

Pancreatitis	
<b>PowerPlan</b>	Acute Pancreatitis Plan, Acute Pancreatitis Critical Care Plan, ED Pancreatitis Plan, GI Pancreatitis Labs Plan
<b>Presentation</b>	<b>Epigastric abd pain</b> w/band-like pain to back, fever, <b>N/V</b> , ileus, jaundice/clay-colored stools
<b>Diagnostic Criteria</b>	At least 2 out of 3: Abdominal pain (see above) + Amylase or lipase > 3 ULN, imaging compatible w/ pancreatitis (U/S, EUS, MRI/MRCP)
<b>Workup</b>	Chem10, <b>amylase/lipase</b> (lipase rises earlier, elevated for longer, more specific), <b>lipids</b> , albumin, glucose, LFTs. ALT > 3x ULN has >95% PPV for gallstone pancreatitis
<b>Pathophys</b>	Congenital anomalies (e.g. <b>choledochal cyst</b> , pancreatic divisum), infectious ( <b>mumps</b> , <b>mycoplasma</b> , coxsackie, influenza, salmonella, GNRs), drugs ( <b>valproic acid</b> , L-asparaginase, steroids), systemic dz ( <b>CF w/pancreatic sufficiency</b> , lupus, RA, HUS, Kawasaki, IBD), metabolic ( <b>hyperlipoproteinemia</b> , hyperCa, DM), EtOH and gallstones (less common), BAT (e.g. handlebar injury), genetic (SPINK1) 10% will have recurrence.
<b>Treatment</b>	NPO (PO once no n/v), NS bolus(es), 1.5x mIVF (consider LR if Ca wnl), nausea control (Zofran), acid blockade (IV pantoprazole), pain control (morphine, ketorolac, acetaminophen) Admit to ICP if obese, hypertriglyceridemia, diabetic, severe abd pain, or difficulty performing reliable serial exams. ICU if HD unstable.
<b>Complications</b>	SIRS, ARDS, Pseudocyst (RUQ US Abd), abscess, pleural effusion (CXR)

Liver Enzymes		
Pattern	Lab Findings	Ddx
<b>Hepatocellular</b>	↑ AST & ALT >> ↑ GGTP, alk phos, bilirubin	<ul style="list-style-type: none"> <li>• Viral infxn (HepA, CMV, EBV, VSV, HSV)</li> <li>• Meds/toxins</li> <li>• Shock (LDH also high)</li> <li>• Autoimmune hepatitis</li> <li>• Steatosis</li> <li>• Celiac Dx</li> <li>• Hemochromatosis (↑ ferritin)</li> <li>• A1AT</li> <li>• Wilson's Dz (↓ ceruloplasmin)</li> <li>• EtOH (2:1 AST: ALT)</li> </ul>
<b>Cholestatic</b>	↑ Alk-Phos, GGTP & Direct Bili >> AST, ALT	<ul style="list-style-type: none"> <li>• Bile duct obstruction/ abnormalities</li> <li>• Infectious Hepatitis</li> <li>• Cirrhosis</li> <li>• Meds/toxins (anabolic steroids, amox/clauv, erythromycin, bactrim, TPN)</li> <li>• PBC/PSC</li> <li>• A1AT</li> <li>• Alagille syndrome</li> <li>• Inborn errors of metabolism</li> </ul>
<b>Infiltrative</b>	↑ Alk-Pho with nml bili (send GGT to determine if from liver or bone)	<ul style="list-style-type: none"> <li>• Granulomatous Dz (sarcoid, Tb)</li> <li>• Amyloidosis</li> <li>• HCC, mets to liver</li> </ul>