Pylephlebitis

Key Points:
- Pylephlebitis is an infective suppurative thrombosis of the portal vein
- Usually associated with other intra-abdominal infections
- Initial antibiotic therapy should cover gram-negatives and anaerobes particularly well
- No good evidence about whether or not to anticoagulate these patients exists; however, most authorities would not recommend anticoagulation unless the pylephlebitis progresses despite adequate antibiotic therapy

- **Definition:** infective suppurative thrombosis of the portal vein
- **Pathogenesis:** usually occurs as a complication of intra-abdominal infection in a region drained by the portal vein (most commonly diverticulitis) but can also complicate liver abscess
  -- Associated hypercoagulable state in 41%
  -- May result in bowel ischemia or infarction if propagates
  -- May ultimately lead to portal HTN
- **Micro:** 88% of cases are associated with bacteremia, frequently polymicrobial
  -- Most common organism: B. fragilis; also aerobic GNRs common
- **Signs/sx:** abdominal pain, fever are most common; +/- nausea/vomiting
  -- Usually non-icteric
  -- Abnormal LFTs (especially alk phos and GGT) are common
- **Dx:** usually made by ultrasound or CT scan; can usually isolate organism from blood cultures
- **Antibiotic treatment:** broad spectrum antibiotics that cover gram-negatives and anaerobes until definitive ID on organism (ex: Amp/Gent/Flagyl)
- **Anticoagulation?** One non-randomized observational trial of 44 patients found that 0/12 who were anticoagulated died vs. 5/32 who were not anticoagulated. There is, however, no consensus on who should be anticoagulated with pylephlebitis.
  -- Some authors suggest that patients with extension of their clot beyond the main PV or persistent fevers unresponsive to antibiotics should be anticoagulated
  -- Alternatively, others suggest that only patients who have a documented hypercoagulable state or evidence of mesenteric vein involvement (higher risk for bowel ischemia/infarction) be anticoagulated
  -- No clear endpoint for anticoagulation
  -- Most patients are not anticoagulated unless there is evidence of progression despite appropriate antibiotic therapy
- **Prognosis:** still carries a mortality rate of 11-32%

References