



Idiopathic Recurrent Acute Pancreatitis

Andres Gelrud, MD, MMSc

Director, Pancreatic Disease Center
Miami Cancer Institute
Baptist Hospital &
Gastro Health



GASTROHEALTH
FOUNDATION

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COI

- PTC Therapeutics, Bogota, Colombia: Sponsor / Consultant
- Boston Scientific: Consultant; Research and Development pancreatic stents
- Abbvie: Consultant: Lectures (pancreatic enzymes)
- UpToDate: Author Royalties (pancreatitis related topics)
- Parexel: Physician adjudicator pancreatic events
- Pancreas Journal: Associate Editor
- Ariel Precision Medicine: Medical Board of Directors (pancreas genetics)
- National Pancreas Foundation: Medical Board of Directors

Introduction

- Definition
- Etiology
- Diagnosis
- Endo therapy
- Conclusions

Definitions:

- Acute Pancreatitis
- Recurrent acute pancreatitis
- Chronic pancreatitis

1. Banks PA et al. Classification of acute pancreatitis 2012. Revision of the Atlanta Classification
Gut 2013 Jan62(1):102-11
2. S Tanner et al. Practical guidelines in Acute Pancreatitis.
Am J Gastro Sep 2013

Pancreatitis

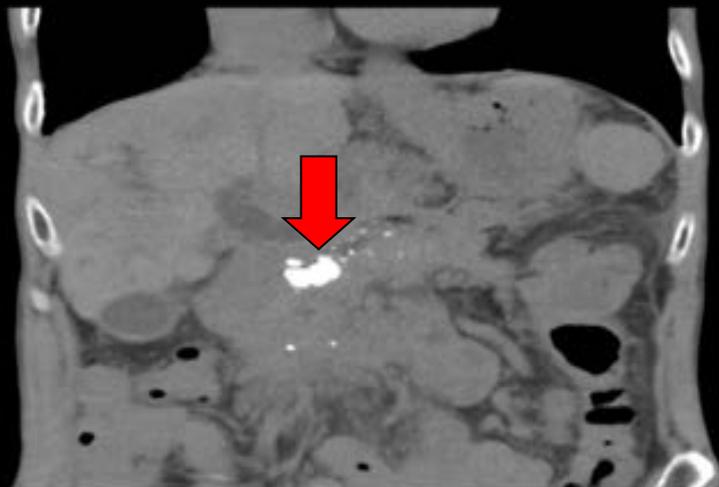
Acute Pancreatitis

1. Abdominal pain
2. Imaging c/w pancreatic inflammation
3. ≥ 3 elevation of amylase / lipase

(two or the above 3 = AP)

1. Banks PA et al. Classification of acute pancreatitis 2012. Revision of the Atlanta Classification
Gut 2013 Jan62(1):102-11
2. S Tanner et al. Practical guidelines in Acute Pancreatitis.
Am J Gastro Sep 2013

Chronic Pancreatitis



Pancreas and Biliary Tract

The American Journal of Gastroenterology **107**, 1096-1103 (July 2012)

Natural History Following the First Attack of Acute Pancreatitis

Dhiraj Yadav, Michael O'Connell and Georgios I Papachristou

N: 7,456 (Pennsylvania Health Care Cost Containment Council)

- Diagnosis of AP from 1996 through 2005
- Etiologies: biliary (28%); alcohol (19%) and idiopathic (36%)

Pancreas and Biliary Tract

The American Journal of Gastroenterology **107**, 1096-1103 (July 2012)

Natural History Following the First Attack of Acute Pancreatitis

Dhiraj Yadav, Michael O'Connell and Georgios I Papachristou

- Readmissions following a sentinel attack of AP are common (29%)
- Progression to CP is infrequent and usually occurs in the setting of RAP, alcohol, and smoking. Less frequent biliary pancreatitis or anatomical.
- RAP risk in biliary AP increased with the duration between AP and cholecystectomy.
- Conclusion: Natural history of CP may be altered through **early behavioral Intervention**

