

Peritonitis

Primary peritonitis

- There is no loss of integrity of the gastrointestinal tract
- Usually caused by a single organism
 - SBP
 - Peritoneal dialysis catheter

Secondary peritonitis

- Result from loss of integrity of the gastrointestinal tract

Tertiary peritonitis

- Recurrent infection of the peritoneal cavity that occurs >48 h after apparently successful and adequate surgical source control of secondary peritonitis.
- The term “persistent peritonitis” may better indicate that it is not a different disease to secondary peritonitis, but rather represents secondary peritonitis lasting longer and harboring selected and more resistant pathogens.

Healthcare-associated infection (HCAI)

- Hospital acquired infections
- Patients living in nursing facilities
- Recent hospitalization within 90 days using aggressive medical therapies (intravenous therapy, wound dressing)
- Home and invasive therapies (hemodialysis, chemotherapy, radiotherapy) in outpatient clinics within 30 days of the index infection.

Treatment

- Antibiotics
 - Differentiating community-acquired from hospital-acquired intra-abdominal infections is useful to define the presumed resistance patterns and identify patients with increased likelihood of infection caused by MDROs.

- In the setting of uncomplicated acute cholecystitis and acute appendicitis post-operative antimicrobial therapy is not necessary

- Source control:
 - SIS/IDSA guidelines suggest that should be performed as soon as possible in patients with diffuse peritonitis
 - Intervention could be delayed for logistical reasons as long as 24 h in patients with a localized infection if appropriate antimicrobial therapy is given and careful clinical monitoring is provided.
 - Highly selected patients can be managed without definitive source control if responding satisfactorily to antimicrobial therapy and other supportive measures.
 - Perforated diverticulitis (including those with an abscess <4 cm)
 - Peri-appendiceal mass
 - Perforated peptic ulcer
 - Planned relaparotomy is not recommended as a general strategy in patients with secondary peritonitis.
 - Damage control surgery may be an option in selected patients with ongoing sepsis
 - Damage control surgery using an open abdomen strategy is an option in patients with severe abdominal sepsis/septic shock
 - Allow early draining of any residual infection and control any persistent source of infection
 - Prevent abdominal compartment syndrome
 - Defer definitive intervention and anastomosis until the patient is hemodynamically stable and thus better able to heal
 - Temporary abdominal closure using negative pressure therapy (NPT) can be useful to decrease the time to definitive abdominal closure. Prolonged NPT may increase the risk of enteric fistulae.