New Frontiers of Biliary & Pancreatic Endoscopy
AGS- New Orleans
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WITH ENOUGH COFFEE I COULD RULE THE WORLD
“We’re gonna help a lot of people today…”

Topics (past)

- Cannulation Techniques
- Nl and Abn anatomy
- Biliary strictures (benign & malig)
- Stents (plastic & metal)
- SOD
- Recurrent pancreatitis
Ampullary Sphincter Anatomy

Dissection

Ampulla

Bile Duct

Pancreatic duct

5 o'clock

11:30
Diagnostic/Therapeutic ERCP

**Biliary**
- Obstruction
- Benign stricture
- Malignant
- Stones
- Ductal injuries
- Cholangitis
- Ampullary Adenoma
- Suspected PSC
- Suspected SOD
- Choledochal cysts

**Pancreatic**
- Acute pancreatitis
- Relapsing pancreatitis
- Microolithiasis
- Pancreas divisum
- Suspected SOD
- Suspected pancreatic ca
- IPMN
- Chronic pancreatitis
- Ductal injuries
- Cystic lesions
Topics (today)

- Indeterminant strictures
- Large/difficult stones
- Difficult pancreatic issues

Videos & Spyglass

Some Data...


Spyglass

- Conceived and started R&D- 1999
- Fiberoptic fiber bundle 0.035in 6000 fibers- 2002
- Testing on live anesthetized pigs- 2003
- 1st human studies- 2007
- Spy 1.5- 2009
- Digital Spyglass- 2015
Indeterminant Strictures

- Biliary stricture that has been brushed/Bx’d
- Benign
  - post-op  PSC  Mirizzi’s  Ch Pancreatic  Al  Cholangitis
- Malignant
  - Ch Ca  Pancreatic Ca  Metastatic Ca

Stricture Diagnosis

- ERCP
  - Brush cytology: 20-30% sensitivity
  - Duct biopsy: 55-60% sensitivity
- Direct Cholangioscopy/ targeted biopsy: 67-90% sensitivity
- EUS/FNA
  - Pancreatic mass: 70-85% sensitivity
  - Biliary strictures: 15-20% sensitivity
  - *other modalities: intraductal US, CLE

Stricture Appearance

- Benign
  - smooth, pink-white, no vessels
- Malignant
  - ulcerated, friable, heaped up, tumor vessels
Large/Difficult Stones

- > 15mm
- Multiple
- Intrahepatic
- Proximal to a stricture
- Altered anatomy - BII, Roux-en-y, Gastric Bypass
- Mirizzi’s syndrome
Difficult Pancreatic Issues

- Pancreatic cystic lesions
  - Serous cystadenoma, Pseudocyst, Mucinous cyst, IPMN
  - < 3cm and asymptomatic - follow in 6 mos
  - > 3cm or symptomatic - EUS/aspirate
- Pancreatic Stones - intraductal
  - pain, obstruction, recurrent pancreatitis
- IPMN
  - Main duct or side branch

IPMN

- Main duct more likely to have malignancy than side branch
- May involve part or all of the pancreas
- Usually cystically dilated duct on CT
- Ampullary “fish-mouth” opening with mucin
- Bad Signs - mural nodules, assoc mass, elev CA19-9

Videos