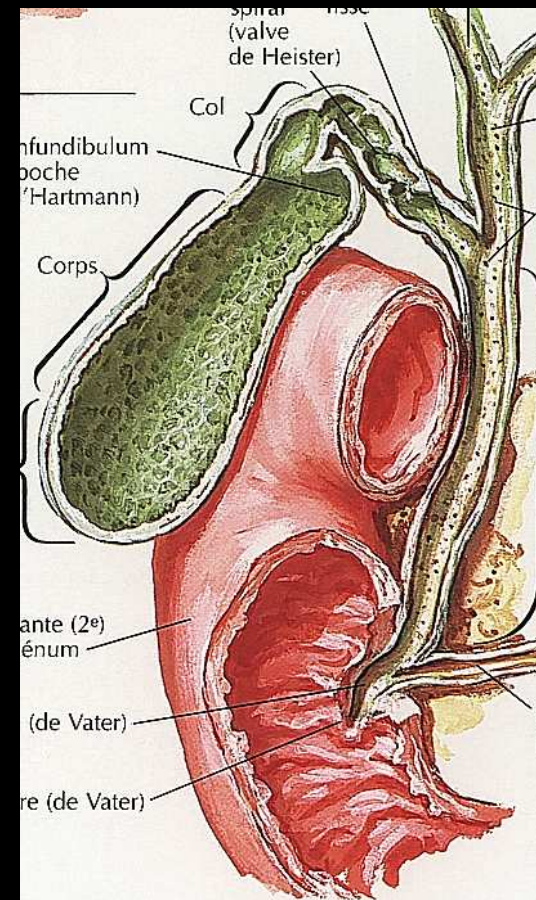


US:

- (1) Common bile duct
- (2) Aorta
- (3) Gallbladder
- (4) Portal Vein







Variants

Fatty pancreas:

- Age
- Obesity
- Cushing



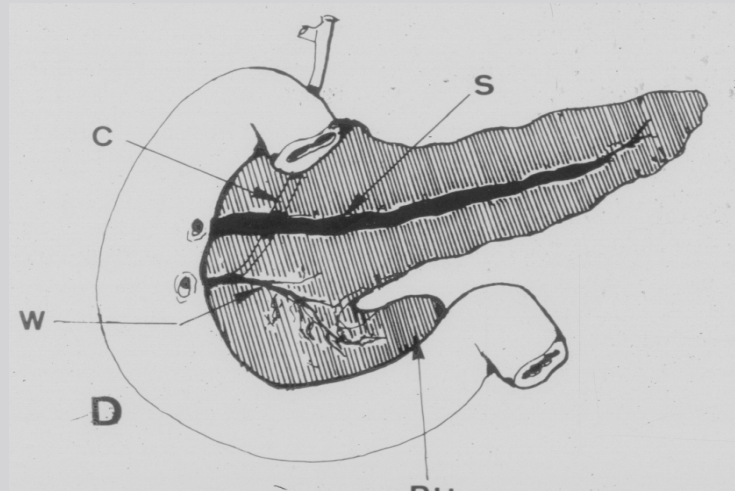
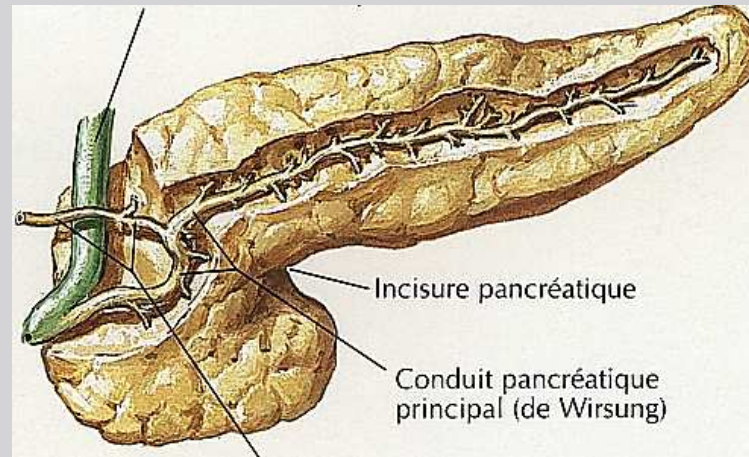
Variants

