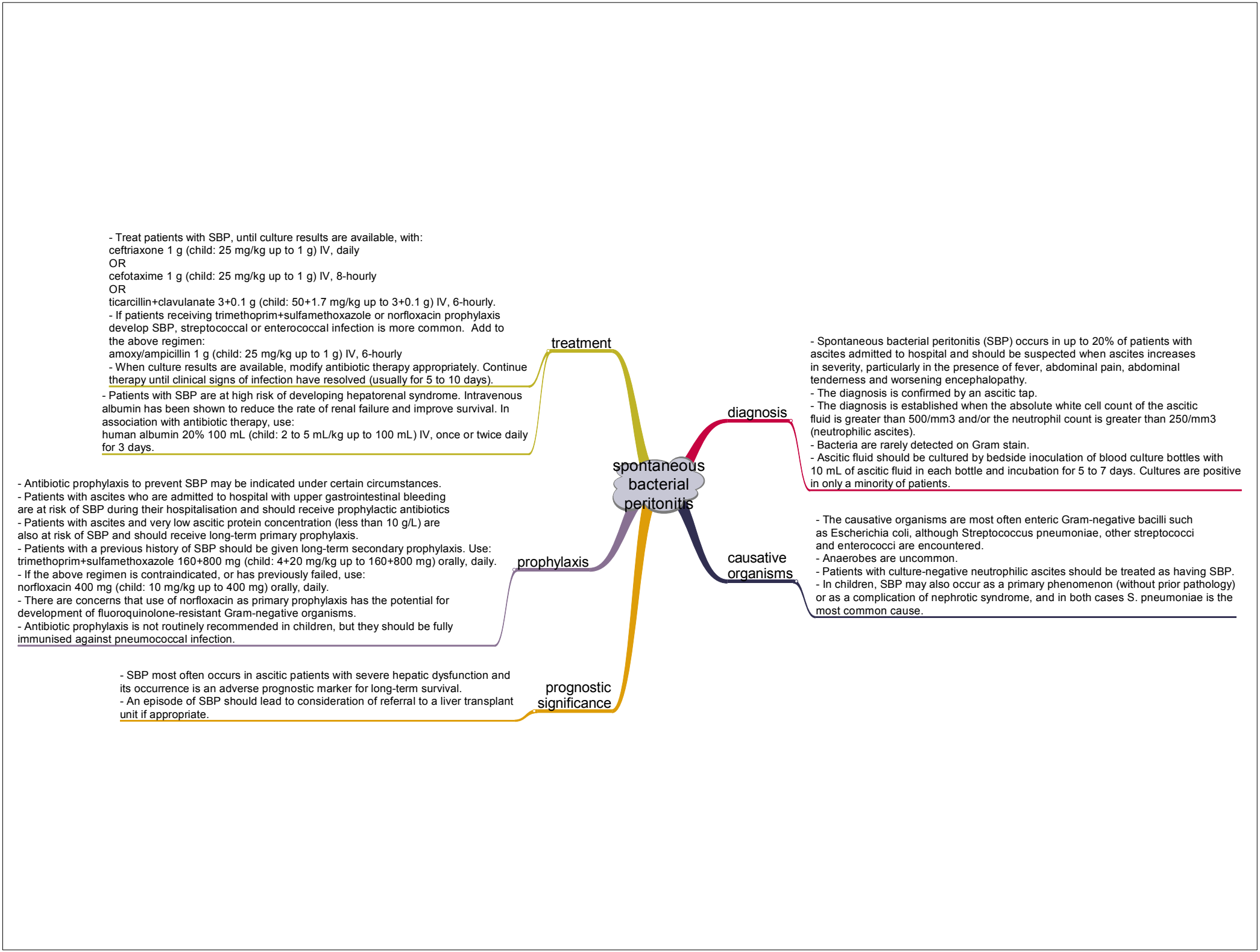
spontaneous bacterial peritonitis
treatment
- Treat patients with SBP, until culture results are available, with:
ceftriaxone 1 g (child: 25 mg/kg up to 1 g) IV, daily
OR
cefotaxime 1 g (child: 25 mg/kg up to 1 g) IV, 8-hourly
OR
ticarcillin+clavulanate 3+0.1 g (child: 50+1.7 mg/kg up to 3+0.1 g) IV, 6-hourly.
- If patients receiving trimethoprim+sulfamethoxazole or norfloxacin prophylaxis develop SBP, streptococcal or enterococcal infection is more common. Add to the above regimen:
amoxy/ampicillin 1 g (child: 25 mg/kg up to 1 g) IV, 6-hourly
- When culture results are available, modify antibiotic therapy appropriately. Continue therapy until clinical signs of infection have resolved (usually for 5 to 10 days).
- Patients with SBP are at high risk of developing hepatorenal syndrome. Intravenous albumin has been shown to reduce the rate of renal failure and improve survival. In association with antibiotic therapy, use:
human albumin 20% 100 mL (child: 2 to 5 mL/kg up to 100 mL) IV, once or twice daily for 3 days.
diagnosis
- Spontaneous bacterial peritonitis (SBP) occurs in up to 20% of patients with ascites admitted to hospital and should be suspected when ascites increases in severity, particularly in the presence of fever, abdominal pain, abdominal tenderness and worsening encephalopathy.
- The diagnosis is confirmed by an ascitic tap.
- The diagnosis is established when the absolute white cell count of the ascitic fluid is greater than 500/mm3 and/or the neutrophil count is greater than 250/mm3 (neutrophilic ascites).
- Bacteria are rarely detected on Gram stain.
- Ascitic fluid should be cultured by bedside inoculation of blood culture bottles with 10 mL of ascitic fluid in each bottle and incubation for 5 to 7 days. Cultures are positive in only a minority of patients.
causative organisms
- The causative organisms are most often enteric Gram-negative bacilli such as Escherichia coli, although Streptococcus pneumoniae, other streptococci and enterococci are encountered.
- Anaerobes are uncommon.
- Patients with culture-negative neutrophilic ascites should be treated as having SBP.
- In children, SBP may also occur as a primary phenomenon (without prior pathology) or as a complication of nephrotic syndrome, and in both cases S. pneumoniae is the most common cause.
prophylaxis
- Antibiotic prophylaxis to prevent SBP may be indicated under certain circumstances.
- Patients with ascites who are admitted to hospital with upper gastrointestinal bleeding are at risk of SBP during their hospitalisation and should receive prophylactic antibiotics
- Patients with ascites and very low ascitic protein concentration (less than 10 g/L) are also at risk of SBP and should receive long-term primary prophylaxis.
- Patients with a previous history of SBP should be given long-term secondary prophylaxis. Use:
trimethoprim+sulfamethoxazole 160+800 mg (child: 4+20 mg/kg up to 160+800 mg) orally, daily.
- If the above regimen is contraindicated, or has previously failed, use:
norfloxacin 400 mg (child: 10 mg/kg up to 400 mg) orally, daily.
- There are concerns that use of norfloxacin as primary prophylaxis has the potential for development of fluoroquinolone-resistant Gram-negative organisms.
- Antibiotic prophylaxis is not routinely recommended in children, but they should be fully immunised against pneumococcal infection.
prognostic significance
- SBP most often occurs in ascitic patients with severe hepatic dysfunction and its occurrence is an adverse prognostic marker for long-term survival.
- An episode of SBP should lead to consideration of referral to a liver transplant unit if appropriate.