DIVISION OF TRAUMA SURGICAL CRITICAL CARE

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 being immediate work-up)

Directed clinician physical exam and evaluation of clinical parameters

Investigate suspected source first

PULMONARY SOURCE

A. New, persistent, or progressive infiltrate
B. Respiratory
   a. Purulent secretions
   b. Decline in pulmonary status
      i. Worsening hypoxemia
      ii. Reduced TV
      iii. Elevated inspiratory pressures
C. Inflammatory
   a. Fever (>38.5°)
   b. Unexplained leukocytosis
   c. New onset delirium

**** Presence of A plus 2 additional symptoms ****

(see Ventilator Associated Pneumonia guideline)

ETT or Tracheostomy

YES → Perform bronchoscopy w/ BAL

NO → Obtain tracheal aspirate

Start empiric pneumonia antibiotics per current guidelines

** Consider size of airway and ability to tolerate procedure**

Adjust/De-escalate therapy per culture and sensitivity:
≥ 10^4 CFU/mL → narrow spectrum
≤ 10^4 CFU/mL → discontinue antibiotics

CATHETER / LINE SOURCE

Central line >72 hrs with purulence at site

OR

One or more signs and symptoms UTI >12hrs
(See UTI guideline)

YES → Change line and replace at NEW site OR Obtain UA w/ reflexive culture and follow UTI guideline

NO → Investigate other source

OTHER SOURCE

Infectious

Evaluate for:
- Delayed abdominal source
- Sinusitis
- Need for new radiologic imaging
- Wound source
- Rectal exam
- C-diff (if diarrhea & leukocytosis present)
- Source control of known infection

Non-infectious

- VTE
- Phlebitis
- Delirium tremens
- Pancreatitis
- Acalculous cholecystitis
- Drug fever
- Sympathetic storm
- Adrenal insufficiency
- NMS
- Malignant hyperthermia

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

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