



# Minimally invasive & novel Therapeutics (MINT) conference '22

## Paraduodenal Pancreatitis, The Disease with a Hundred Names

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Alicante, Spain

## Cystic dystrophy of the duodenal wall

*Adenomyoma*

Groove pancreatitis

Pancreatic duodenal hamartoma

*Paraduodenal pancreatitis*

# INTRODUCTION



Potet & Duclert

Cystic dystrophy on aberrant pancreas of the duodenal wall

Becker

Groove pancreatitis

Adsay & Zamboni

Paraduodenal pancreatitis

Pancreatic duodenal hamartoma

# INTRODUCTION



HARVARD  
MEDICAL SCHOOL



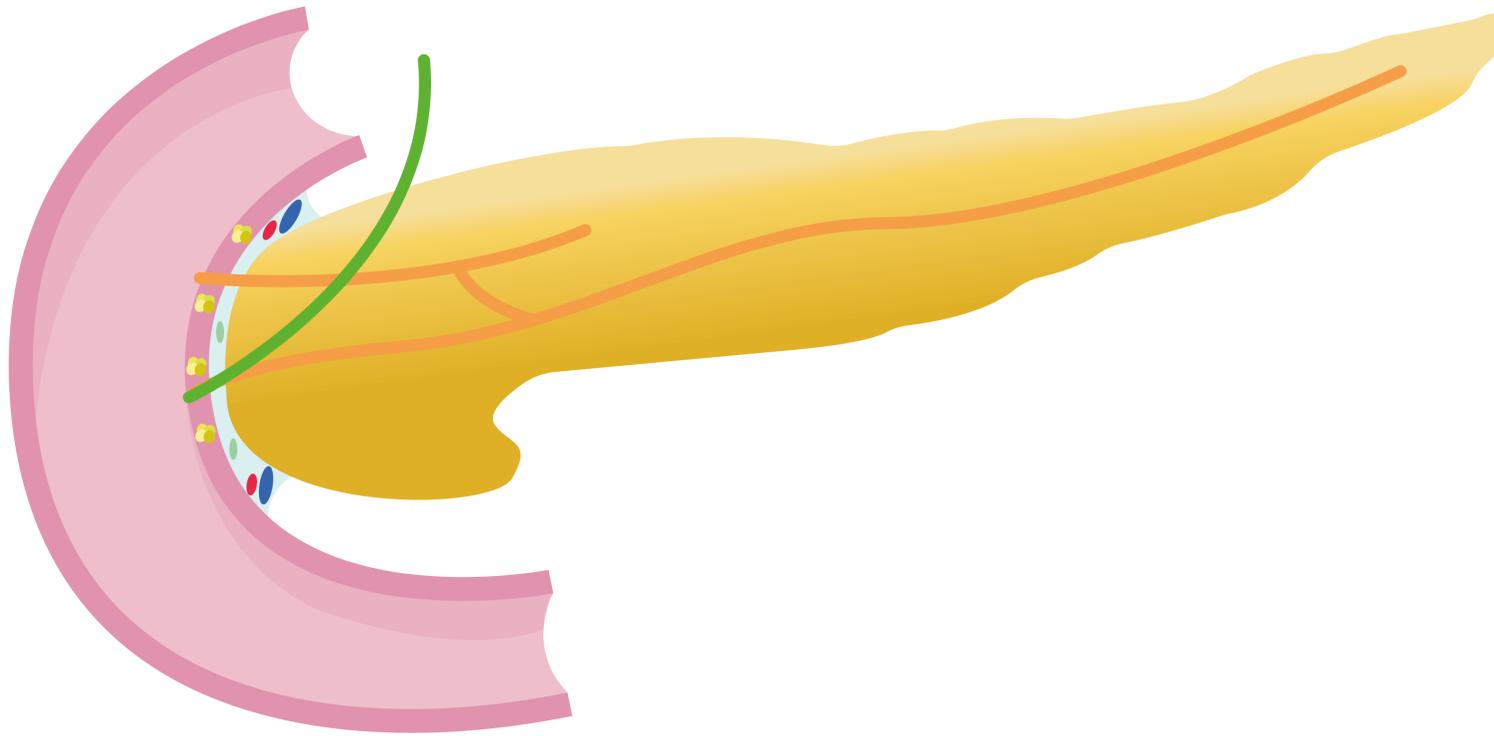
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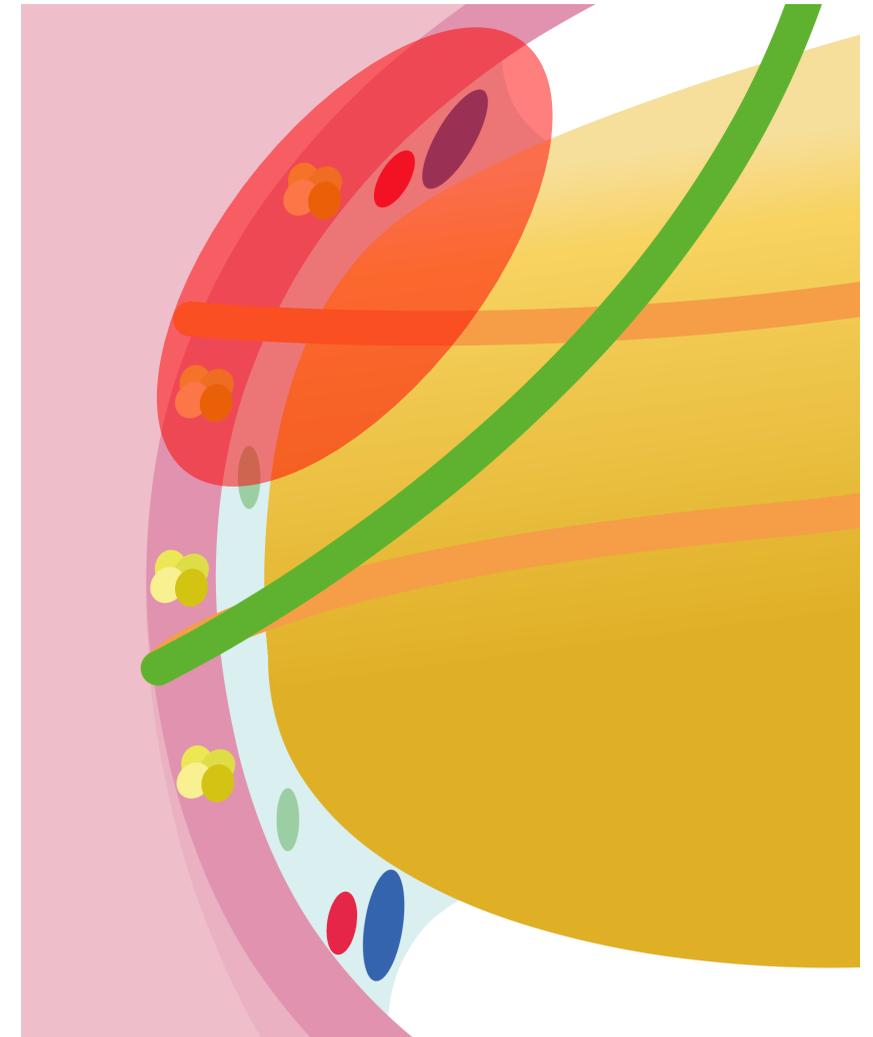
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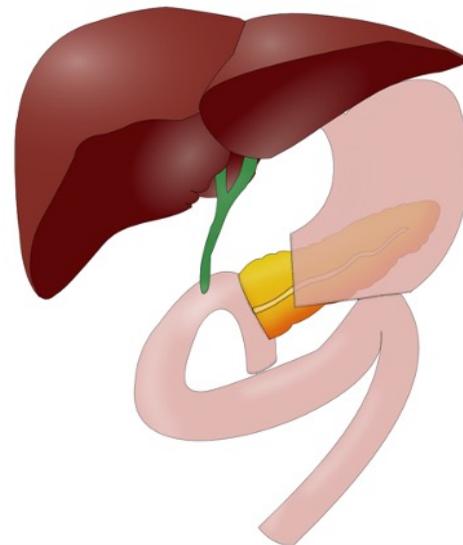
# INTRODUCTION



