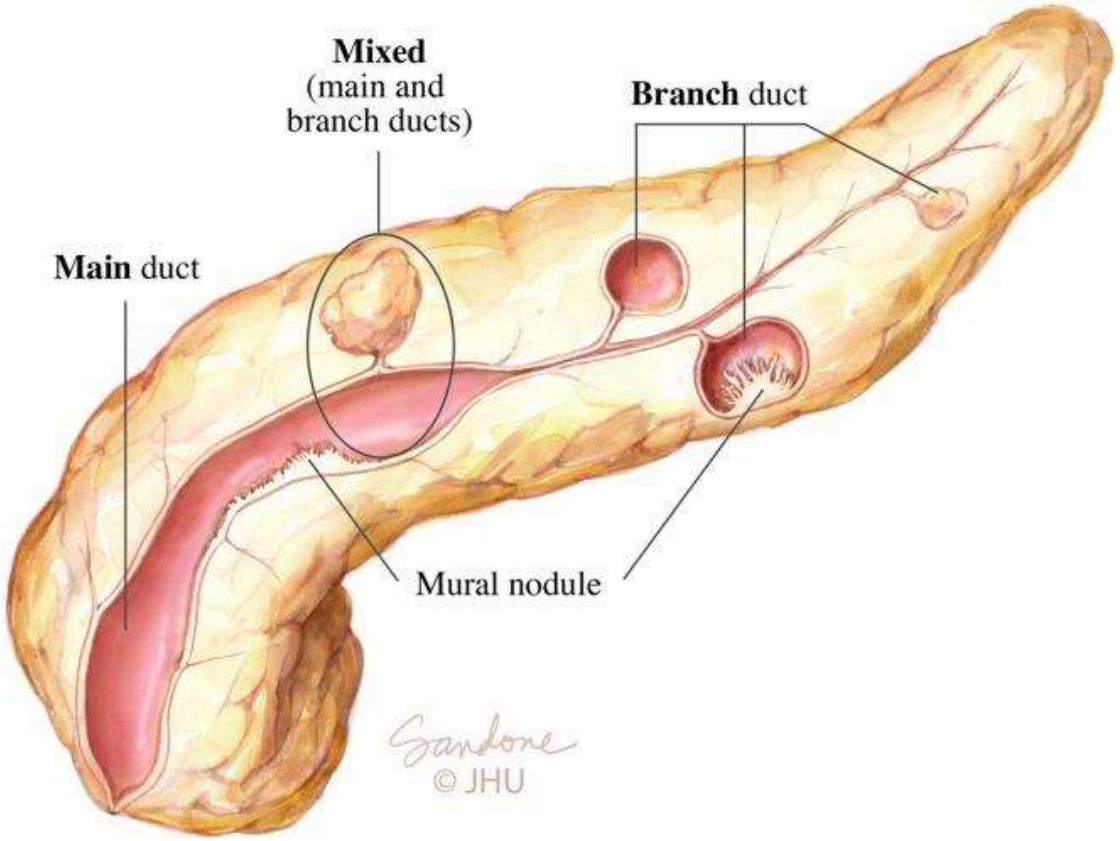
