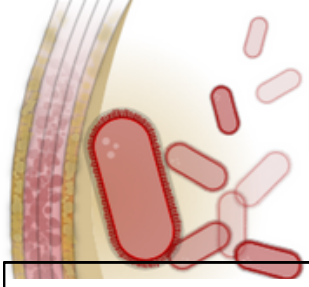

Spontaneous bacterial peritonitis and pleuritis

Diagnosis and general management

Spontaneous bacterial peritonitis

Consider the diagnosis in a patient with cirrhosis & ascites with:

- Worrying signs or symptoms (abdominal pain, fever, worsening renal function, confusion) **OR**
- Presentation to the ER (even if asymptomatic)

To confirm the diagnosis, perform a same day ascites sample (cell count & differential, culture & sensitivity)

SPperitonitis = ascites fluid polymorphonucelar count (PMNs) >250cell/uL*
**if macroscopically bloody, subtract 1 PMN per 250 RBC/uL*

Spontaneous bacterial pleuritis

Consider the diagnosis in a patient with cirrhosis & pleural effusion with:

Worrying signs or symptoms (chest pain, fever, worsening renal function, confusion)
OR

- Presentation to the ER (even if no localizing symptoms)

To confirm the diagnosis, perform a same day pleural fluid sample (cell count & differential, culture & sensitivity)

SPpleurits = pleural fluid polymorphonucelar count (PMNs)

- >250cell/uL*with a positive pleural culture

OR

- >500 cells/uL* with a negative pleural culture

**if macroscopically bloody, subtract 1 PMN per 250 RBC/uL*

General Management

Consider if the patient is a transplant candidate

Send blood & ascites or pleural fluid cultures in blood culture bottles

Antibiotic therapy - see algorithm below **maximum 100 grams albumin/day*

Intravenous albumin dosing (only for SBPeritonitis): reduces mortality & renal dysfunction:

- 1.5g/kg bodyweight* on day one of infection
- 1g/kg bodyweight on day three of infection

Medication considerations

- **Hold or reduce meds that are potentially nephrotoxic** (NSAIDS, aminoglycosides, angiotension-converting enzyme inhibitors, angiotensin II antagonists or α1-adrenergic receptor blockers
- **Non selective beta blockers may need to be temporarily held** in patients with refractory ascites and:
  - systolic pressure <90mmHg or MAP <65mmHg
  - acute kidney injury OR
  - hyponatremia <130mmol/L