Progression from AP or RAP → CP

Gastroenterology 2015;149:1490–1500

CLINICAL—PANCREAS

Frequency of Progression From Acute to Chronic Pancreatitis and Risk Factors: A Meta-analysis



CrossMark

Sharanya J. Sankaran,¹ Amy Y. Xiao,¹ Landy M. Wu,¹ John A. Windsor,¹
Christopher E. Forsmark,² and Maxim S. Petrov¹

Conclusions (14 studies / n=8492):

10% of pt's with 1st episode of AP develop CP

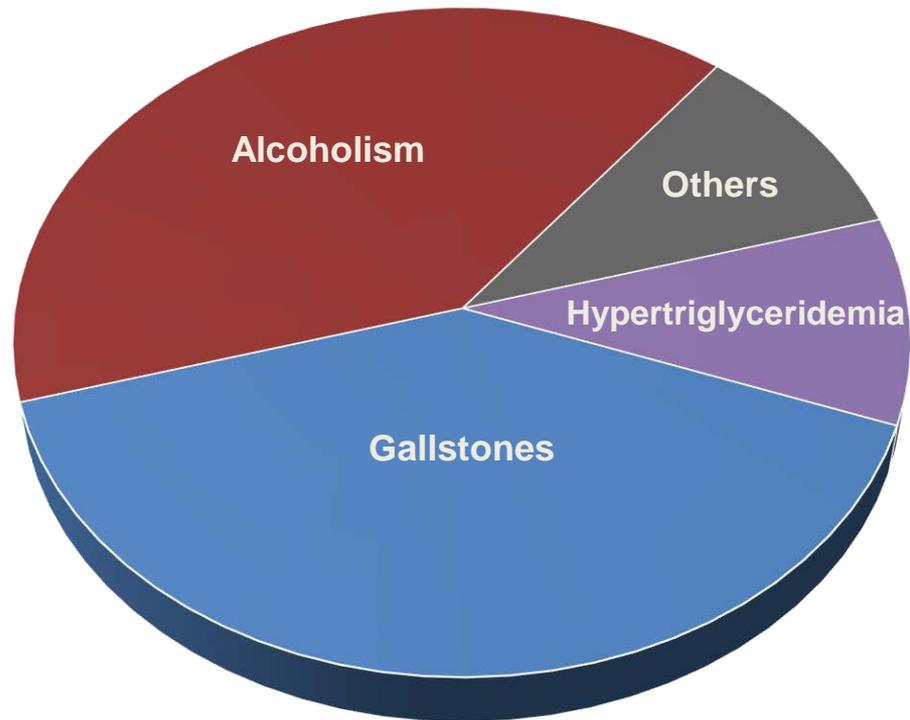
36% of pt's with RAP develop CP

Risk is higher among smokers, alcoholics and men

Diagnostic Work up

- Basic Labs (metabolic work up):
 - TG
 - Ca
 - TTG and IgA (Celiac Dz)
 - TSH
 - IgG4 (Auto Immune Pancreatitis)
 - Genetic testing

