

Spontaneous Bacterial Peritonitis (SBP) - Full Clinical Guideline

Reference no.: CG-T/2012/220

The probability of survival at 1 year following an episode of SBP is 30-50%. SBP should trigger referral for transplant assessment where appropriate.

The prevalence of SBP in cirrhotic patients with ascites is 1.5-3.5% in outpatients and 10% in inpatients

Note that patients may be asymptomatic or SBP may manifest as hepatic encephalopathy or worsening of liver function as opposed to abdominal pain or fever

Diagnosis

An ascitic neutrophil (polymorph) count of ≥ 250 cells/ mm³ indicates SBP

The use of reagent strips is not recommended for diagnosis in cases of **suspected** SBP

Ascites culture is negative in as many as 60% of patients with SBP

Bacterascites refers to the positive culture of ascitic bacteria in association with an ascitic neutrophil count < 250 cells/ mm³. This can be seen as a result of extraperitoneal infection or herald SBP. Do not start antibiotics if clinically well, but instead repeat ascitic WCC. 62% of cases will resolve without antibiotics

A very high ascitic neutrophil count (1000s), the presence of multiple organisms (particularly fungi and enterococcus) on culture or localised abdominal symptoms/ signs raises the possibility of secondary bacterial peritonitis due to perforation or inflammation of intra-abdominal organs. A CT scan of the abdomen/ pelvis should be considered under these circumstances.

Management

The most common pathogens causing SBP are gram negative bacteria. Patients receiving prophylaxis with a Quinolone antibiotic may have SBP caused by gram positive cocci.

Initiate **antibiotic therapy** if neutrophil count ≥ 250 cells/ mm³

Intravenous Augmentin 1.2mg tds for a minimum of 3-5 days followed by 625mg tds orally once clear evidence of response (total duration at least 1 week) or oral/iv Ciprofloxacin 500mg/400mg bd if penicillin sensitive

A repeat ascitic sample should be taken 48hrs after initiation of antibiotics. A $< 25\%$ reduction in neutrophil count should raise suspicion of antibiotic resistance and treatment should be modified according to culture results or discussion with a Microbiologist.

Renal impairment occurs in approximately 30% of patients with SBP treated with antibiotics alone. 20% human albumin solution should be administered on day 1 (1.5g/kg) and 3 (1g/kg).

All patients with proven SBP should commence secondary prophylaxis with Co-trimoxazole 960mg od following initial antibiotic treatment. In patients who cannot take Co-trimoxazole 960mg od, Ciprofloxacin 500mg od is an alternative.

The role for antibiotics in primary prophylaxis is not proven.

Further reading

1. [EASL clinical practice guidelines on management of ascites, spontaneous bacterial peritonitis and hepatorenal syndrome. Journal of Hepatology 2010; 53: 397-417](#)
2. [BSG guidelines on the management of ascites in cirrhosis. GUT 2006; 55 \(Suppl 6\) 1-12](#)

Documentation Controls

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