INTRA-ABDOMINAL SEPSIS

Secondary peritonitis · source control first

SOURCE *control*

MANAGEMENT PATHWAY

1. Resuscitate (sepsis bundle)
2. CT + source cultures
3. Empiric antibiotics
4. SOURCE CONTROL
5. Review response
6. 4 days after control

SOURCE CONTROL IS THE PRIORITY: drainage, surgery or percutaneous within 6-12 h for an uncontrolled source. Antibiotics do not substitute for it.

EMPIRIC THERAPY

cover Enterobacterales + anaerobes

Setting	Regimen & dose	Add
Community-acquired	Pip-tazo 4.5 g q6-8h OR ceftriaxone 2 g + metronidazole 500 mg q8h OR ertapenem 1 g	-
Healthcare / severe	Meropenem 1 g q8h OR pip-tazo (high-resistance unit)	Enterococcus cover (vancomycin / ampicillin)
Antifungal	Echinocandin (caspofungin 70 → 50 mg)	Upper-GI perforation, post-op, immunosuppressed

MONITOR RESPONSE

- Lactate clearance, fever, WCC, organ support
- Drain output & character; follow operative cultures
- 4 days of antibiotics after ADEQUATE source control (STOP-IT)
- If source not controlled, continue & re-intervene

NOT IMPROVING?

- **Undrained collection -** re-image (CT); re-drain or re-operate
- **Resistant GNB / ESBL -** escalate to a carbapenem
- **Missed Enterococcus / Candida -** broaden - healthcare / upper-GI source
- **Ongoing leak -** anastomotic breakdown - back to theatre

Likely organisms: E. coli, Klebsiella, Enterobacter, Pseudomonas (healthcare) · anaerobes (B. fragilis - ALWAYS cover) · Enterococcus, streptococci, Candida (complicated / upper-GI).

SOURCE-CONTROL OPTIONS: percutaneous drain for a localised collection / abscess · laparotomy for diffuse peritonitis, ischaemia or ongoing leak · damage-control + planned relook if unstable · remove infected devices / mesh · divert (stoma) for a failed anastomosis.

PEARLS & PITFALLS

- No antibiotic rescues an uncontrolled source - drain, divert or resect early.
- Add Enterococcus and Candida cover for healthcare-associated and upper-GI perforation.
- After good source control, 4 days of antibiotics is enough (STOP-IT) - stop, don't drift to 10.
- Not improving? Re-image for an undrained collection before you just broaden antibiotics.

References: SIS/IDSA Intra-abdominal 2010 · WSES 2017 · STOP-IT, NEJM 2015 · Surviving Sepsis 2021.

Educational aid; verify doses against local protocol and patient factors.