Hypertriglyceridemia is likely the third leading cause of **Acute Pancreatitis**



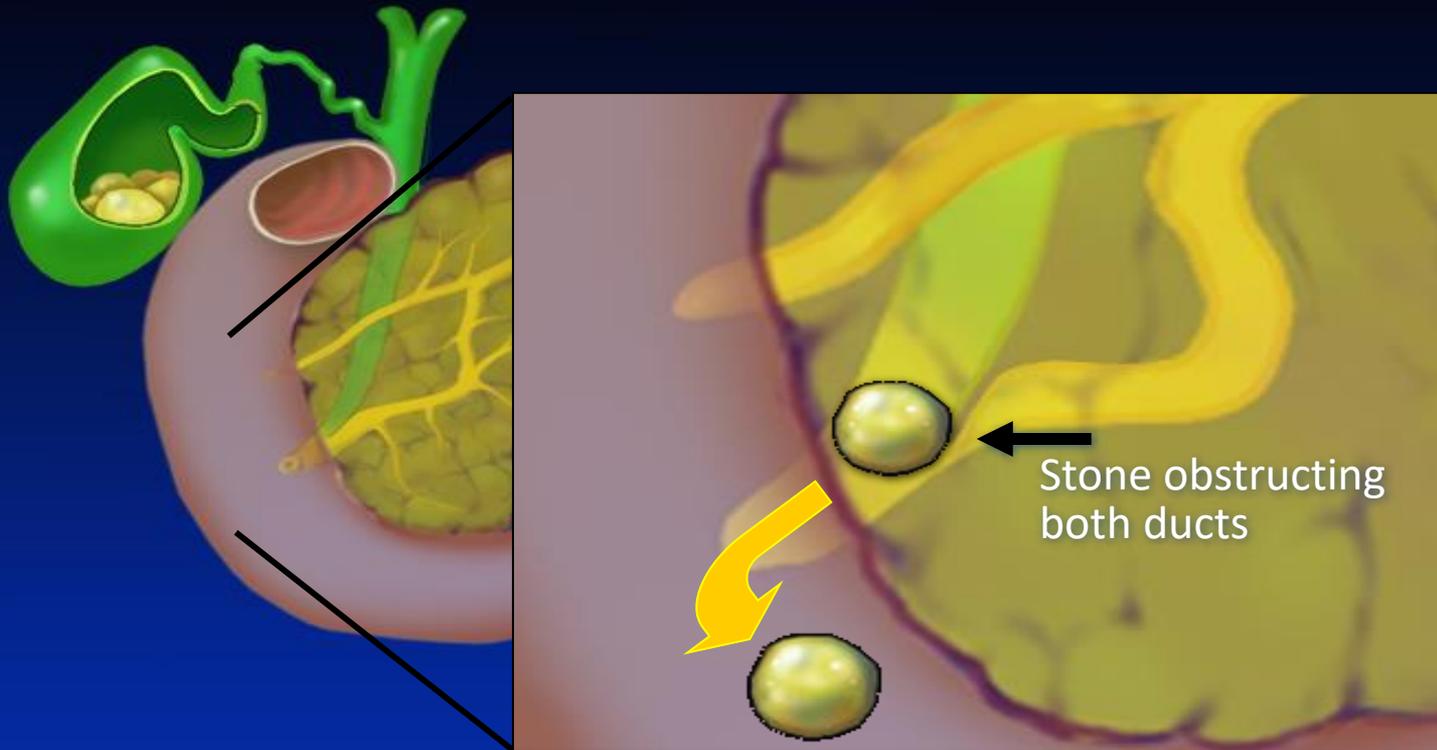
Whitcomb DC. Clinical practice. Acute pancreatitis. *NEJM*. 2006;354:2142-2150

Valdivielso P et al.. Current knowledge of hypertriglyceridemic pancreatitis. *Eur J Med*. 2014;25:689-694

Fortson MR et al. 3rd Clinical assessment of hyperlipidemic pancreatitis. *Am J Gastroenterol*. 1995;90:2134-2139.

