University Hospitals of Derby and Burton NHS Foundation Trust

Intra-Peritoneal Abscess in Adults, Lower Gastrointestinal Tract Origin – Microbiology Summary Clinical Guideline

Reference number: CG-MICRO/3690/23

Clinical concerns re intra-peritoneal abscess (symptoms and signs include abdominal pain, tenderness, and ± mass)

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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 × 2, drawn approximately 1-15 minutes apart, from 2 locations/venepunctures
- Blood sciences:
  - FBC, CRP, lactate, U&Es, and LFTs

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Treatment

- Surgical opinion ± intervention:
  - Consult with the lower gastrointestinal tract registrar/consultant on call
- Empiric, intravenous antibiotics (please note, page 2)
  - Empiric anti-fungals can be considered in specific patients, including a distal duodenal focus of intra-abdominal abscess, recurrent intra-abdominal abscess (for example, post-operative/radiological 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/procedural fluid, pus, or tissue

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Investigation (if surgery or radiology intervenes):

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

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Treatment

- Directed, intravenous antibiotics (please note, Microbiology Full Clinical Guideline pages 3-5)

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, if non-immediate without systemic involvement penicillin allergy	Ceftriaxone 2 g 24 hourly **and** Metronidazole 500 mg 8 hourly	Ceftazidime 1 g 8 hourly **and** Vancomycin or teicoplanin, dose as per hospital guidelines, vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 15-30 mg/l **and** Metronidazole 500 mg 8 hourly
Third line, if immediate rapidly evolving or non-immediate with systemic involvement penicillin allergy	Ciprofloxacin 400 mg 12 hourly **and** Metronidazole 500 mg 8 hourly	Ciprofloxacin 400 mg 12 hourly **and** Vancomycin or teicoplanin, dose as per hospital guidelines, vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 15-30 mg/l **and** Metronidazole 500 mg 8 hourly

Empiric, intravenous antibiotics: hospital acquired

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

Empiric anti-fungals

Empiric anti-fungals can be considered in specific patients, including a distal duodenal focus of intra-abdominal abscess, recurrent intra-abdominal abscess (for example, post-operative/radiological 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/procedural fluid, pus, or tissue.