Volker Becker

Int. J. Pancreatol 1991

600 Whipples  
for chronic  
pancreatitis

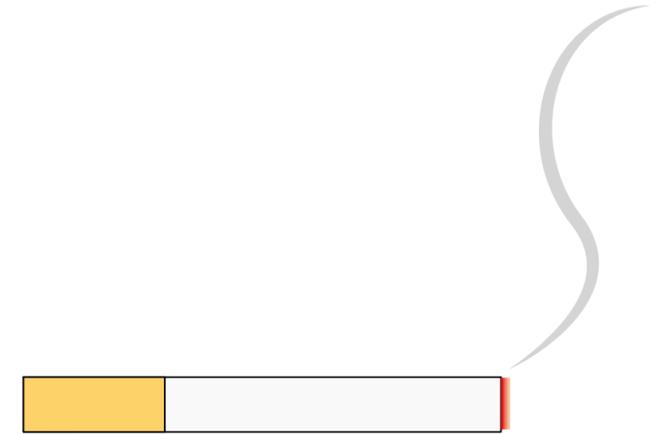
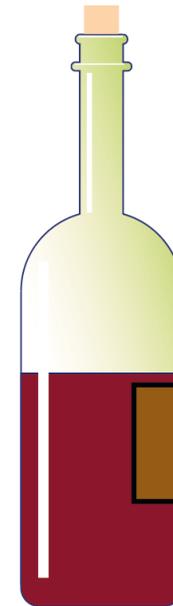
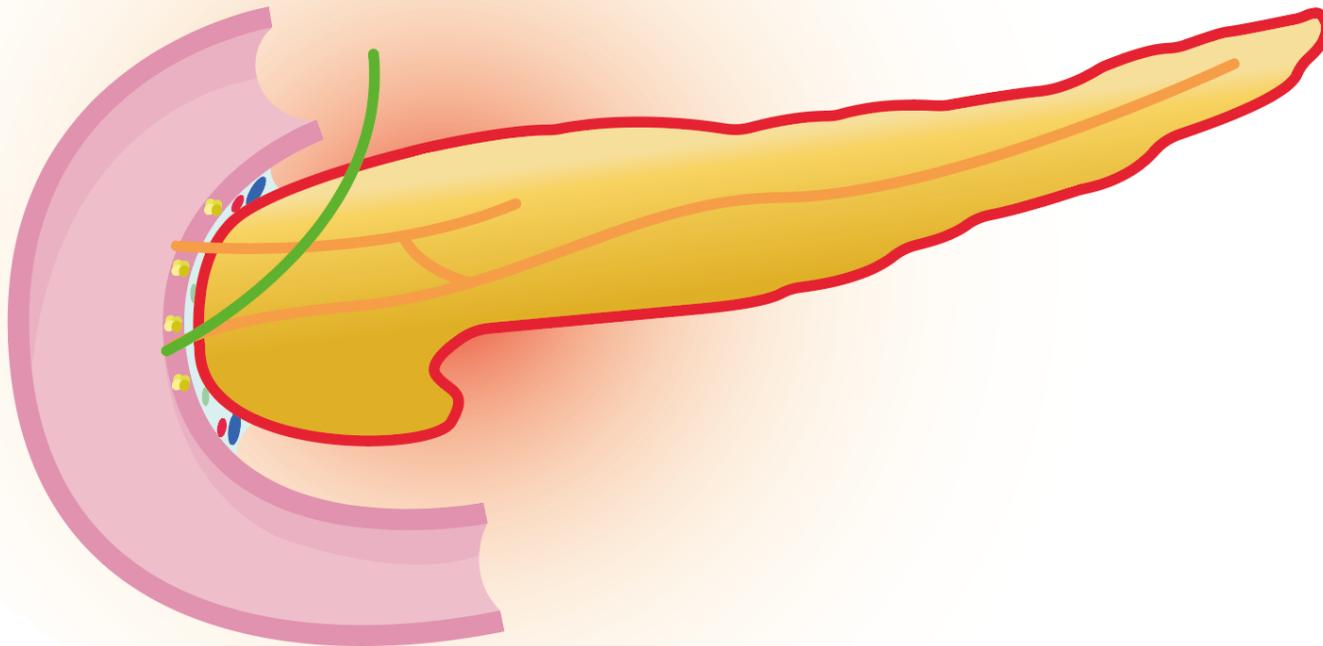


**20% GROOVE INVOLVEMENT**  
2% pure groove involvement 7%  
segmental pancreatitis of the  
head with groove involvement  
11% chronic pancreatitis with  
groove involvement

50% with duodenal cysts

**FREQUENCY**

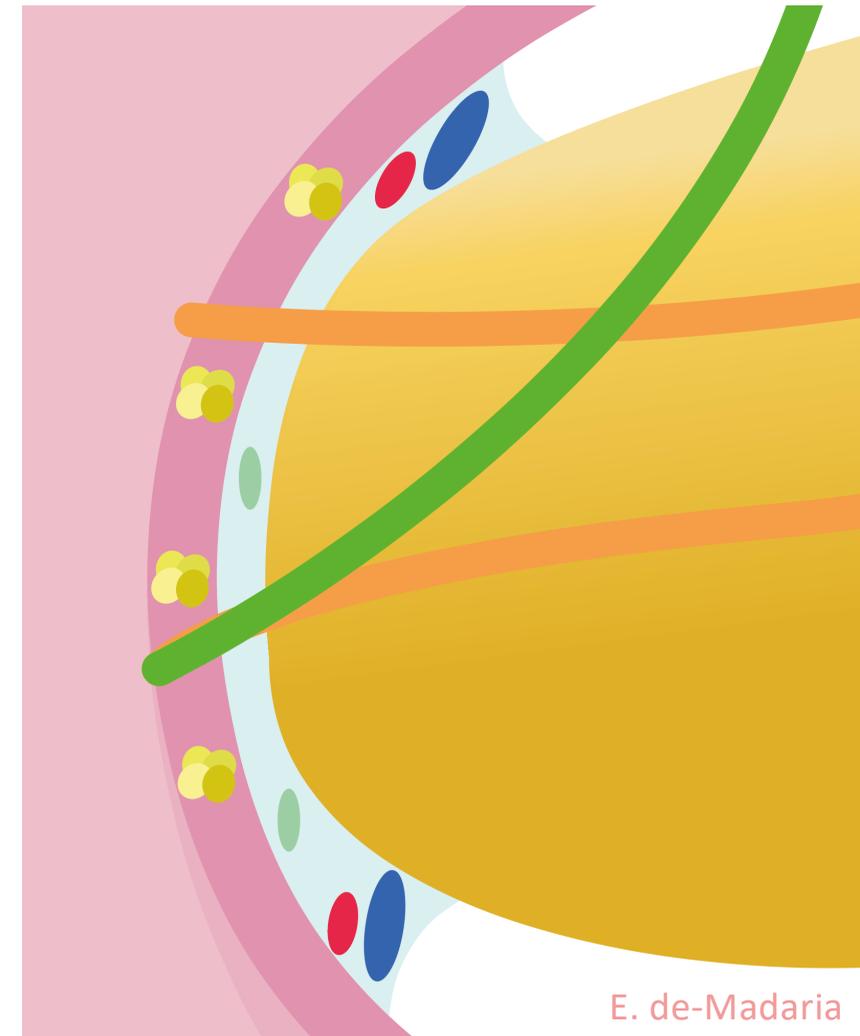
## Males, 5<sup>th</sup> decade



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**ETIOLOGY & PATHOPHYSIOLOGY**

According to 1 single center study 0.18% of all pathology samples have digestive wall heterotopic pancreatic tissue, in 25% cases in duodenum/proximal jejunum