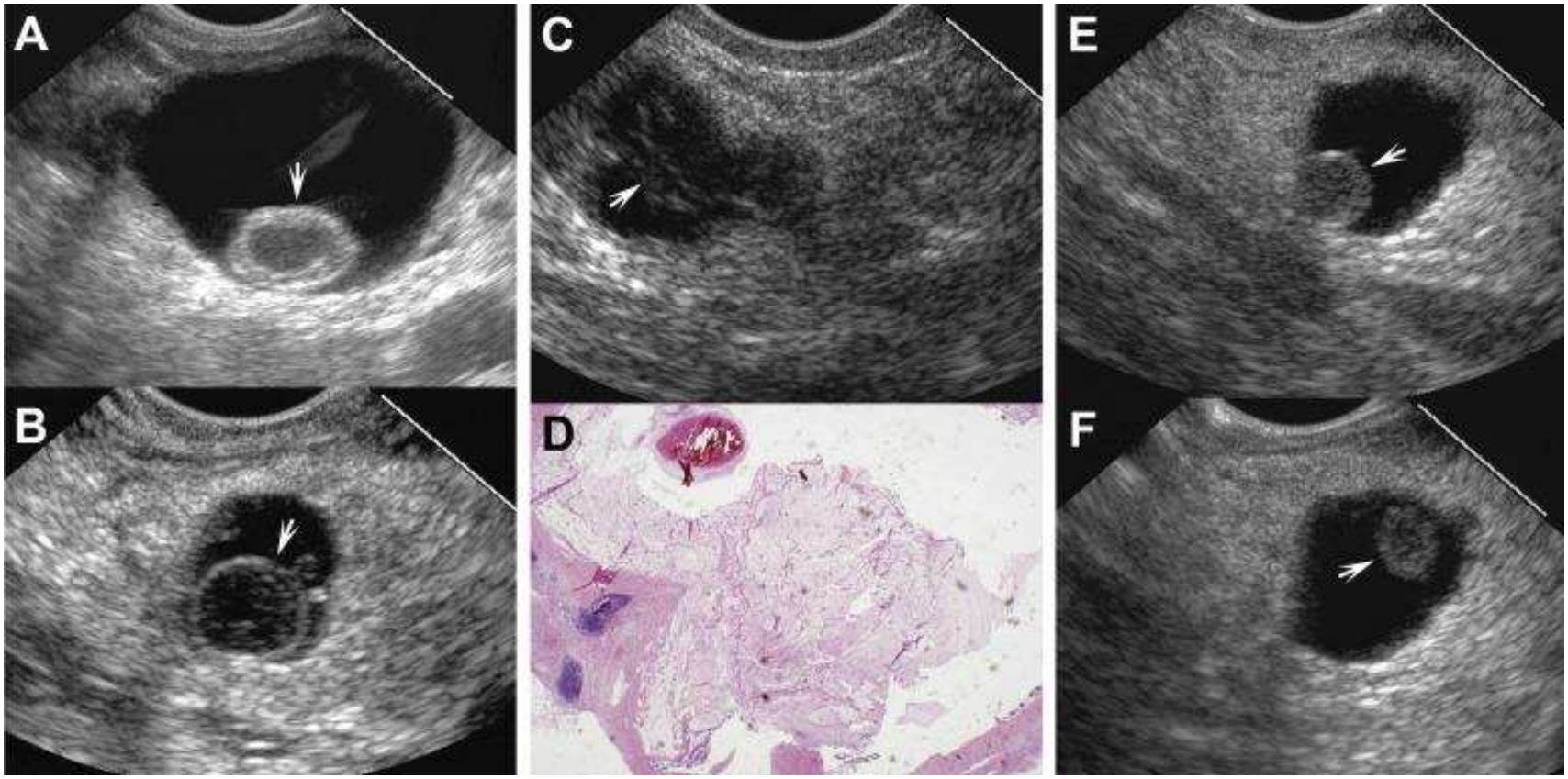
IPMN