Low echogenicity of the
uncinate process: 28 %



Variants

Pancreas Divisum : 5-10 %



Acute Pancreatitis

Chronic Pancreatitis

Tumor

- Adenocarcinoma
- Neuroendocrine tumor

Cysts

Pseudocysts



Acute Pancreatitis

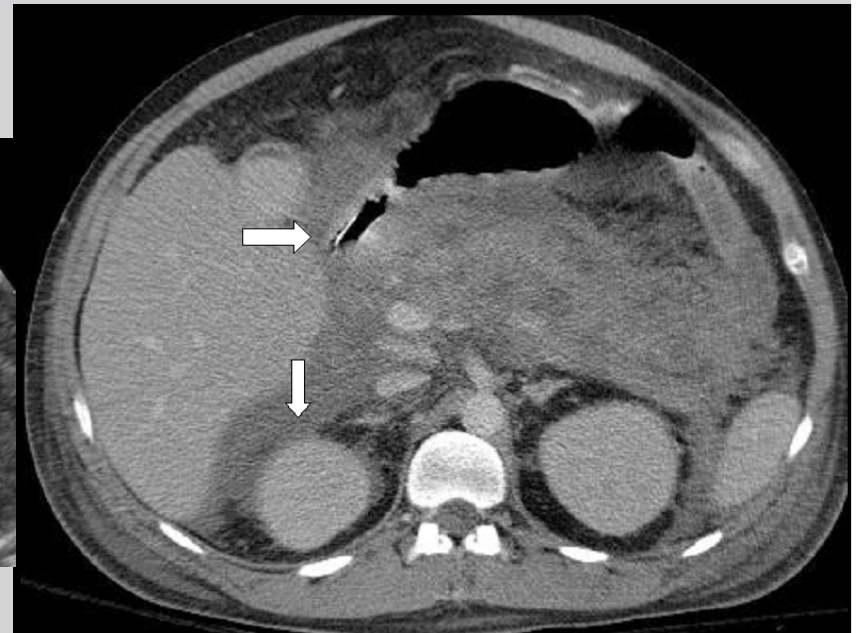
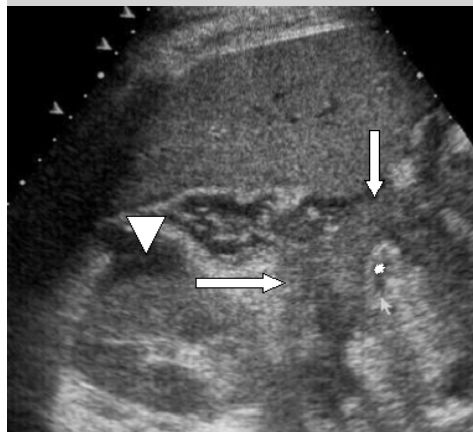
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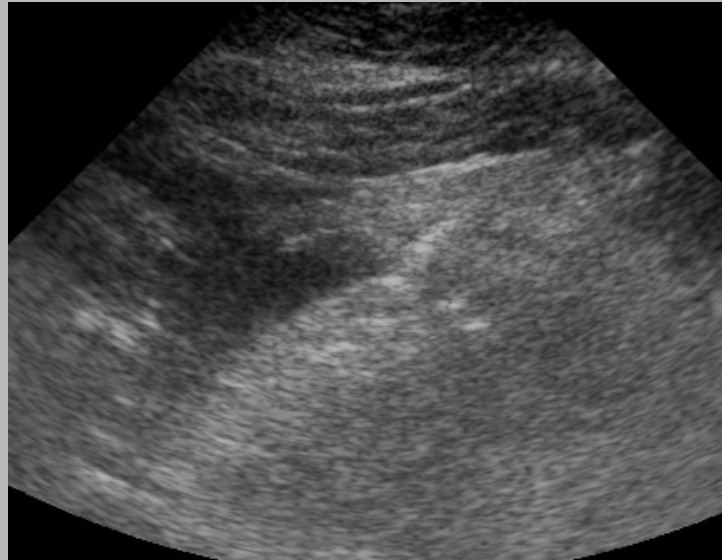
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Tomodensitométrie et pancréatite aiguë		
Grade A :	Pancréas normal	Pas de points
Grade B :	Pancréas tuméfié	1 point
Grade C :	Infiltration péripancréatique	2 points
Grade D :	Présence d'une coulée inflammatoire	3 points
Grade E :	Au moins deux coulées inflammatoires dans des espaces anatomiques différents	4 points
	Ou surinfection d'une coulée	4 points

Tableau VII (a) : Stadification tomodensitométrique de la pancréatite aiguë suivant Balthazar, 1990.



