

Spontaneous Bacterial Peritonitis



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KEYWORDS

• Spontaneous bacterial peritonitis • Ascites • Infection • Cirrhosis

HOSPITAL MEDICINE CLINICAL CHECKLIST

1. Spontaneous bacterial peritonitis (SBP) is an infection of the ascitic fluid in the absence of an intra-abdominal source, characterized by an absolute polymorphonuclear cell (PMNC) count greater than 250 cells/mm³.
2. SBP is a common infection in patients with cirrhosis, with a prevalence of 3.5% in the outpatient setting and 10% to 30% in the inpatient setting.
3. Cirrhosis predisposes patients to SBP by increasing bacterial overgrowth and gut permeability.
4. Risk factors include high bilirubin levels, low ascitic fluid protein concentrations, prior episodes of SBP, gastrointestinal bleeding, and decompensated cirrhosis.
5. Patients with SBP have varying presentations, the most common symptoms being fever, abdominal pain, changes in mental status, and abdominal tenderness.
6. The different disease processes on the differential diagnosis for SBP can be differentiated by the PMNC count, the presence of organisms on culture, and the number of organisms identified.
7. The diagnosis of SBP is based on analysis of ascitic fluid.
8. SBP is diagnosed when the PMNC count is equal to or greater than 250 cells/mm³, without a known alternative source of infection.
9. The decision to treat SBP should be based on of review ascitic fluid data, with empiric therapy started immediately if the results are consistent with an infection.
10. Consultation for nongastroenterologists to comanage patients with SBP should be considered under most circumstances.

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11. Patients' readiness for discharge should be based on their clinical response to antibiotic therapy in the setting of close outpatient follow-up.
12. A paracentesis should be performed on patients when there is a clinical suspicion for spontaneous peritonitis, with careful consideration of potential contraindications.
13. A systematic approach should be used when performing a paracentesis.
14. It is important to recognize the complications that may occur after performing a paracentesis, which can include, but are not limited to bleeding, infection, and hypotension.
15. The decision to administer albumin following a paracentesis should be determined by the amount of ascites fluid removed and whether there is SBP present.
16. A repeat paracentesis to document the clearance of infection is generally not indicated in SBP.
17. Common antibiotics used to treat SBP include third-generation cephalosporins, amino-/antipseudomonal penicillins, or fluoroquinolones.
18. SBP should be treated for a minimum of 5 days.
19. Antibiotic prophylaxis should be considered in patients with a prior history of SBP with cirrhosis who experience an upper gastrointestinal bleed, or in patients who meet laboratory criteria guidelines, including an ascitic fluid protein level less than 1.5 g/dL in combination with an elevated creatinine, bilirubin, Child-Pugh score, or hyponatremia.
20. Trimethoprim/sulfamethoxazole or norfloxacin is generally used for antibiotic prophylaxis.
21. Whether secondary prophylaxis regimens should be continued while the patient is undergoing treatment for SBP has not been conclusively studied or reported in consensus statements.
22. There are no data to support routinely changing a patient's secondary prophylaxis regimen following treatment of an acute episode of SBP.

DEFINITIONS*How is spontaneous bacterial peritonitis defined?*

Spontaneous bacterial peritonitis (SBP) is an infection of ascitic fluid that occurs in the absence of an intra-abdominal source amenable to surgical intervention.¹ The condition occurs almost exclusively in the setting of cirrhosis complicated by ascites. Cell counts from ascitic fluid consistent with SBP are defined by the presence of an absolute polymorphonuclear cell (PMNC) count greater than 250 cells/mm³. If hemorrhage is present in the ascites, a corrected PMNC count should be used by subtracting 1 PMNC from the absolute PMNC count for every 250 red cells/mm³. Patients receiving peritoneal dialysis are generally considered to have peritonitis when cell counts obtained from the effluent are greater than 100 white blood cells per mm³ with at least 50% PMNCs. In situations where external factors may influence cell counts (eg, prior antibiotic therapy; specimen from an abbreviated dwell time), the percentage of PMNCs is a more reliable marker of infection. Gram stain and positive culture results from ascitic fluid in the setting of an elevated PMNC count are confirmatory of the diagnosis of SBP.

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