Acute Pancreatitis

Gallstones

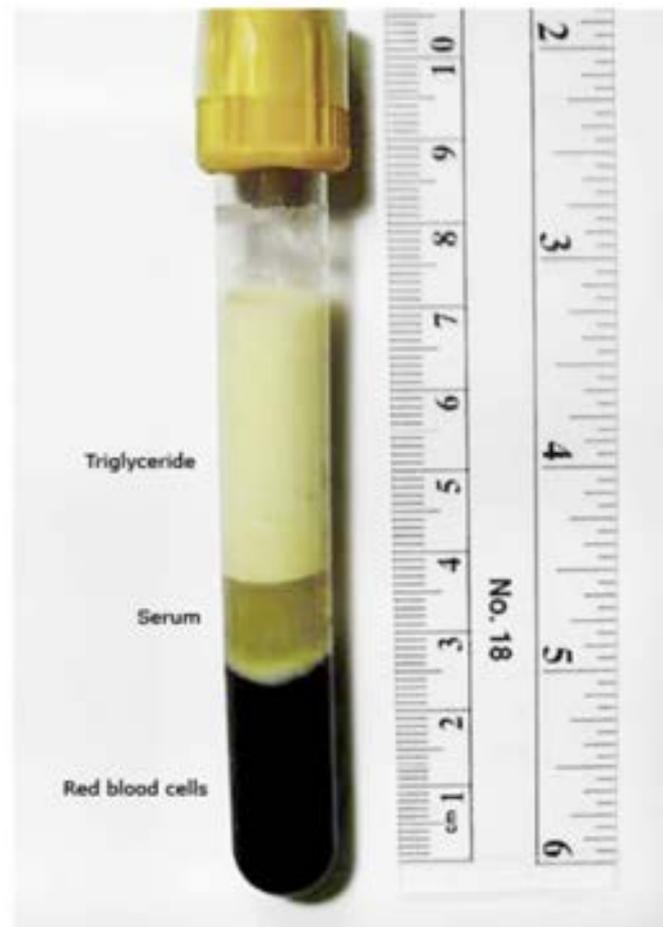


Review > Am J Gastroenterol. 2009 Apr;104(4):984-91. doi: 10.1038/ajg.2009.27.

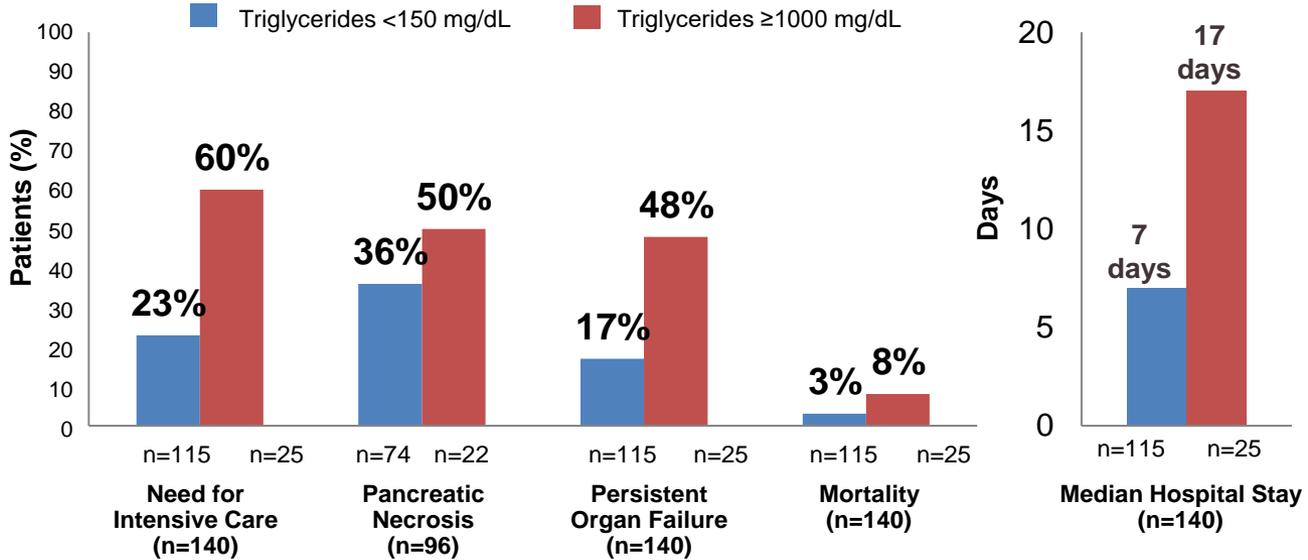
Epub 2009 Mar 17.

Hypertriglyceridemic pancreatitis: presentation and management

Wayne Tsuang¹, Udayakumar Navaneethan, Luis Ruiz, Joseph B Palascak, Andres Gelrud



Acute Pancreatitis Can Be Deadly; Outcomes are Worse for Those Who Have Extremely High Triglyceride Levels



The Severity in Acute Pancreatitis Study/Pancreatitis-associated Risk Of Organ Failure (SAPS/PROOF) is an ongoing observational study conducted at the University of Pittsburgh Medical Center.