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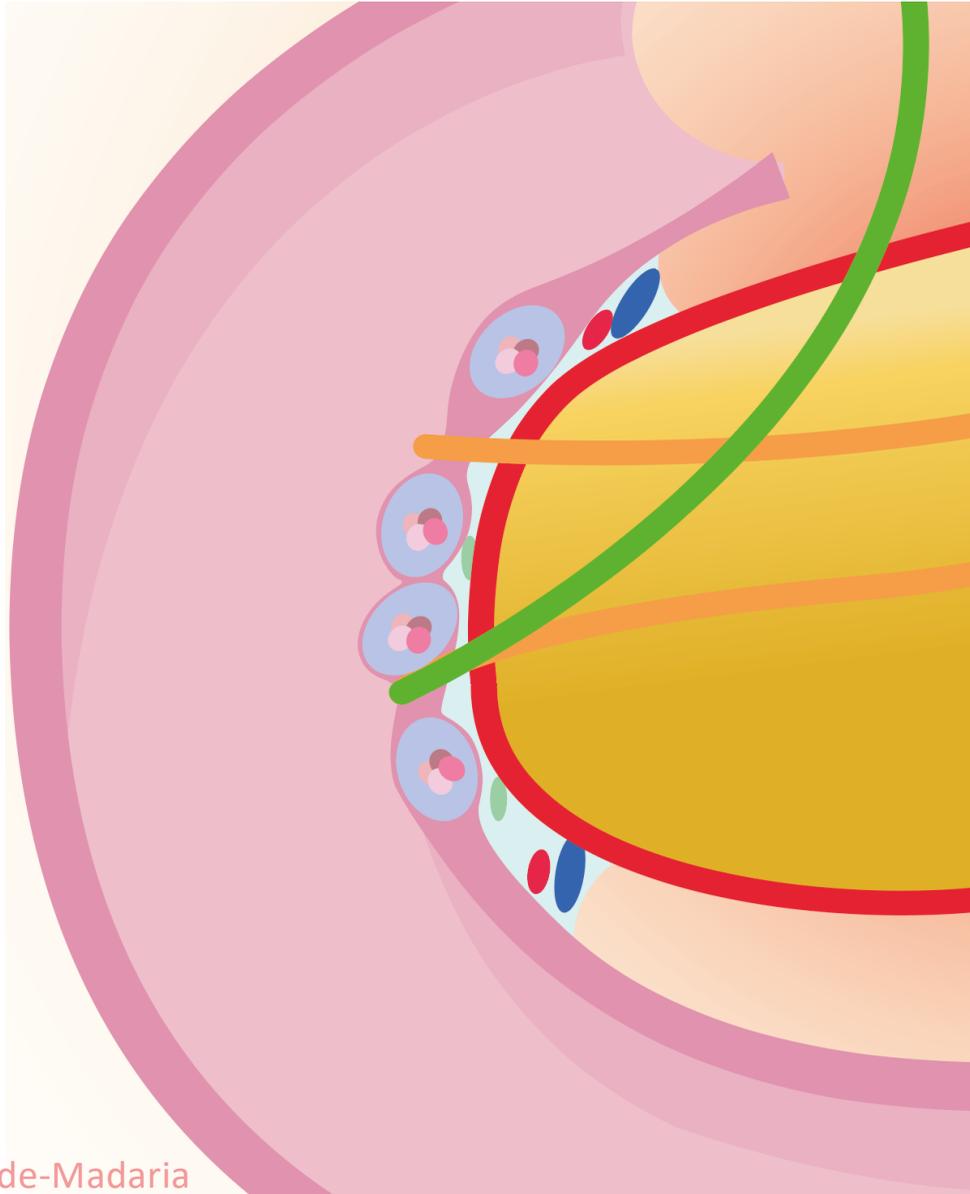
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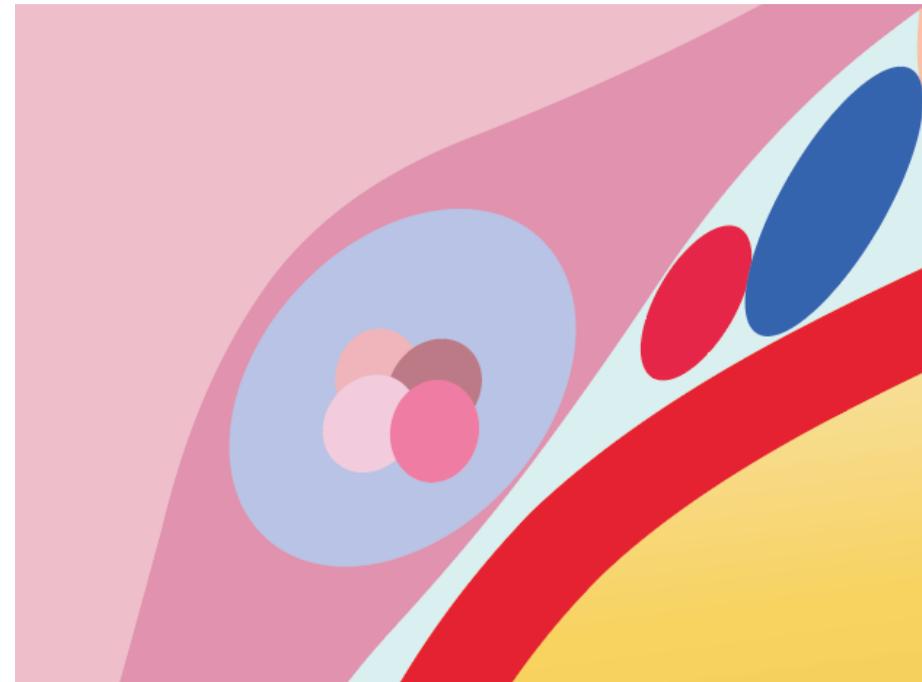
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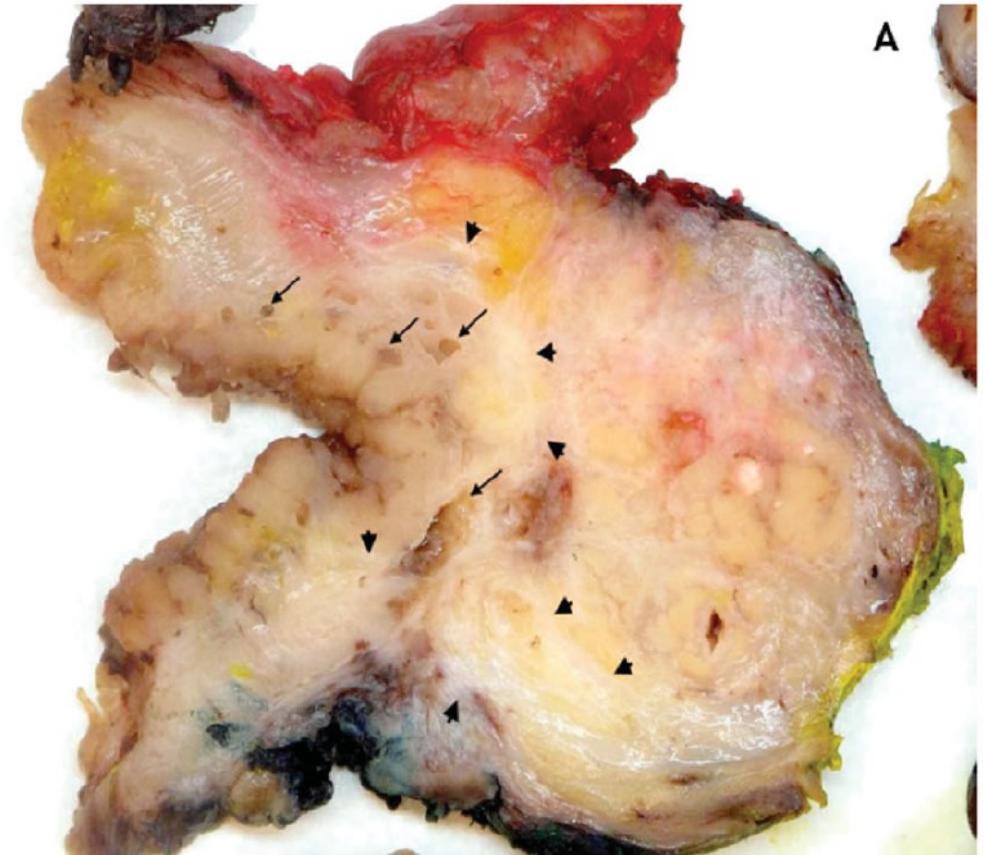
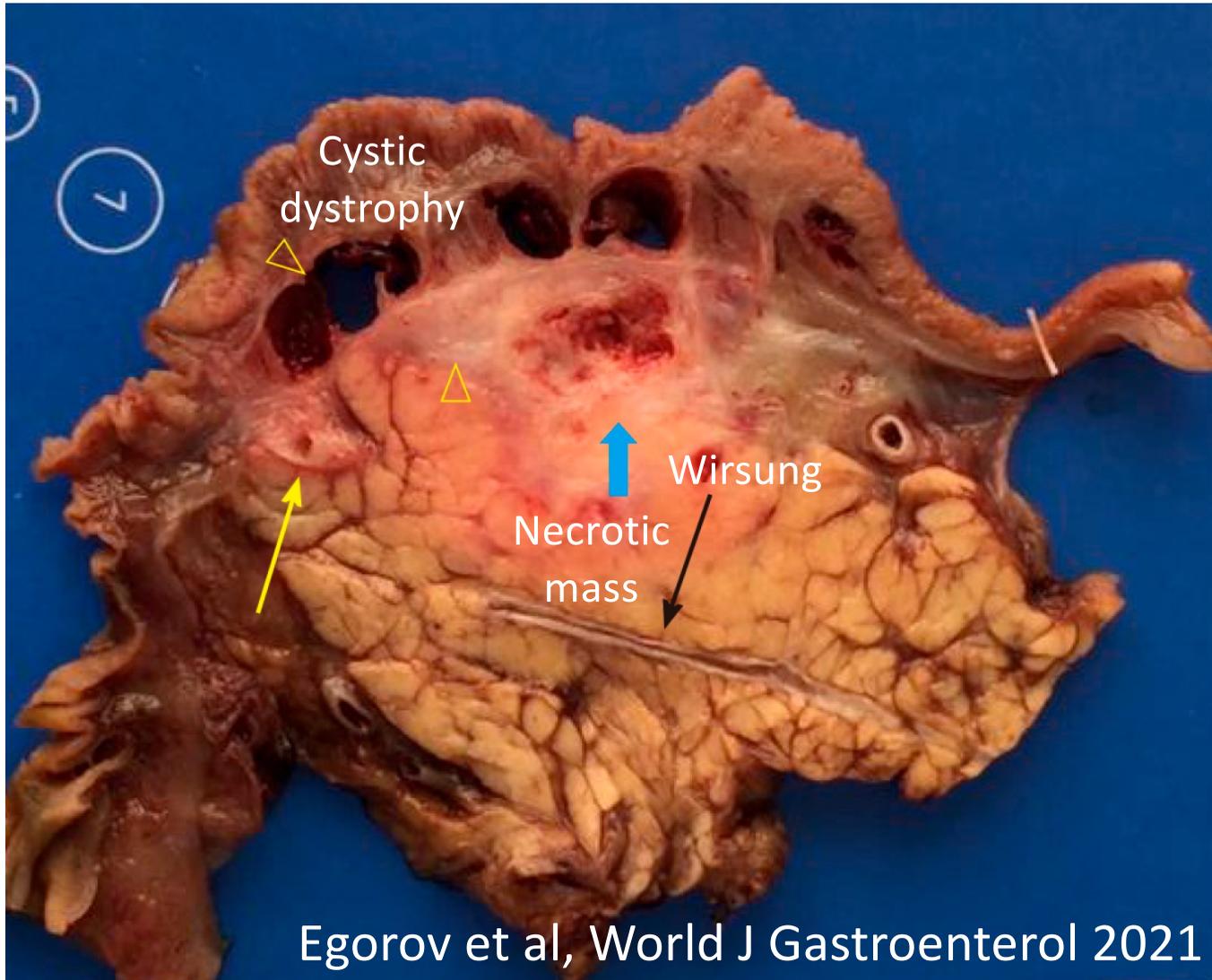


