

# Fever in SCU

≥ 38.5

## History and physical

(Examine all wounds and drains)

### Is the patient septic?

- qSOFA: RR>20; SBP <100; AMS
- Consider HR, WBC, other clinical assessment

Yes

### Sepsis pathway

1. Start Broad Spectrum Abx within 1 hr
2. Consider Source Control
3. Blood Cultures (try to send before abx)
4. Consider algorithm below

### Concern for elevated ICP?

Yes

### Head Injury pathway

1. Fever threshold lowered to 38.0
2. Consider algorithm below rule out infection
3. Antipyretics
4. Consider cooling measures

### What is your clinical suspicion?

*Cytokine release is a common non-infectious source of fever 24 hours after trauma/surgery*

### Common causes of drug fever:

- Antiepileptics: Carbamazepine; phenytoin; phenobarbital; primidone
- Antimicrobials: beta-lactams, sulfonamides, nitrofurantoin, minocycline
- Allopurinol; Heparin

### Drug related causes of fever:

- Neuroleptic malignant syndrome
- Malignant hyperthermia
- Serotonin syndrome: L-tryptophan, lithium, L-dopa, dextromethorphan, tramadol, meperidine, and the MAOs

### Urinary Etiology:

- Frequency, dysuria, AMS
- Hx obstruction

*Rare in trauma population; obtain in intubated patients only if no other sources of infection*

Urine Analysis

Neg

No Urine Culture

Pyuria

### Urine Culture

- 1.) Change foley if in >48 hours prior to Ucx
- 2.) Blood Cultures

### Pulmonary Etiology:

- Change in oxygenation requirement?
- New CXR infiltrate?
- Leukocytosis?
- Worsening Secretions?

*Consider the above factors and if clinical suspicion remains*

1. BAL, Mini BAL or Sputum
2. Blood Cultures

### Start Empiric Antibiotics

### F/u cultures and consider q48hrs repeat blood cx:

- **PNA; BCx:** <10<sup>4</sup>: d/c antibiotics; >10<sup>4</sup> narrow as able
- **Urine Cx:** <10<sup>3</sup>: d/c antibiotics; >10<sup>3</sup> narrow as able

### Central Line Infection:

- Erythema
- Purulence

### Peripheral Blood Cultures x2

+ Line holiday if able

Remove Line and replace at new site (if able)

### Other Infectious Sources:

Abdominal source  
Acalculous cholecystitis  
Clostridium difficile  
Endocarditis  
Epidural abscess  
Fungal infections  
Meningitis  
NSTI  
Sinusitis  
Viral infection  
Wound Infection

Identify and treat underlying cause

Consider Blood cultures

### Non-Infectious Sources:

Acalculous cholecystitis  
Acute Myocardial Infarction  
Alcohol/drug withdrawal  
Adrenal Insufficiency  
Blood product transfusion  
Burn  
Cytokine-related fever  
Dressler Syndrome (Pericardial injury)  
Drug fever (see upper-left)  
Fat emboli  
Fibroproliferative phase ARDS  
Gout  
GI bleed  
Hematoma  
Heterotopic ossification  
Immune reconstitution inflammatory syndrome  
Intracranial bleed  
Jarish-Herxheimer reaction  
Pancreatitis  
Pulmonary Infarct  
Pneumonitis  
Thyroid Storm  
Transplant Rejection  
Tumor lysis syndrome  
Venous thromboembolism  
Vasculitis