Nawaz H, et al. *Am J Gastroenterol*. 2015;110(10):1497-503.

Diagnostic Work up

- Pancreatic protocol CT (high resolution)
 - Tumors
- MRI IV contrast with MRCP w or w/o secretin
 - PD structural abnormalities; variants and stones / sludge
- EUS
 - Small tumors; GB; biliary stones / sludge; structural abnormalities
- ERCP only when endotherapy is indicated !

PANCREAS, BILIARY TRACT, AND LIVER

Increased Risk of Pancreatic Adenocarcinoma After Acute Pancreatitis

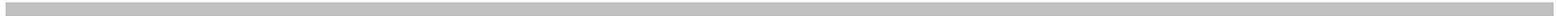
Satish Munigala,* Fasiha Kanwal,* Hong Xian,^{‡,§} Jeffrey F. Scherrer,^{‡,||} and Banke Agarwal*

N= 495,504 Veterans Health Administration (2000-2007)

5720 were dx with AP → 710 were dx with PaCa

Conclusion: “A significant number of patients with PaCa initially present with AP; the diagnosis of cancer is often delayed by up to 2 years. We suggest that PaCa be routinely considered as a potential etiology of AP in patients >40 years old. “

Casos “Particulares / Interesantes”

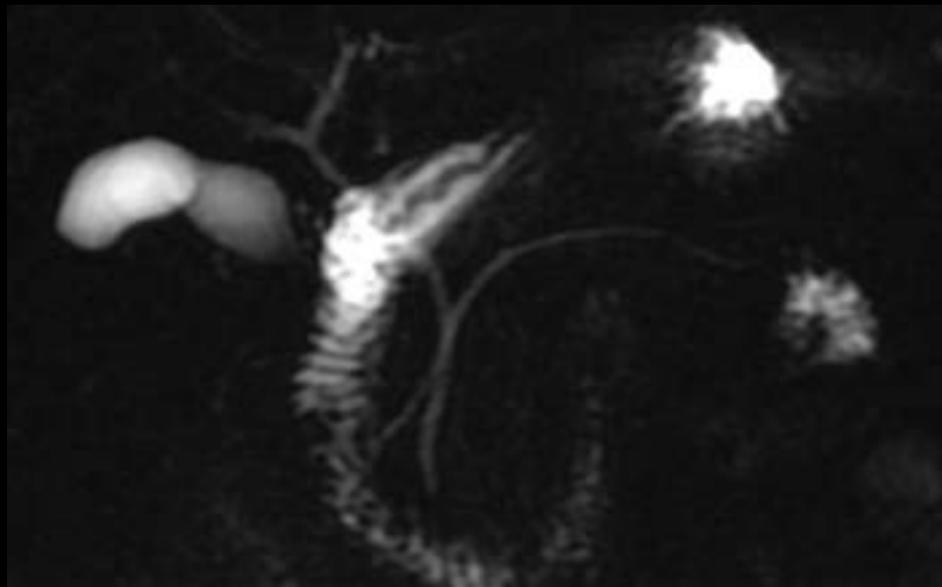
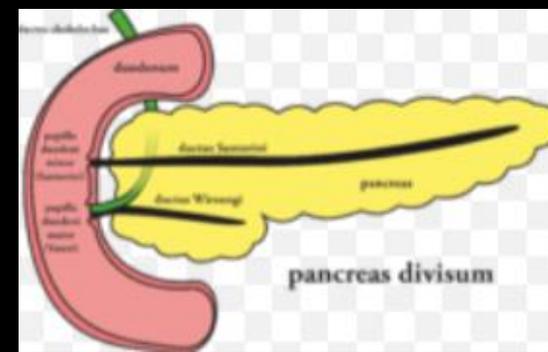


32 yo F adm with 3rd episode of pancreatitis, elevated LFTs,
Tbili 4, L 10,800 and found to have an abnormal MRCP

