Intra-abdominal Infection (IAI)

Community-Acquired IAI

Patient is admitted with an IAI present or develops IAI within 48 hours of hospitalization, where it is <u>not</u> the result of a previous contact with healthcare (e.g. invasive procedures or hospitalization).



Healthcare-Associated

Patient develops an IAI within 48 hours of admission with recent contact with healthcare (e.g. recent surgery or hospitalization) or after 48 hours of hospitalization



Intra-abdominal Infection Community-Acquired

Management should involve source control. Uncomplicated IAIs include non-perforated appendicitis or perforated appendix without established infection (i.e. OR within 24 hours of rupture). Oral stepdown should be considered as soon as patient tolerates oral intake.

Uncomplicated (involvement of source organ with source control)

| Drug | Dose | Route | Duration |
|---------------|-------------|-------|---------------|
| Cefazolin + | 2 g q 8h | IV | 24 hr post-op |
| Metronidazole | 500 mg q12h | PO/IV | |

Complicated (extension beyond source organ with source control)

| Drug | Dose | Route | Duration |
|---------------|-------------|-------|----------|
| Ceftriaxone + | 2 g q24h | IV | 3-5 days |
| Metronidazole | 500 mg q12h | PO/IV | |

Severe (septic shock or ICU)

| Drug | Dose | Route | Duration |
|-------------------------|-------------|-------|--------------|
| Piperacillin-tazobactam | 3.375 g q6h | IV | Up to 7 days |

If severe cefazolin/ceftriaxone/penicillin allergy

| Ciprofloxacin + | 500 (400) mg q12h | PO (IV) | As above |
|-----------------|-------------------|---------|----------|
| Metronidazole | 500 mg q12h | | |

Step-down option

| Amoxicillin- | 875/125 mg BID | PO | As above |
|--------------|----------------|----|----------|
| clavulanate | | | |





Remember to check cultures, revise your diagnosis and consider oral Rx by day 3

Intra-abdominal Infection Healthcare-Associated

Management should involve source control. Prolonged previous hospitalization (>5 days), anastomotic leak, perforation, and post-operative abscess. Oral step-down should be considered as soon as patient tolerates oral intake.

Mild-moderate (with source control), use BOTH:

| Drug | Dose | Route | Duration |
|---------------|-------------|-------|----------|
| Ceftriaxone + | 2 g q24h | IV | 7 days |
| Metronidazole | 500 mg q12h | PO/IV | |

Severe (septic shock or ICU)

| Piperacillin-tazobactam | 3.375 g q6h | IV | 7 days |
|-------------------------|-------------|----|--------|
|-------------------------|-------------|----|--------|

If ceftriaxone/penicillin allergy, use BOTH:

| Ciprofloxacin + | 500 (400) mg q12h | PO (IV) | 7 days |
|-----------------|-------------------|---------|--------|
| Metronidazole | 500 mg BID | PO/IV | 7 days |

→ If MRSA or *Enterococcus faecium* suspected, **ADD**:

| Vancomycin | Load 25 mg/kg, | IV | 7 days |
|------------|----------------------|----|--------|
| | then 15 mg/kg q8-12h | | |

→ If Candida spp suspected (in peritoneal fluid/tissue), ADD ONE of:

| Fluconazole | 400 mg q24h | PO/IV | 7 days |
|-------------|-------------|-------|--------|
| Micafungin | 100 mg q24h | IV | 7 days |





Remember to check cultures, revise your diagnosis and consider oral Rx by day 3