Tomodensitométrie avec injection intraveineuse de contraste	
Pas de défaut de rehaussement de la glande	Pas de point
Défaut de rehaussement < 30 % de la glande	2 points
Défaut de rehaussement supérieur à 30 % de la glande et de moins de 50 %	4 points
Défaut de rehaussement de plus de 50 % de la glande	6 points



Tableau VII (b) : Stadification tomodensitométrique de la nécrose pancréatique suivant Balthazar, 1990.

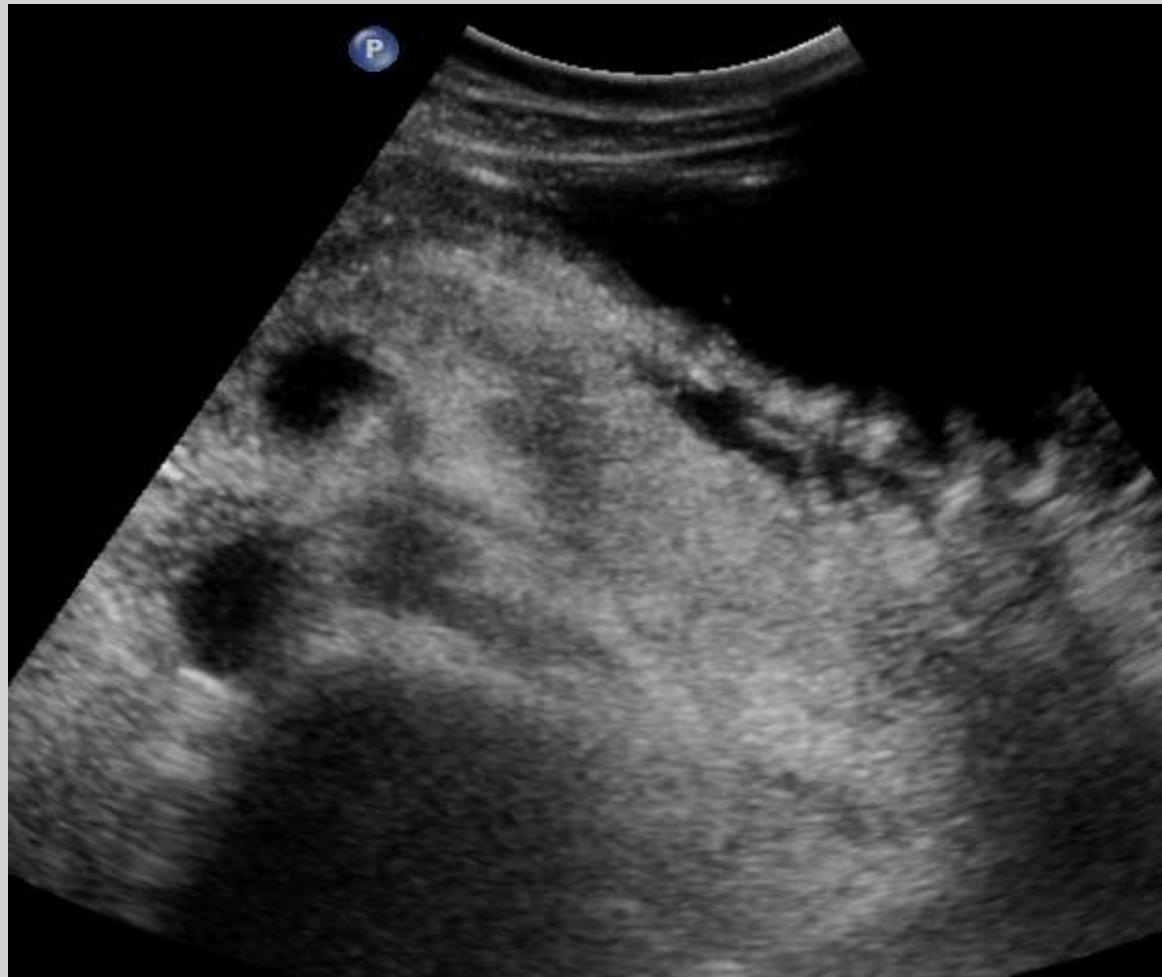
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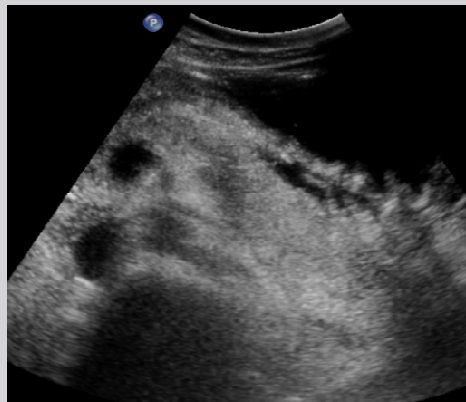
