

## Intra-Abdominal Peritonitis in Adults, Lower Gastrointestinal Tract Origin – Microbiology Summary Clinical Guideline

Reference number: CG-ANTI/1337/23

Clinical concerns re intra-abdominal peritonitis (manifesting symptoms and signs include abdominal pain and tenderness)

### Investigation

- Radiology:
  - First line: in general, CT abdomen pelvis
  - Second line: discuss with the surgical senior and collaborate with the consultant radiologist
- Microbiology:
  - Before starting antibiotics: blood cultures x 2, drawn approximately 1-15 minutes apart, from 2 locations/venepunctures
- Blood sciences:
  - FBC, CRP, lactate, U&Es, and LFTs

### Treatment

- Surgical opinion ± intervention:
  - Consult with the lower gastrointestinal tract registrar/consultant on call
- Empiric, intravenous antibiotics (please note, page 2)
  - NB Empiric anti-fungals can be considered in specific patients, including recurrent intra-abdominal peritonitis (for example, post-operative recurrence or after completion of anti-bacterials) or history of immunocompromise. However, in general, anti-fungals are reserved for patients with cultures of *Candida* species from blood or intra-operative fluid, pus, or tissue

Investigation (if surgery intervenes):

- Microbiology:
  - Fluid, pus, or tissue for MC&S

Treatment

- Directed, intravenous antibiotics (please note, Microbiology Full Clinical Guideline pages 3-4)
  - In general, 4 days from surgical intervention and source control

### Empiric, intravenous antibiotics: community acquired

	If clinically stable	If clinically unstable (haemodynamic instability, sepsis, or septic shock)
First line	Co-amoxiclav 1.2 g 8 hourly	Piperacillin tazobactam 4.5 g 8 hourly
Second line, <a href="#">if non-immediate without systemic involvement</a> <a href="#">penicillin allergy</a>	Ceftriaxone 2 g 24 hourly <b>and</b> Metronidazole 500 mg 8 hourly	Ceftazidime 1 g 8 hourly <b>and</b> Vancomycin or teicoplanin, <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 15-30 mg/l <b>and</b> Metronidazole 500 mg 8 hourly
Third line, <a href="#">if immediate rapidly evolving or non-immediate with systemic involvement</a> <a href="#">penicillin allergy</a>	<a href="#">Co-trimoxazole</a> 960 mg 12 hourly <b>and</b> Metronidazole 500 mg 8 hourly	<a href="#">Ciprofloxacin</a> 400 mg 12 hourly <b>and</b> Vancomycin or teicoplanin, <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 15-30 mg/l <b>and</b> Metronidazole 500 mg 8 hourly

### Empiric, intravenous antibiotics: hospital acquired

First line	Piperacillin tazobactam 4.5 g 6 hourly
Second line, <a href="#">if non-immediate without systemic involvement</a> <a href="#">penicillin allergy</a>	Ceftazidime 2 g 8 hourly <b>and</b> Vancomycin or teicoplanin, <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 15-30 mg/l <b>and</b> Metronidazole 500 mg 8 hourly
Third line, <a href="#">if immediate rapidly evolving or non-immediate with systemic involvement</a> <a href="#">penicillin allergy</a>	<a href="#">Ciprofloxacin</a> 400 mg 8 hourly <b>and</b> Vancomycin or teicoplanin, <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 15-30 mg/l <b>and</b> Metronidazole 500 mg 8 hourly

### Empiric anti-fungals

Empiric anti-fungals can be considered in specific patients, including recurrent intra-abdominal peritonitis (for example, post-operative recurrence or after completion of anti-bacterials) or history of immunocompromise. However, in general, anti-fungals are reserved for patients with cultures of *Candida* species from blood or intra-operative fluid, pus, or tissue.