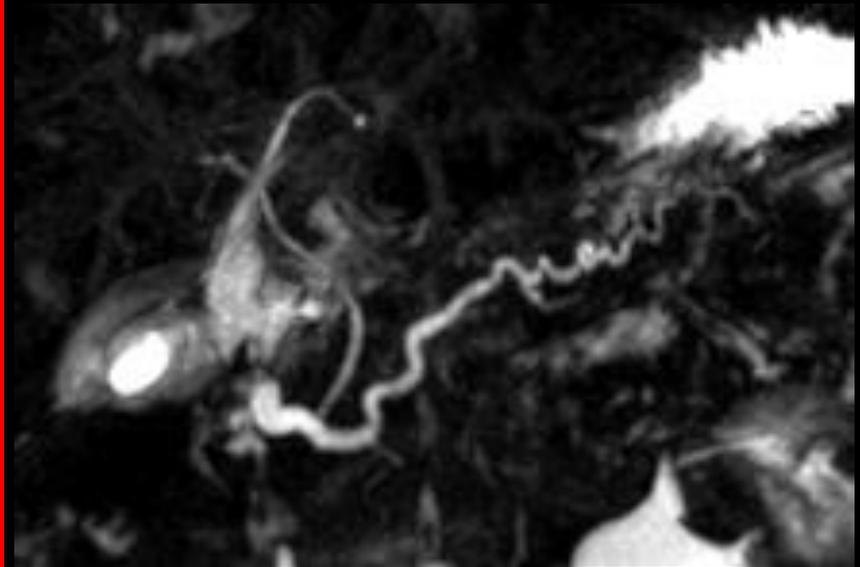
What can we Treat Endoscopically?

- Pancreas divisum
- Ampullary tumors
- Other anatomical abnormalities or variants

MRI – MRCP: Pancreas Divisum



A



B

Pancreas Divisum & RAP

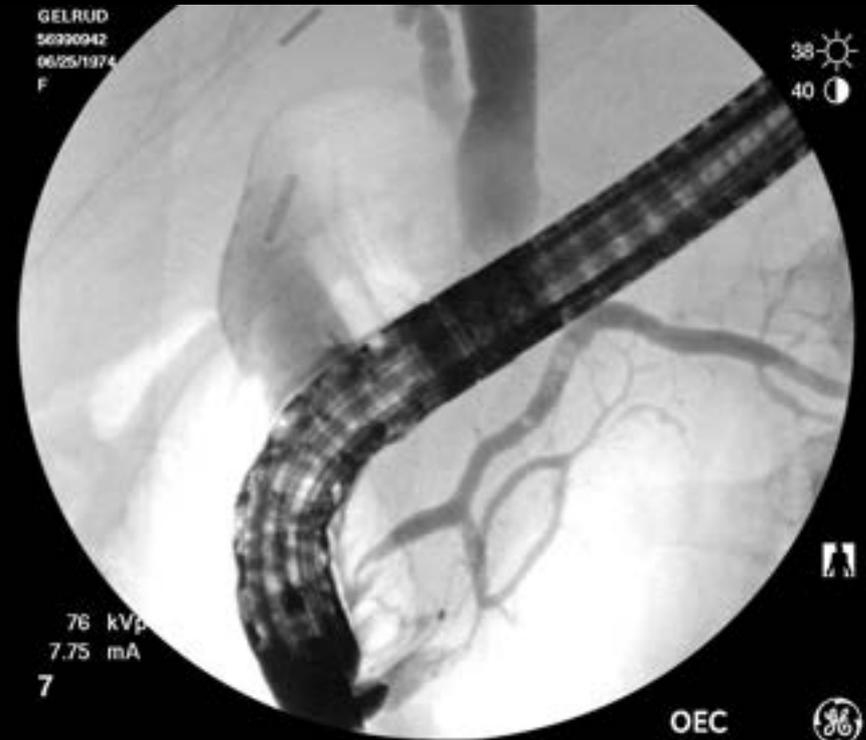


Am J Gastroenterol. 2004 Aug;99(8):1557-62.