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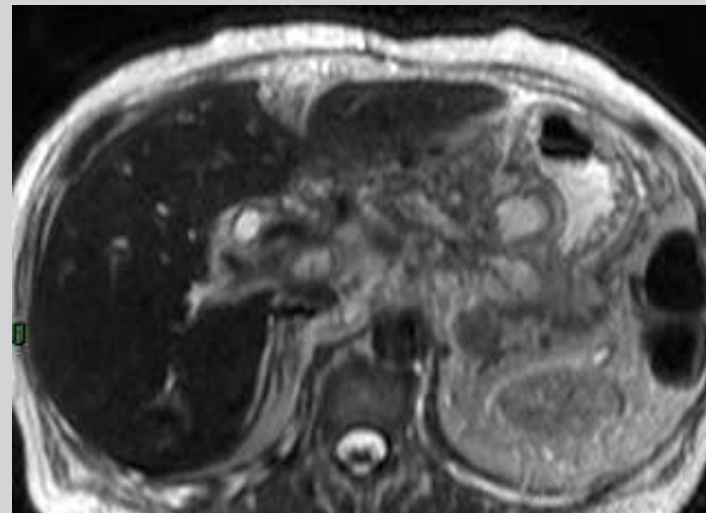
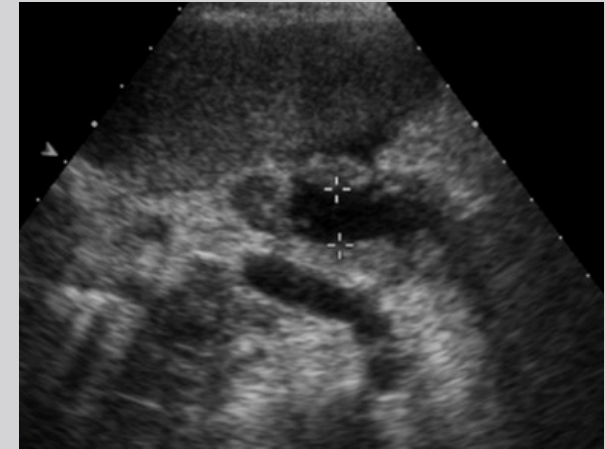
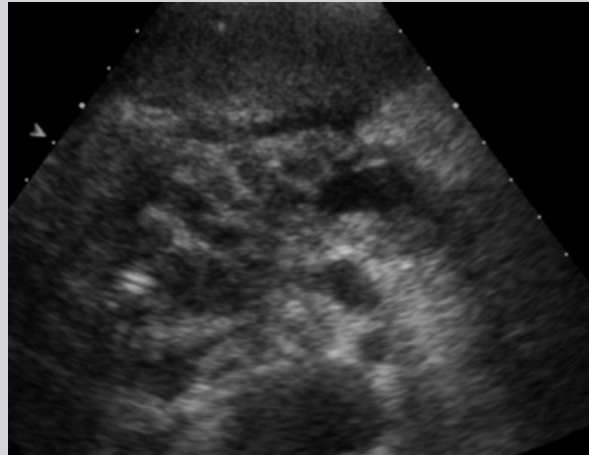
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