DIVISION OF ACUTE CARE SURGERY
GUIDELINE FOR THE EVALUATION, DIAGNOSIS, AND EMPERIC TREATMENT OF INFECTION

Temp >38.5° for >4hrs AND >24hrs post-admission/post-op
(IF evidence of organ dysfunction, it is permissible to begin immediate work-up)

**PULMONARY SOURCE**

New, persistent, or progressive infiltrate
PLUS
any TWO of the following:

- Purulent secretions
- Decline in pulmonary status such as:
  - worsening hypoxemia
  - ventilator compliance
  - elevated inspiratory pressures
- Fever (>38.5)
- Unexplained leukocytosis
- New onset delirium

**ETT or Tracheostomy**

- Perform bronchoscopy w/ BAL
- Obtain tracheal aspirate

- Start empiric pneumonia antibiotics per current guidelines
- Consider size of airway and ability to tolerate procedure
- If patient unable to tolerate bronchoscopy, obtain TA

**INVESTIGATE SUSPECTED SOURCE FIRST**

**SUSPECTED CENTRAL LINE**

Central line >72h w/purulence at site

- D/C CVC and replace at new site if indicated

Blood cultures should only be obtained when other potential sources have been ruled out

**SUSPECTED UTI**

Does patient have one of the following:
(Unless signs of sepsis)

- Fever >38.5
- Rigors
- Hypotension (unrelated to meds)
- New urinary frequency, urgency, dysuria

**INVESTIGATE OTHER SUSPECTED SOURCE**

**UNCOMPLICATED**

- Nitrofurantoin 100 mg PO BID x 5d

**COMPLICATED**

- Ceftriaxone 1 gm IV Q24h x 7d
- Levofloxacin 750mg IV/PO daily x 5d

- Alternative Agents
  - TMP-SMX DS PO BID x 3d
  - Cefdinir 300 mg PO BID x 5-7d

Adjust/De-escalate therapy per culture and sensitivity:

- ≥ 10⁴ CFU/mL → narrow spectrum x 7 days (total)
- ≤ 10⁴ CFU/mL → discontinue antibiotics

If culture negative or <100,000cfu/mL, discontinue antibiotics.
**Characteristics of Complicated UTI**

- Male
- Neurogenic bladder
- Polycystic kidneys
- Suprapubic catheter
- Indwelling catheter
- Pregnancy

^Includes patients with UTI symptoms whose foley was removed w/in last 48 hours.

**Antibiotic notes:**
- Nitrofurantoin should not be used if CrCl < 30 mL/min.
- Adjust TMP-SMX to SS tablet if CrCl < 30 mL/min. Not for dialysis patients.
- Decrease cefdinir to 300 mg daily if CrCl < 30 mL/min.
- Reduce levofloxacin dose to 750 mg q 48h if CrCl < 50 mL/min.

**Community Acquired PNA (HD 1-3days)**
- Ceftriaxone (Rocephin®)
  - 2 gm q24h
  - No adjustment needed in renal dysfunction

**Hospital Acquired PNA (HD ≥ 4days), Bloodstream Infection, or Surgical Site Infection**
- Vancomycin
  - Use Epic vancomycin advisor for dosing recommendations
- Cefepime (Maxipime®)
  - CrCl > 60 – 2g q8h
  - CrCl 30-60 – 1g q8h
  - CrCl 11-29 – 1g q12h
  - CrCl < 11 or HD – 1g q24h
  - CRRT – 1g q8h

**Intrabdominal Infections**
- Piperacillin/Tazobactam (Zosyn®) – Infuse ALL doses over 4 hours
  - CrCl > 20 – 3.375gm q8h
  - CrCl ≤ 20 – 3.375gm q12h
  - Hemodialysis – 3.375gm q12h
  - CRRT – 3.375gm q8h
- Vancomycin [if gram positive coverage needed]
  - Use Epic vancomycin advisor for dosing recommendations
- Fluconazole (Diflucan®) [if antifungal coverage needed]
  - CrCl ≥ 50 – 800 mg x 1, 400 mg q24h (400mg Q24h if CRRT)
  - CrCl < 50 – 400 mg x 1, 200 mg q24h
References

Ventilator Associated Pneumonia


Trauma UTI


Other