Mixed
(main and
branch ducts)
Branch duct
Main duct
Mural nodule
Sandone
© JHU


A
B
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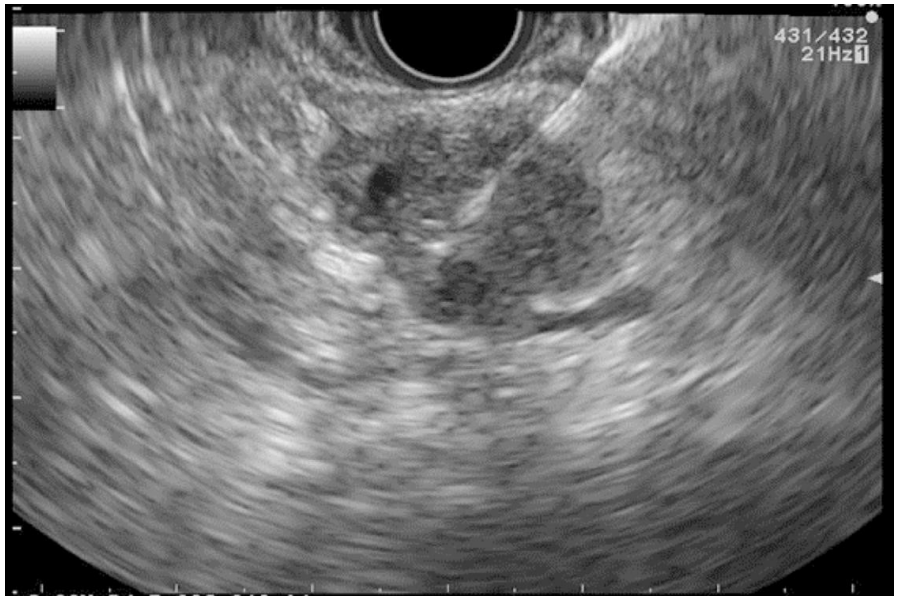
E
F

Case 4

- 45 year old male
- Weight loss and abdominal pain.
- Proceeded to have a CT scan – pancreatic mass lesion (mid body). Metastatic disease.

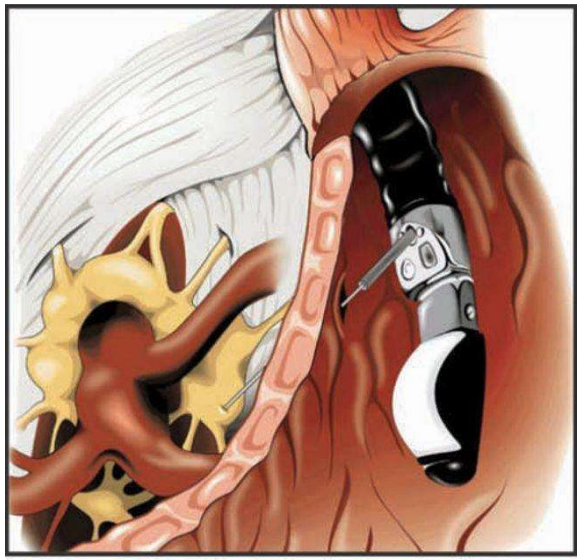


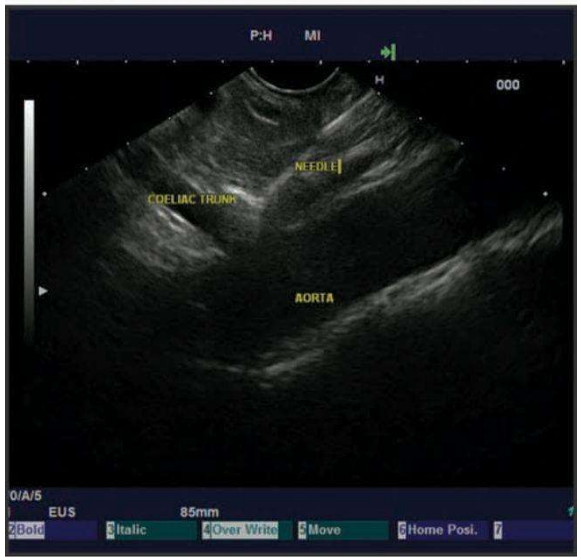
Confirmed – Pancreatic adenocarcinoma.

- Severe abdominal pain (all options exhausted).

Coeliac plexus neurolysis

- Traditionally, access to the celiac plexus has been percutaneous.
- However necessary to avoid the different structures located between the skin and the celiac plexus while performing this.
- Combination of 98-100% alcohol + 0.25% Bupivacaine.
- Coeliac ganglion block in chronic pancreatitis.





Coeliac plexus block and neurolysis.