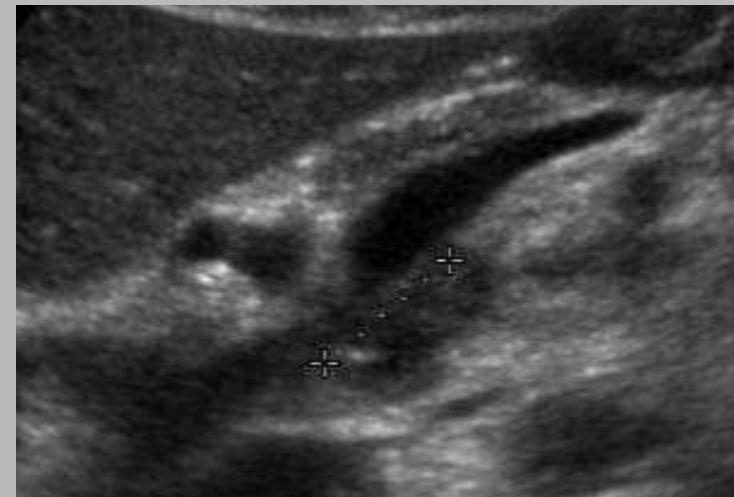
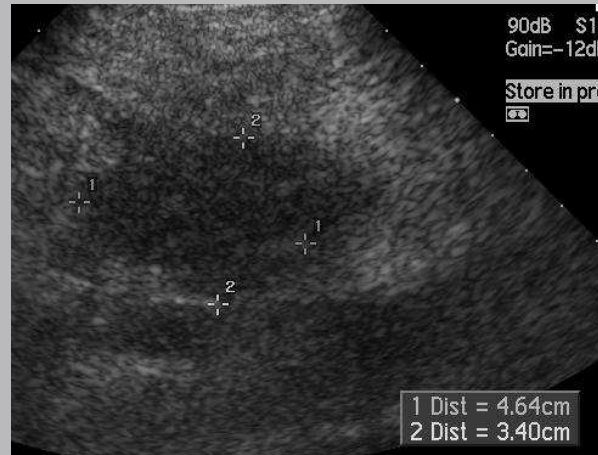
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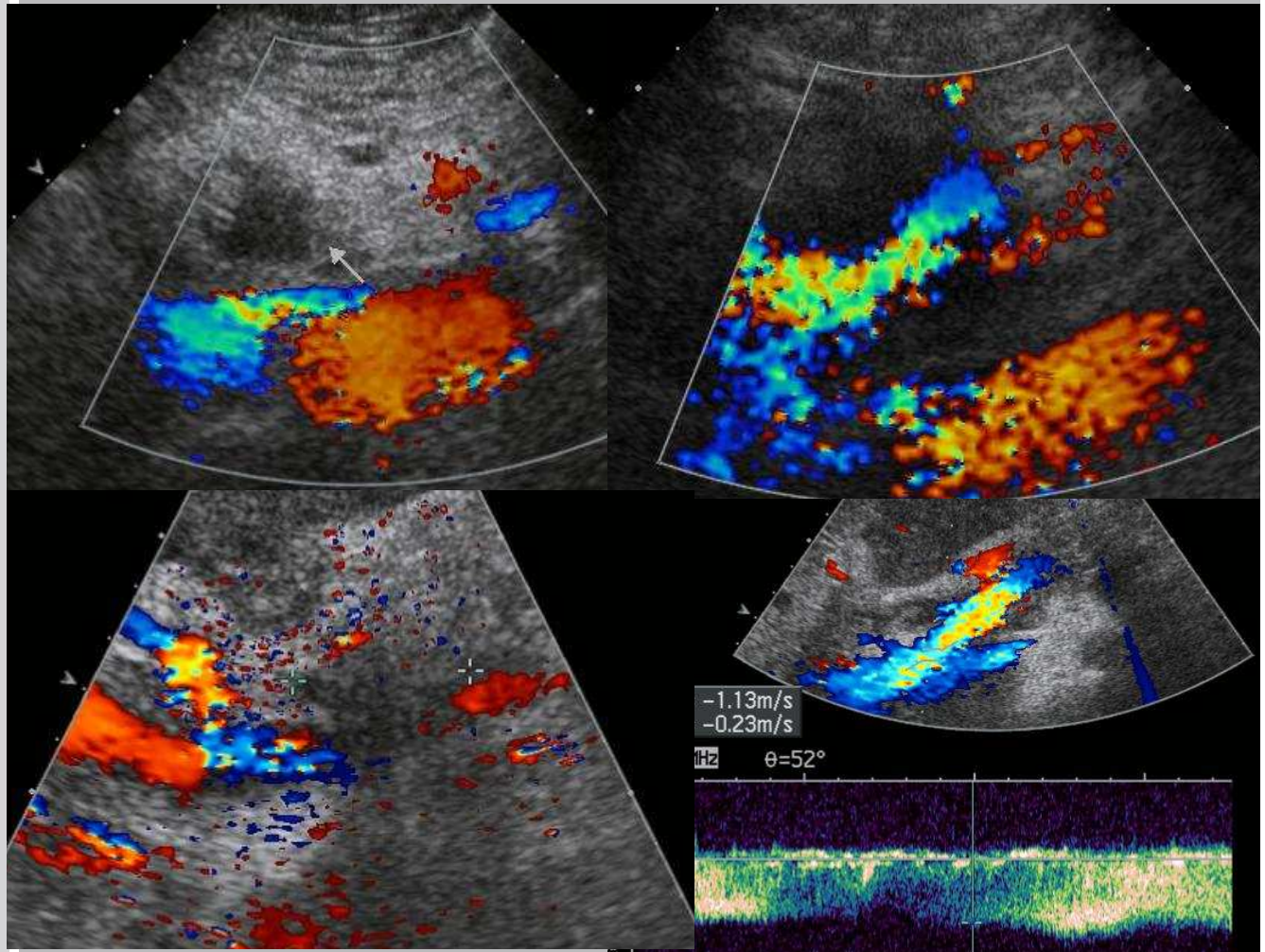
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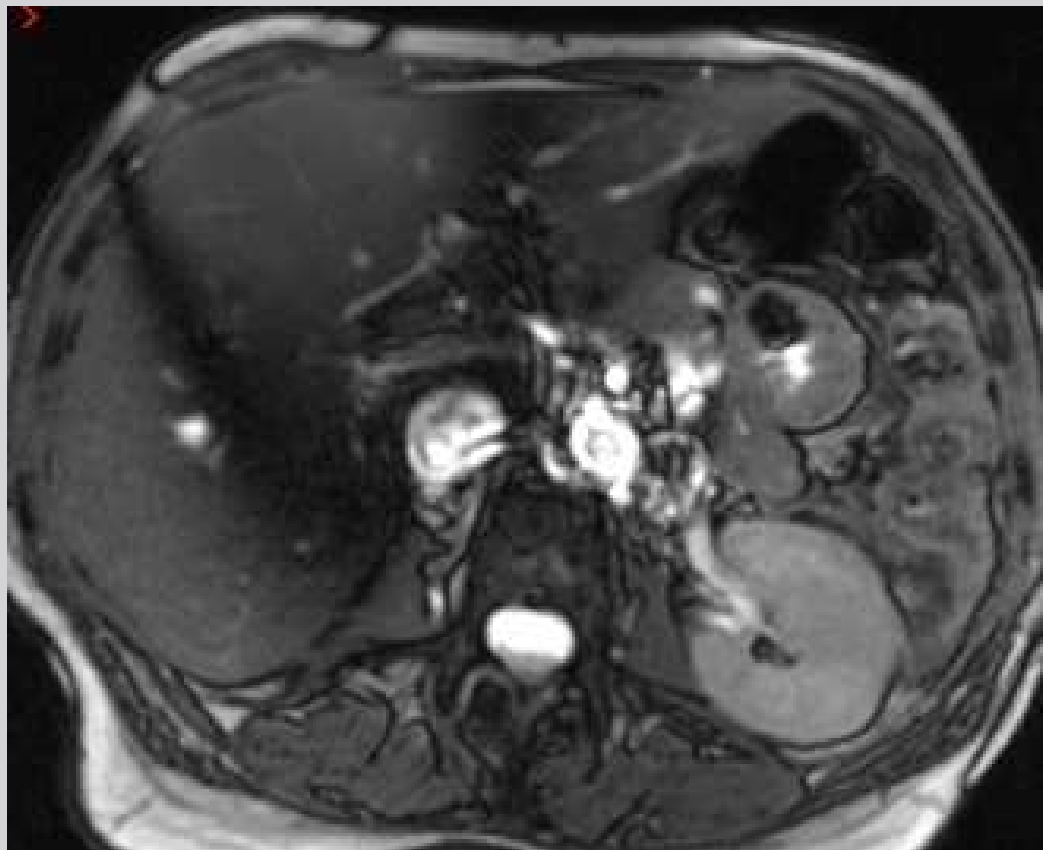
