NEW PORTAL VENOUS THROMBOSIS AND POLYMICROBIAL BACTEREMIA SUGGESTIVE OF PYLEPHLEBITIS

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INTRODUCTION

PYLEPHLEBITIS rare, deadly disease characterized by suppurative thrombosis of the portal vein precipitated by localized thrombophlebitis draining an infected area.[3]

CLINICAL PRESENTATION may include:

- Fever
- RUQ/general abdominal tenderness
- Hepatomegaly
- Leukocytosis
- Polymicrobial blood cultures

DIAGNOSIS aspiration of culture-positive fluid from mesenteric venous system; may be **inferred** from bacteremia and portal venous thrombosis.

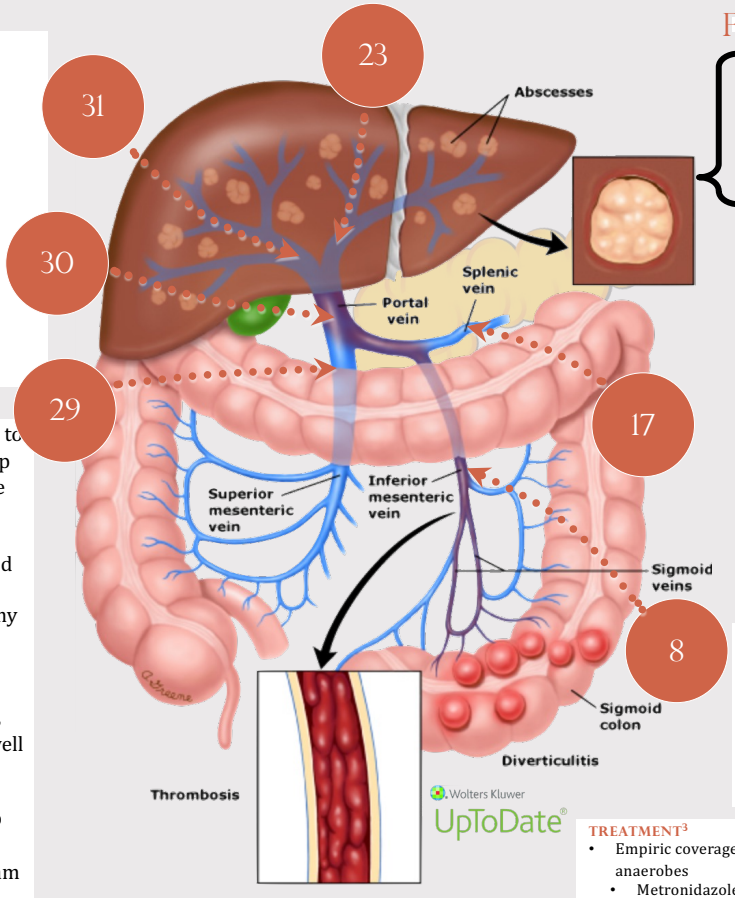
CASE SUMMARY

56 M presents 2 months after hospital discharge previously found to have portal venous thrombosis and polymicrobial (e. coli and strep angiosus/constellatus) bacteremia now with 4 days of progressive abdominal pain.

PMH$_X$ CAD, PAD, OSA, COPD, IDDM type 2, hypothyroidism, opioid use d/o on methadone, EtOH use d/o c/b chronic pancreatitis, pancreatic pseudocyst s/p partial pancreatectomy and splenectomy

COURSE

- CT and MRI abdomen with pancreatitis, 2 large multiseptated collections within the liver, abscesses forming along portal vein, and extensive portal vein thrombosis in left and right main as well as branches.
- Patient had percutaneous drain, abscess cultures grew strep constellatus. Blood cultures grew the same and cleared prior to discharge.
- Antibiotics initially IV vancomycin and IV piperacillin-tazobactam switched to IV ceftriaxone and PO metronidazole for a 6-week course in addition to anticoagulation with apixaban.
- ID follow-up showed resolution of symptoms with good adherence.



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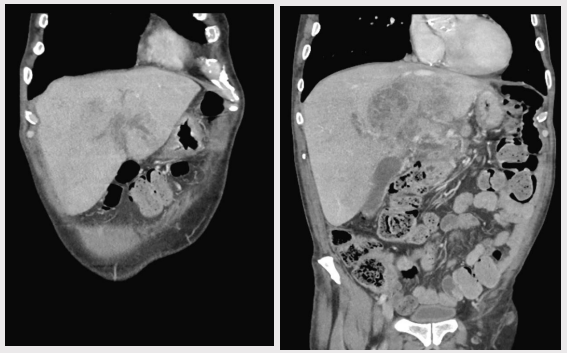
MOST COMMON SITES OF THROMBOSIS IN ONE CASE SERIES N=95[1]

FREQUENTLY ISOLATED SPECIES[1,3]

- POLYMICROBIAL
- STREPTOCOCCUS VIRIDANS
- ESCHERICHIA COLI
- BACTEROIDES FRAGILIS
- STREPTOCOCCUS ANGIOSUS

CT IMAGES



RISK FACTORS[1]

- Smoking (29%)
- Prior abdominal operations (29%)
- Antiplatelet use (25%)
- Steroid use (19%)
- Malignancy (17%)
- Connective tissue disease (15%)
- Cirrhosis (13%)
- Hypercoagulable state (5%)

DIAGNOSTICS[2,3]

- CT abdomen/pelvis with IV contrast versus abdominal ultrasound with dopplers
- Blood cultures

TREATMENT[3]

- Empiric coverage of gram negative aerobes and anaerobes
  - Metronidazole + cephalosporin vs quinolone
  - Monotherapy with piperacillin-tazobactam vs ampicillin-sulbactam
  - Monotherapy with Carbapenem vs meropenem vs ertapenem
- Source control
- Consider anticoagulation
- Limited role for Surgery/catheter-directed thrombolysis

CLINICAL PEARLS

OUTCOMES[3,4]

- Uniformly fatal in case series of 20 persons in 1948.
- Case series of 95 showed 10 deaths and 85 recovered in 2016
- Same series showed 19 complications
  - Chronic thrombosis (11)
  - Bowel ischemia (4)
  - Hepatic abscess (2)
  - Hepatic infarction (1)
  - Splenic infarction (1)

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Lifespan

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