Endosonography-guided celiac plexus neurolysis efficacy in current literature

Ref.	Design	*n*	Technique	Neurolytic agent	Pain control (follow up)	Complications
Wiersema *et al*[6]	Retrospective	30	Bilateral	3 mL bupivacaine (0.25%) + 10 mL ethanol (98%)	88% (10 wk)	Diarrhea 13.3%, Pain 3.3%
Gunaratnam *et al*[17]	Prospective	58	Bilateral	3-6 mL bupivacaine (0.25%) + 10 mL ethanol (98%)	78% (24 wk)	Pain 8.6%
Levy *et al*[11]	Retrospective	17	Direct	8 mL bupivacaine (0.25%) + 12 mL ethanol (99%)	94% (2-4 wk)	Hypotension 35%, pain 41% and diarrhea 16%
Sahai *et al*[9]	Prospective	160	Central *vs* Bilateral	10 mL bupivacaine (0.5%) + 20 mL ethanol	45.9% *vs* 70.5% (7 d). $P < 0.05$	Bleeding 0.7%
Sakamoto *et al*[18]	Retrospective	67	Broad *vs* bilateral	3 mL lidocaine (1%) + 9 mL ethanol (98%)	Mean VAS scores 3.9 *vs* 2.5 (7 d) and 4.8 *vs* a 3.4 (30 d) $P < 0.05$	None
Wyse *et al*[7]	RCT	48	Bilateral *vs* analgesia	10 mL bupivacaine (0.50%) + 20 mL ethanol	Likert scale reduction 28% (4 wk) + 60% (12 wk) $P < 0.05$	None
LeBlanc *et al*[10]	RCT	50	Central *vs* bilateral	20 mL lidocaine (0.75%) + 10 mL ethanol (98%)	69% *vs* 81% (61.9%)(14wk)	Hypotension 2% pain 36%
Iwata *et al*[19]	Retrospective	47	Central, direct or bilateral	2-3 mL bupivacaine + 20 mL ethanol	68% (7 wk)	Hypotension 17%, diarrhea 23% and inebriation 8%
Ascunce *et al*[20]	Retrospective	64	Bilateral	10 mL lidocaine (1%) + 20 mL ethanol (98%)	50% (1 wk). OR 15.61 of response if celiac ganglia was detected	Hypotension 2%, pain 2% and diarrhea 23%
Wiechowska-Kozłowska *et al*[12]	Retrospective	29	Central *vs* bilateral	2 mL lidocaine (2%) + 20 mL ethanol (98%)	86% (1-2 wk)	Hypotonia 3.4%, pain 6.9% and diarrhea 10.3%
Téllez-Ávila *et al*[21]	Retrospective	53	Central *vs*	10 mL lidocaine (1%) + 10-20 mL	48% *vs* 56% (4 wk)	Transitory pain 0% *vs* 3%

Advantages of Endoscopic ultrasound

- Ultrasound transducer is into the second part of the duodenum hence interference from digestive gas or abdominal fat is avoided while viewing the biliary tree.

- EUS can detect small stones/ sludge and even microlithiasis making it a preferred modality for preoperative diagnosis of choledocholithiasis in patients with intermediate risk.

- Tissue can then be examined microscopically in real-time, ensuring optimal targeting and diagnosis

Cases which could be referred for EUS

- Pancreatico-biliary indications.
    * Pancreatic mass on imaging for FNAC.
    * Suspected chronic pancreatitis – to confirm.
    * Suspected choledocholithiasis
    * Dilated common bile duct – for further assessment.
    * Recurrent abdominal pain(biliary type) – for assessing biliary sludge / choledocholithiasis/chronic pancreatitis.
    * Calibre change in pancreatic duct – to exclude mass lesions.
    * Pancreatic cystic lesions.

- Coagulation profile (INR)
- Anticoagulation check
- Clopidogrel (stop 5 days before), Aspirin okay
- Explain possible complications – Pancreatitis/perforation/bleeding (1-2%)

Thank you.