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Cystic dystrophy on aberrant  
pancreas of the duodenal wall  
ETIOLOGY & PATHOPHYSIOLOGY



Vujasinovic [...] Verbeke, Scand J  
Gastroenterol 2022 (Picture from C. Verbeke)

**PATHOLOGY**

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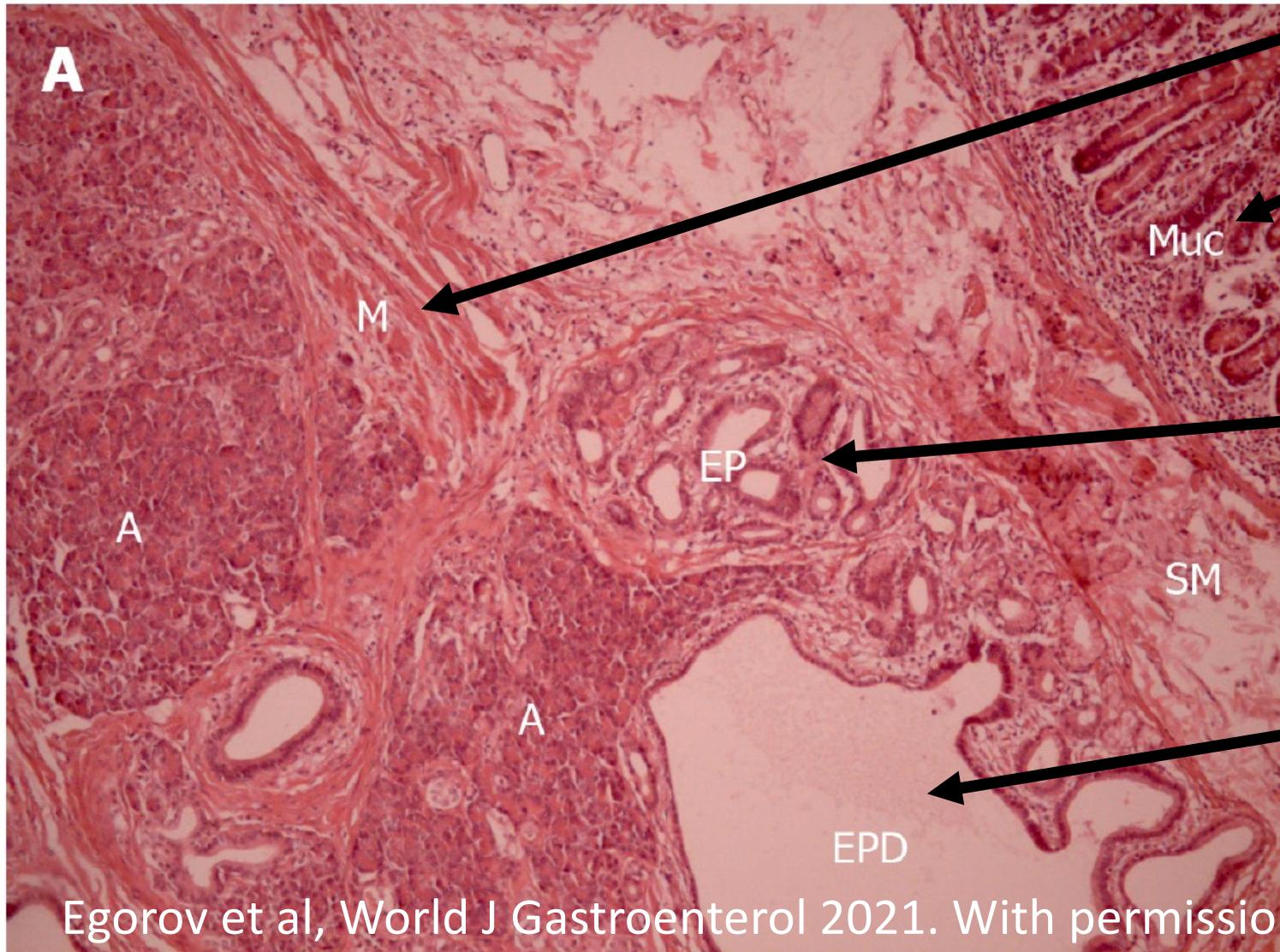