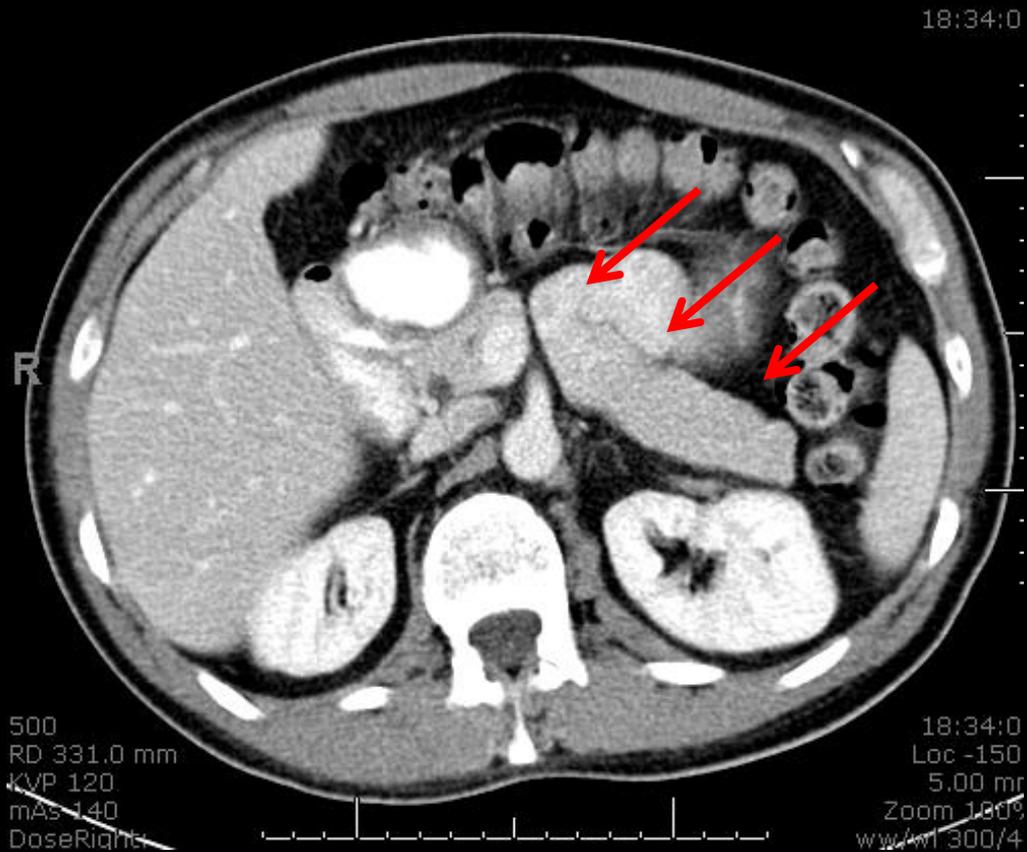
Analysis of cystic fibrosis gene product (CFTR) function in patients with pancreas divisum and recurrent acute pancreatitis.

Gelrud A¹, Sheth S, Banerjee S, Weed D, Shea J, Chuttani R, Howell DA, Telford JJ, Carr-Locke DL, Regan MM, Ellis L, Durie PR, Freedman SD.

MRCP & ERCP: Incomplete Divisum or Dorsal dominant



57 yo M with RAP x 3
What is the Dx?



Rare Anatomy



Rare Etiologies



Pancreatic Agenesis



Medical Treatment of RAP

- STOP Tob / STOP EtOH
- Rule out treatable metabolic conditions (most freq missed)
Celiac; ↑TG; ↑Ca; ↓ Thyroid; Vasculitis, IF abnl image IgG4
- Antioxidants (no data to support the use)
- Empiric CCY (not recommended)
- Urso (no data to support the use)
- No role for uncovered pancreatic enzymes
- Nutrition: good hydration & low fat diet

Conclusions:

- Pancreas divisum:
IF dilated dorsal duct → ERCP with minor sphx
IF normal dorsal duct → controversial
- Acute pancreatitis \geq 40yo think of Pancreatic CA
- When in doubt discuss with your team or refer to Pancreatic disease center

agehrud@gastrohealth.com

www.pancreasanimado.com