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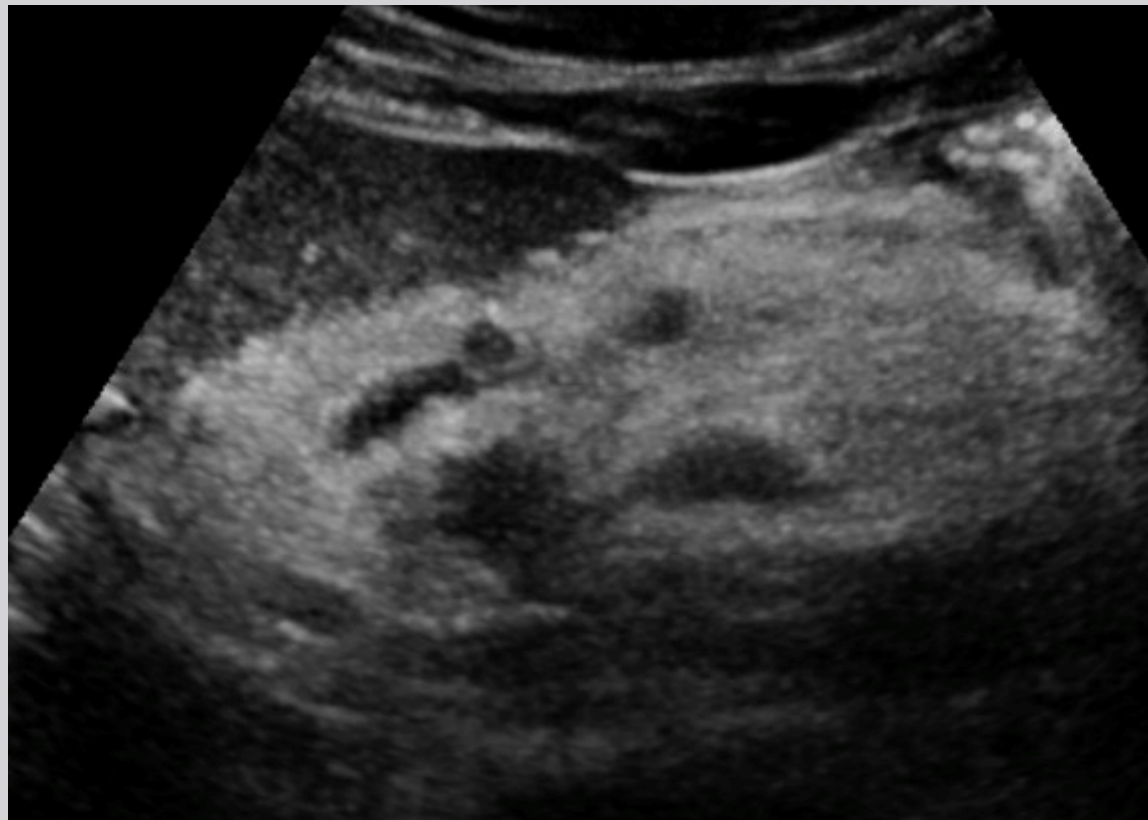
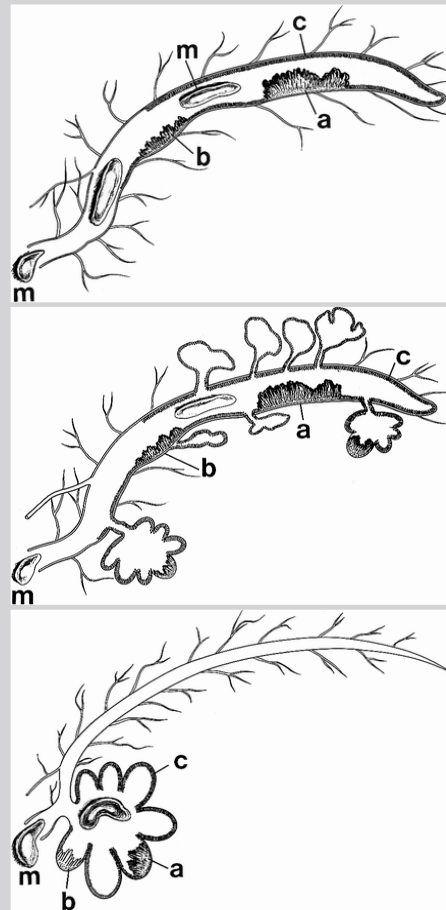
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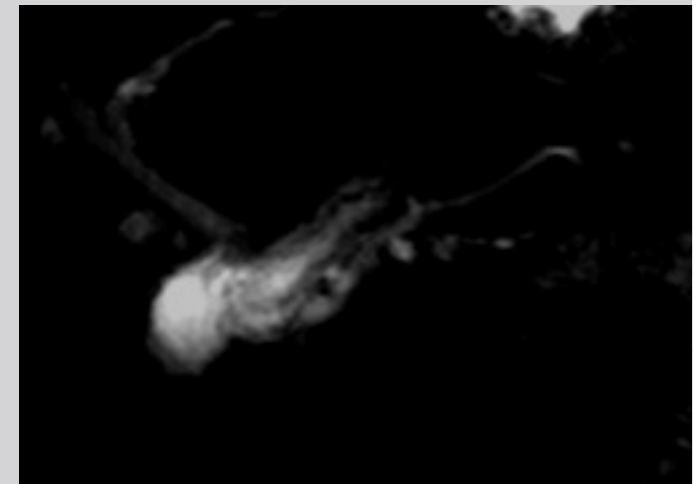