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**PATHOLOGY**



Duodenal muscle layer

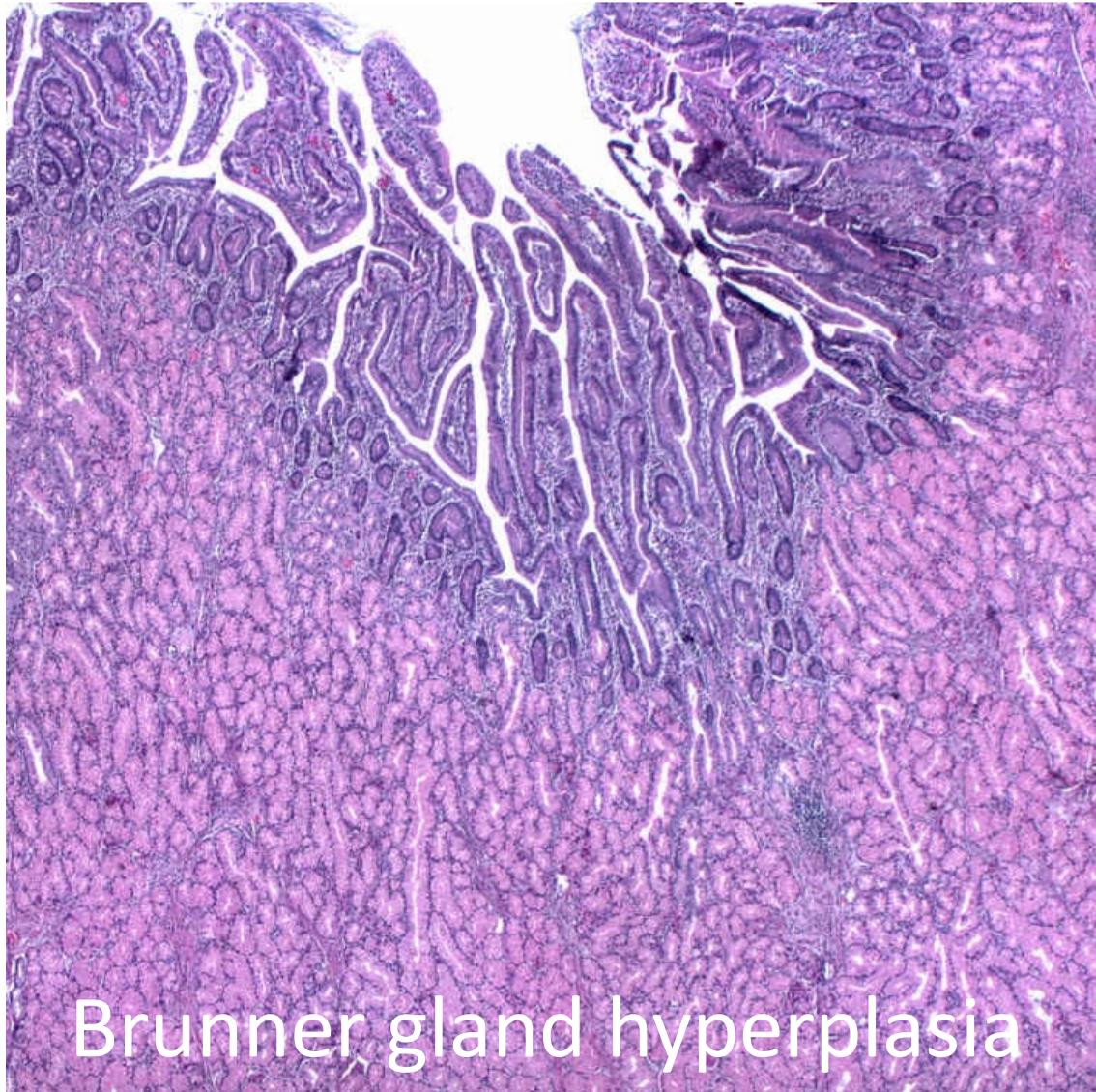
Duodenal mucosa

Ectopic pancreatic tissue

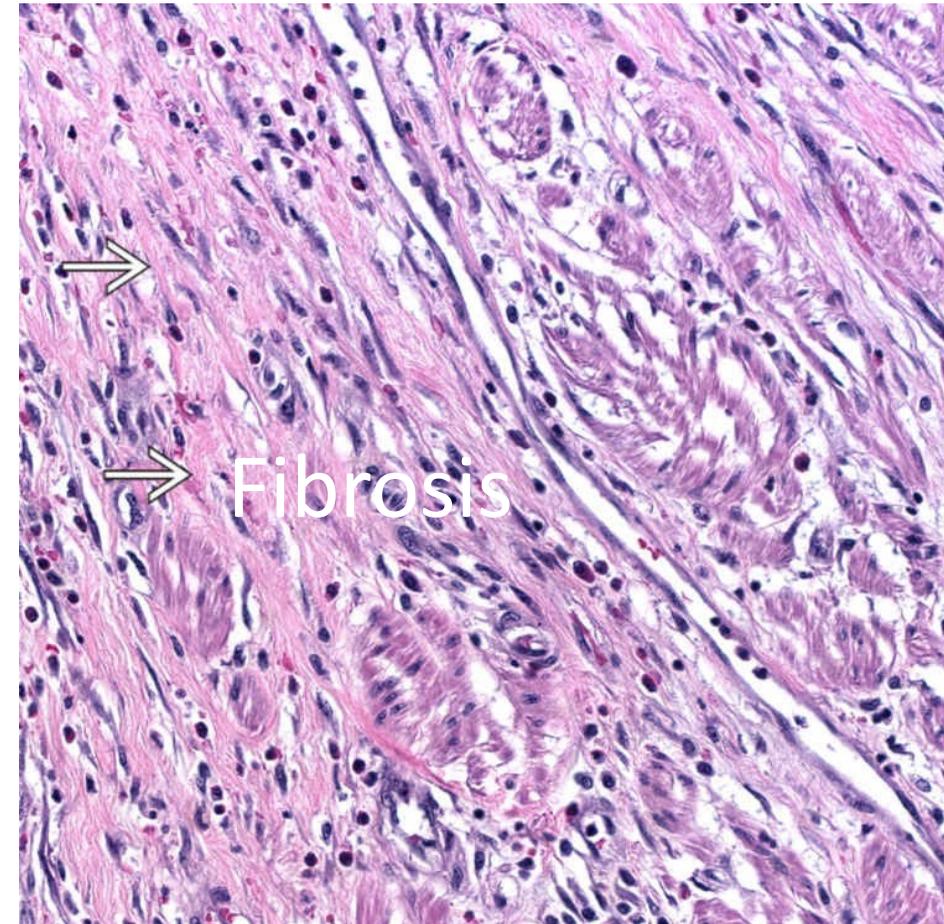
Dilated ectopic  
pancreatic duct

**PATHOLOGY**

Egorov et al, World J Gastroenterol 2021. With permission



Brunner gland hyperplasia



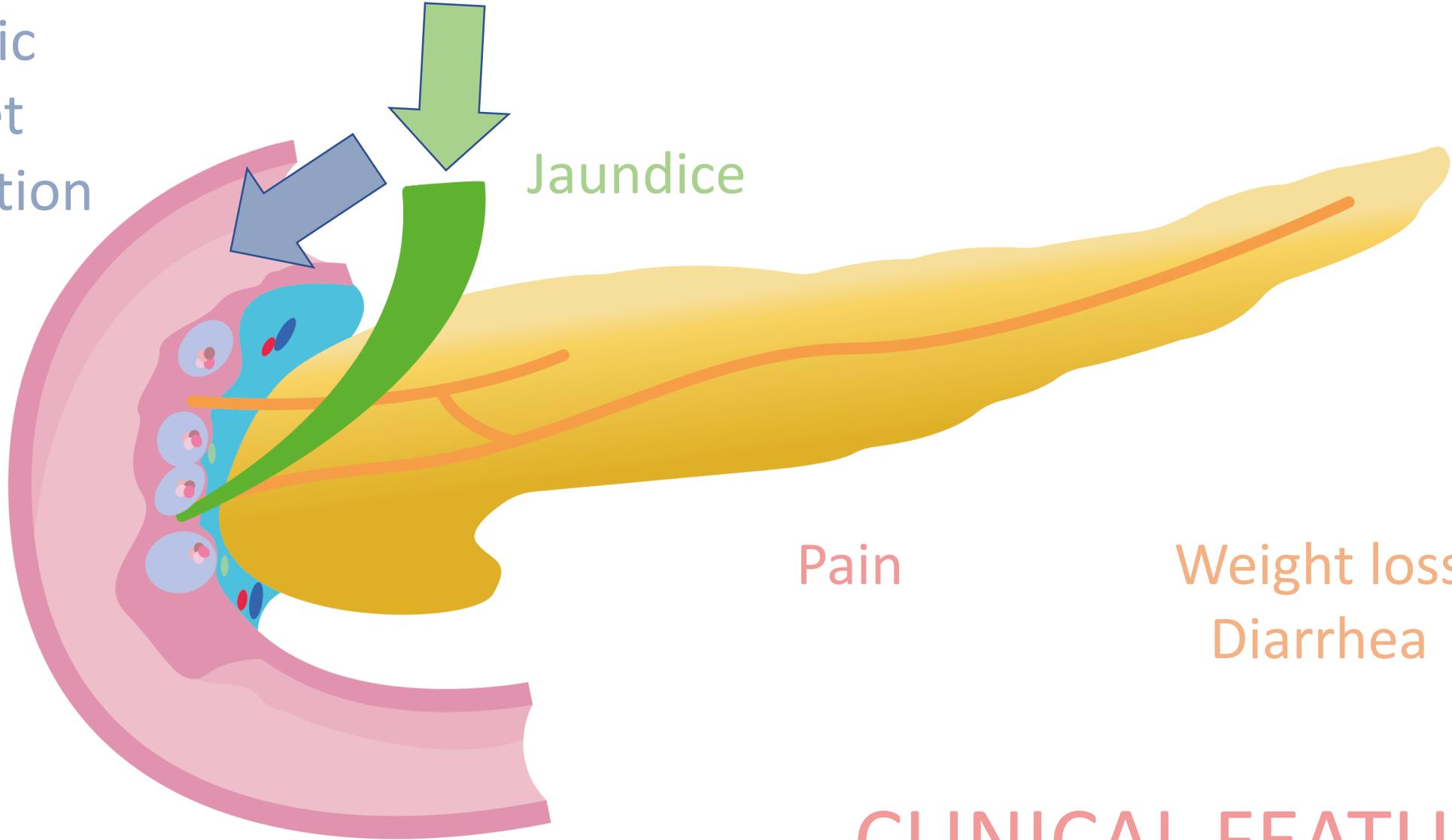
Gastric  
outlet  
obstruction

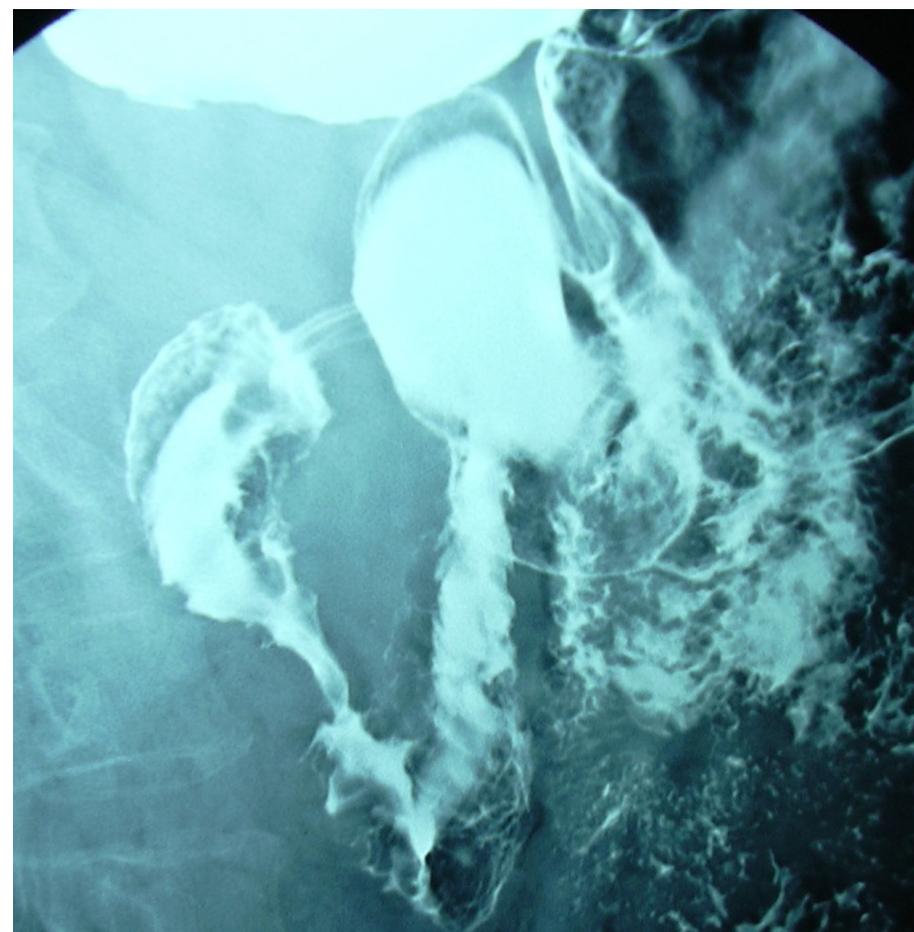
Jaundice

Pain

Weight loss  
Diarrhea

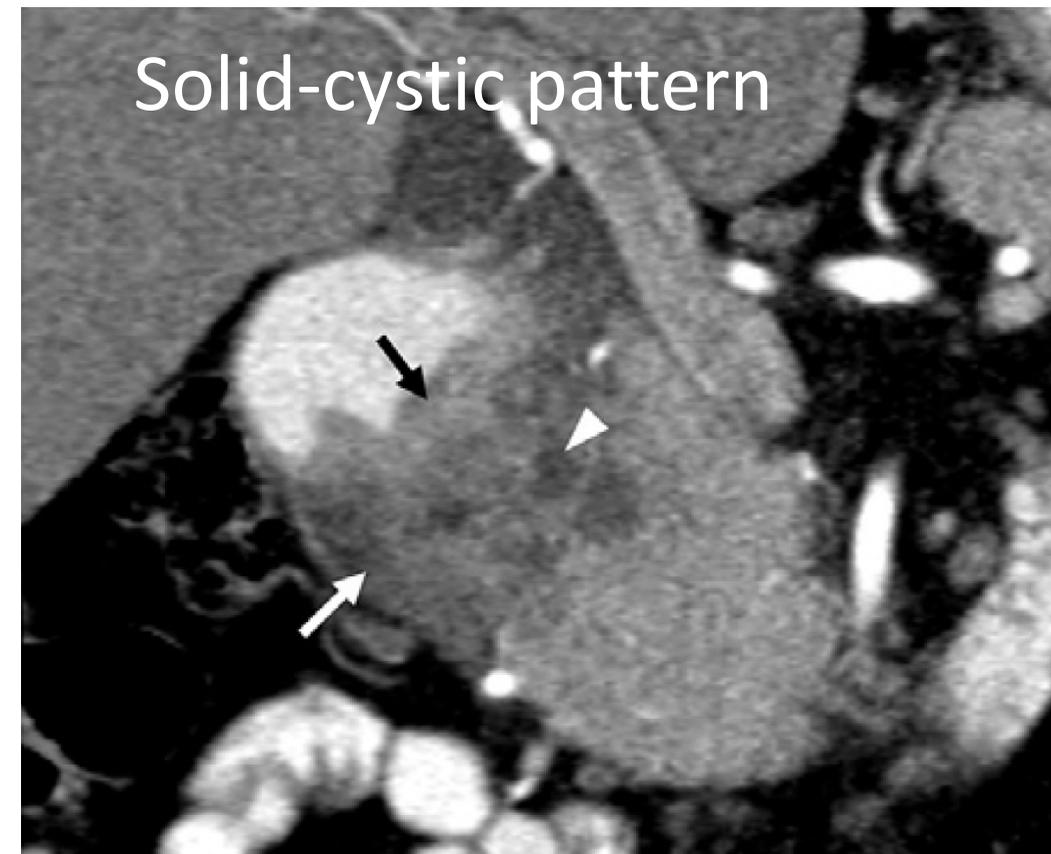
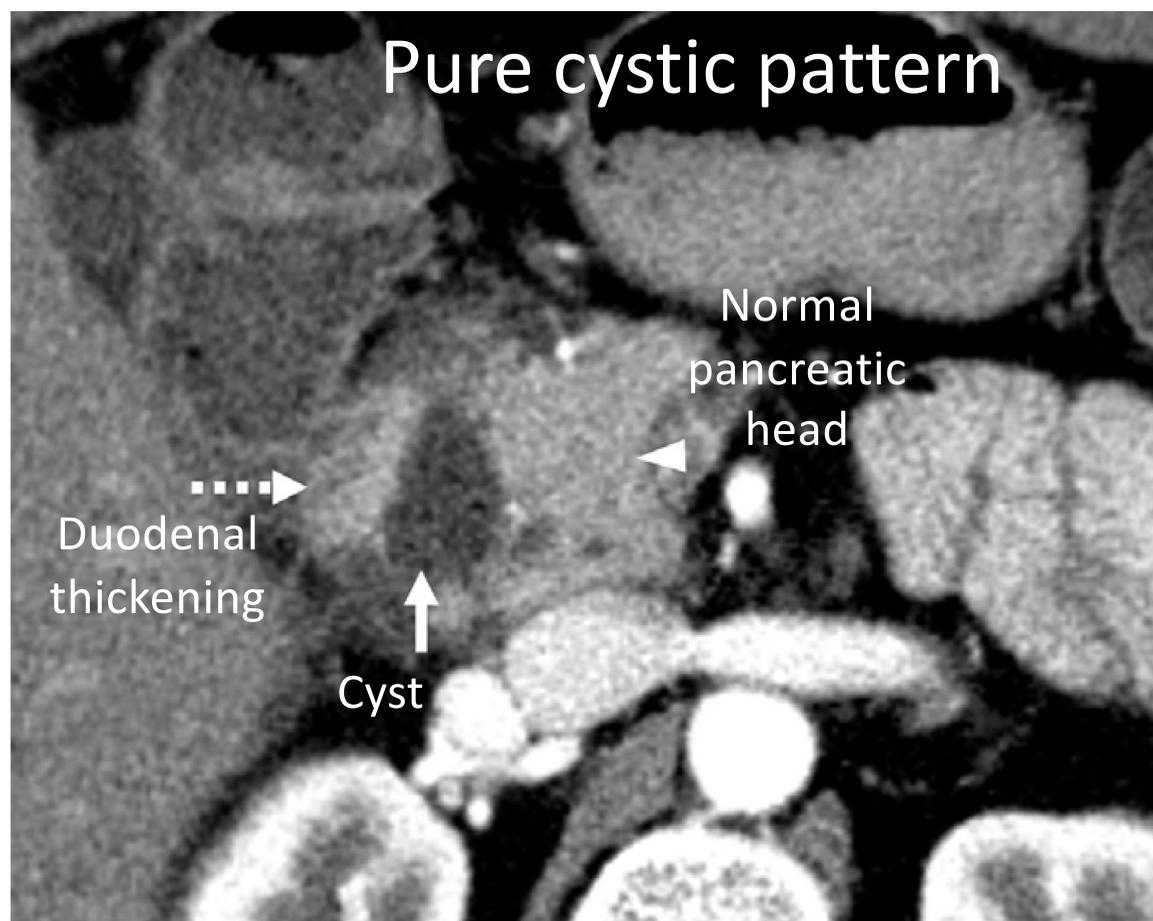
CLINICAL FEATURES