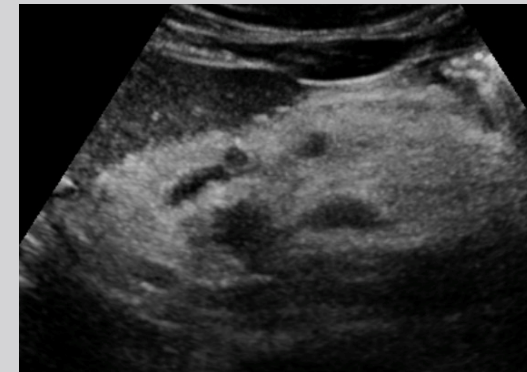
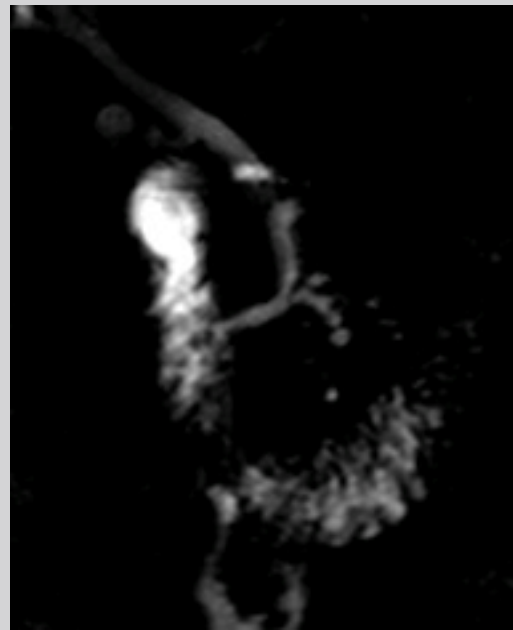
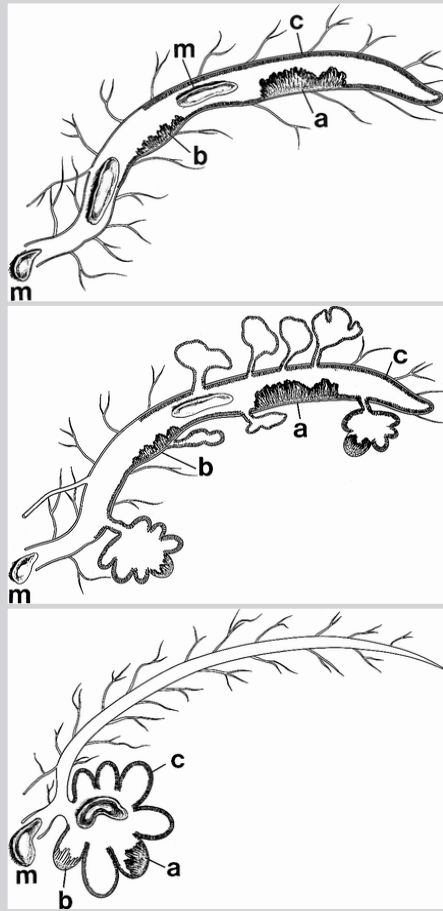
Pseudocysts



Intraductal Papillary Mucinous Tumor.



Intraductal Papillary Mucinous Tumor.



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