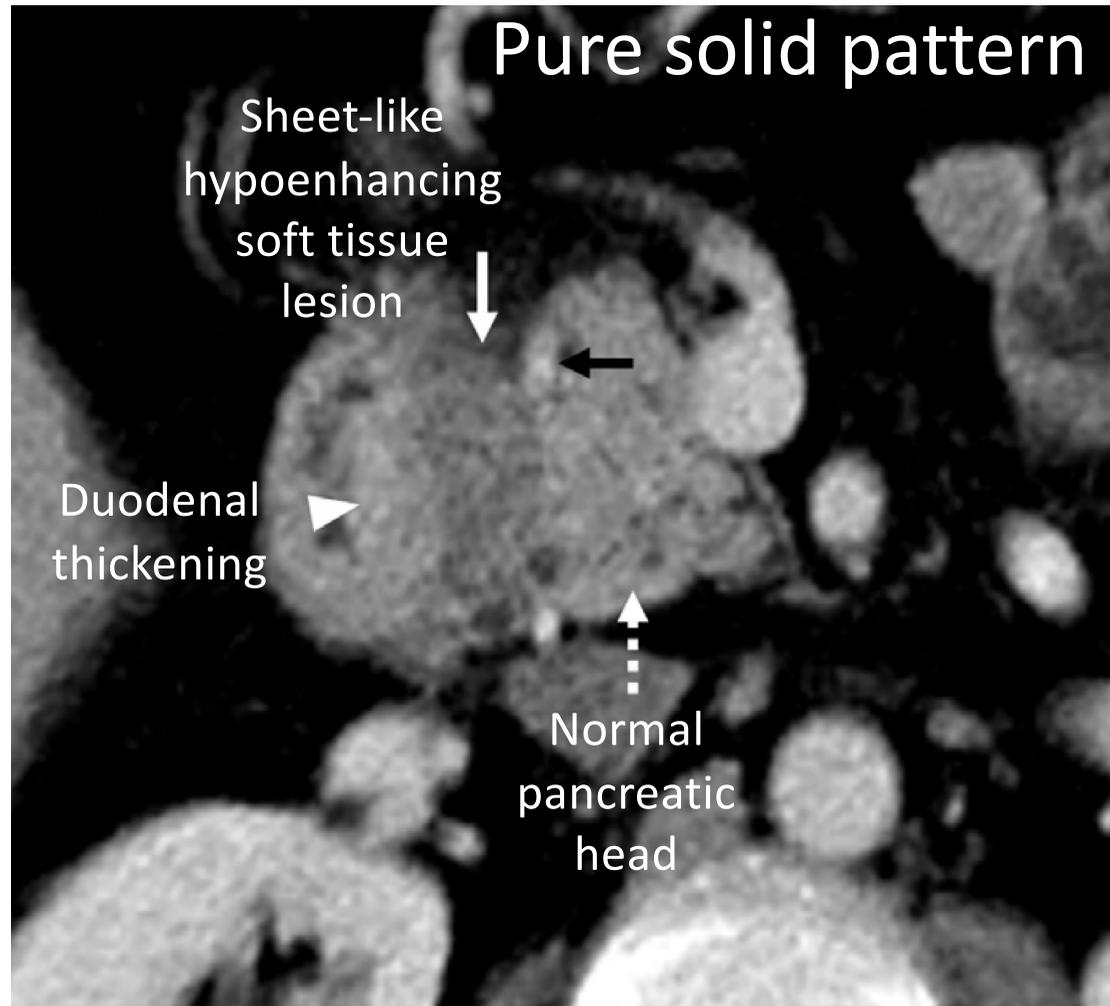




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**CLINICAL FEATURES**





Pancreatic gland with or without signs of chronic pancreatitis

**In favor of PDP (and not cancer):**

Penetrating duct sign  
CP-like upstream dilation of pancreatic duct

Smooth and tapered narrowing of the ducts

Vessel displacement, not encasement

**DIAGNOSIS- CT MRI**



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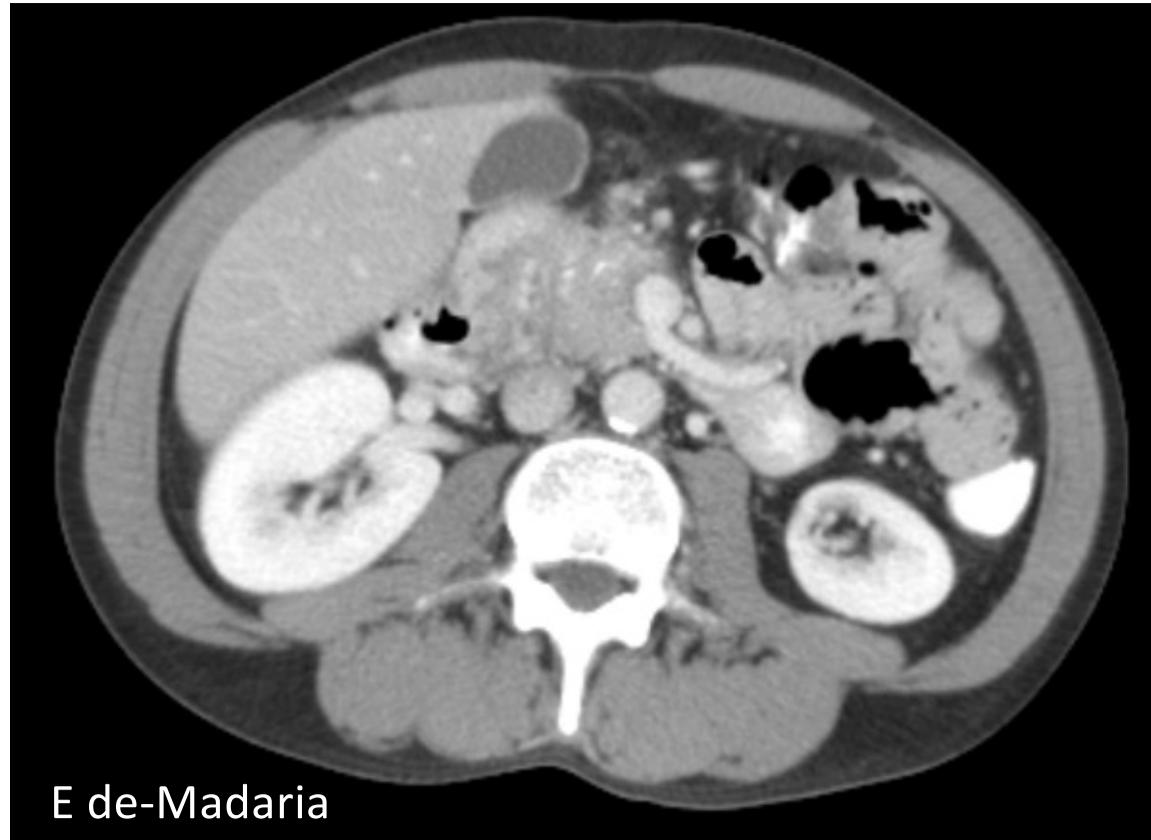
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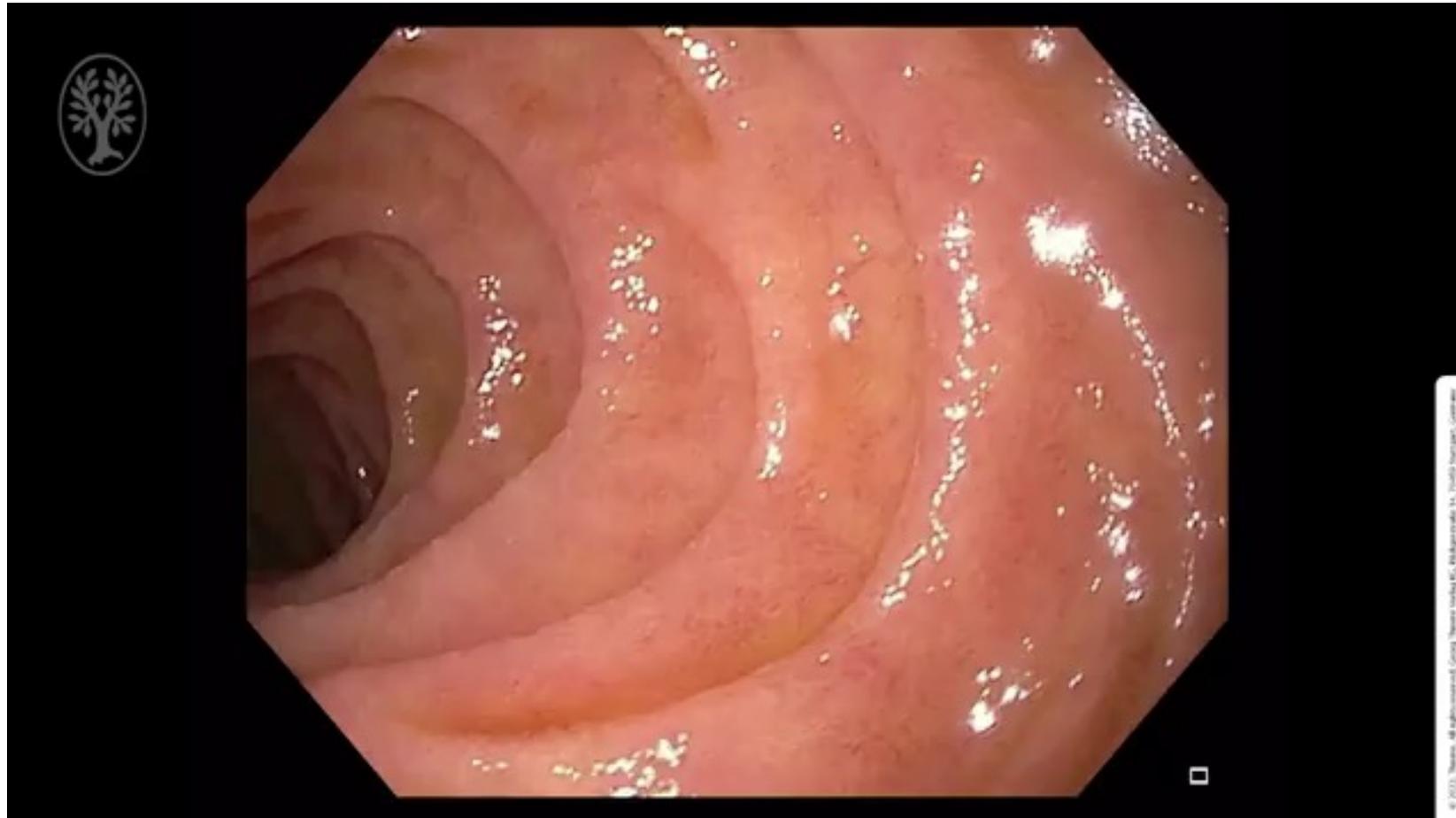
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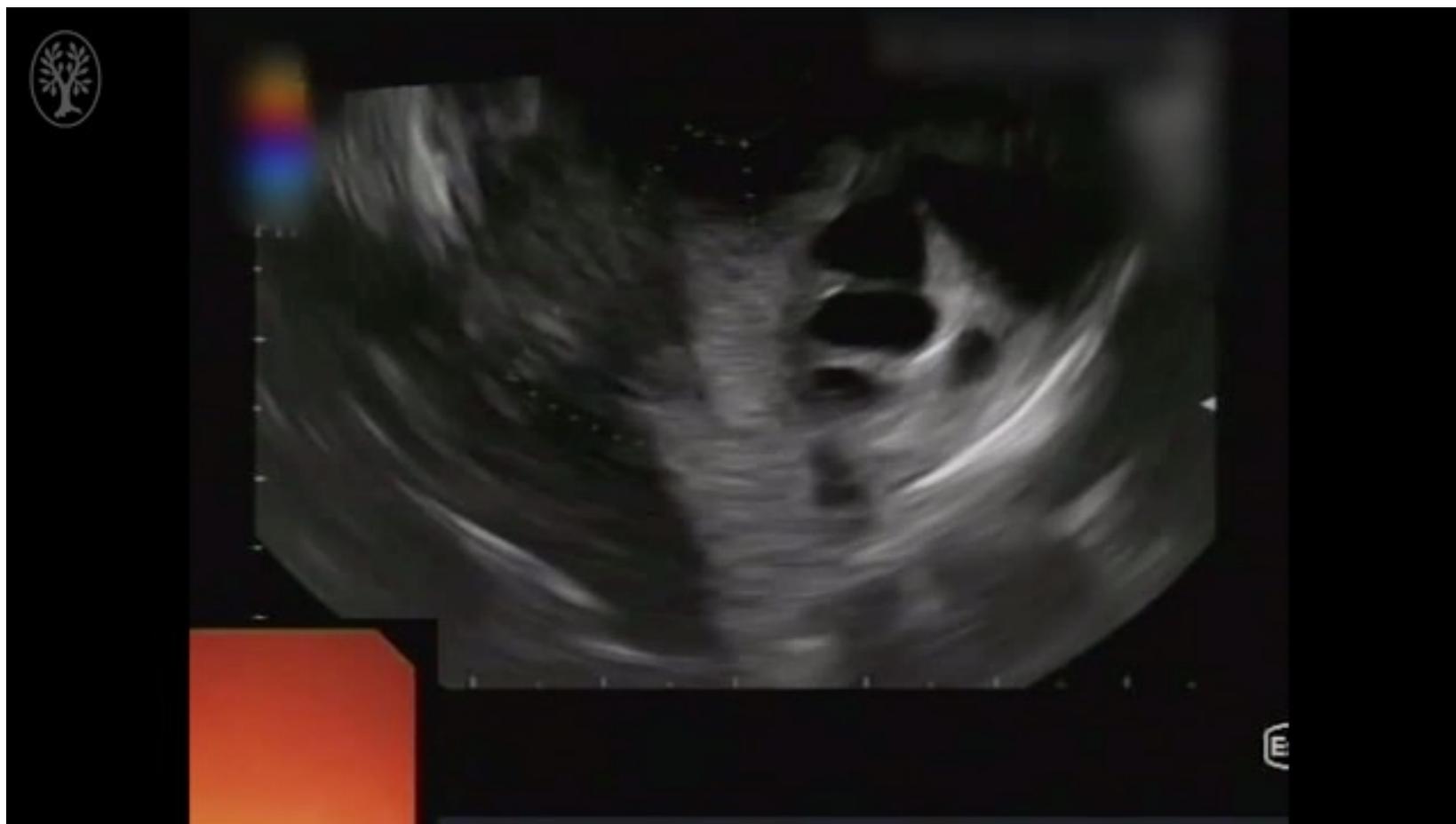


DIAGNOSIS- CT MRI



Pedro López-Muñoz, Vicente Pons,  
Endoscopy 2022, with permission

**DIAGNOSIS-Endoscopy**

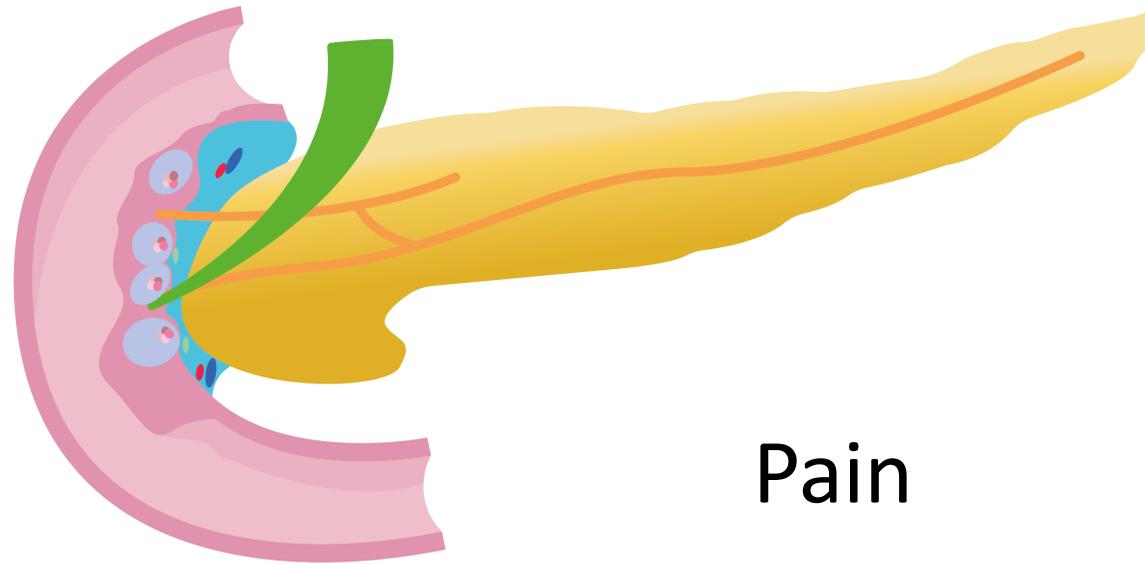


Dario Ligresti et al, Endoscopy  
2019, with permission

DIAGNOSIS-Endoscopy

## Jaundice

Gastric  
outlet  
obstruction



Pain

**MANAGEMENT**

## Systematic Review

335 cases

90% male

87% smokers

87% alcohol cons.

92% abdominal pain

29% conservative (complete relief 50%)

12% endoscopy (complete relief 57%)

59% surgery (complete relief 79%)



# Conservative management

Avoid smoking-alcohol  
Analgesics, supportive measures  
Role of somatostatin analogs?

MANAGEMENT



# Endoscopic management

- Stenting of main bile duct
- Stenting of the main pancreatic duct
- Stenting of the minor papilla?
- Duodenal cyst drainage

MANAGEMENT



## Surgical management

Mainly Whipple procedure  
Highly effective but associated to morbidity  
(20%)-mortality (1.5%)

MANAGEMENT



## CONCLUSIONS

Paraduodenal pancreatitis involves the groove region as well as ectopic pancreatic tissue in the duodenal wall

Males, smokers, high alcohol consumption

Pain, gastric outlet obstruction, jaundice

Initial conservative/endoscopic management

Surgery in selected cases