

## Bothin Burn Center: Early detection and Goal Directed Therapy of Sepsis Protocol

### Physician Order Set/Nursing Standardized Procedure

Date: \_\_\_\_\_ Time: \_\_\_\_\_

#### Rationale to initiate Sepsis Protocol (check all that apply):

**Documented Infection** with Sepsis, criteria to initiate sepsis protocol, any one of the following:

- Visibly infected wound with one sign of sepsis (see list below)
- Hypotension requiring vasopressors
- Pathogen identified in blood or urine culture sent in the last 4 days
- Burn > 20% with two signs of sepsis (see list below)
- Any Three signs of sepsis (see below)

Signs of possible Infection/**Suspected Infection** include any of the following:

- Temp >39.0 or <36.5
- Low platelets (platelets <100, or <150 and declining on 3 consecutive draws)
- Inability to continue enteral feedings for a period of 12 hours due to: abdominal distension or high gastric residuals
- Unexplained hyperglycemia (serum glucose >250)
- Increasing Oxygen demands (O2 by nasal cannula increased by 4L/min, or FiO2 on vent increase of 20%)
- Increased sputum production (patient requiring frequent suctioning, or change in color or consistency of sputum)
- High WBC (WBC >15 persisting more than 24 hours after surgery, or >10 and trending up on 3 consecutive blood draws)
- CHANGE in mental status (unexplained by medications)
- Hypotension requiring >2 fluid boluses in 8 hours

**For documented Infection/Sepsis, nurse to initiate:**

1. Culture, if not done in last 48 hours:

- o Blood cultures x2 (Peripheral Draws)
- o Sputum gram stain and culture if patient is intubated
- o Urinalysis and urine culture
- o Wound culture, site: \_\_\_\_\_ (please obtain specimen in the OR of most suspicious wound, otherwise send with next scheduled dressing change, preferably post-tubbing)

2. Order and obtain stat Lactate Level (*if not obtained in last 24 hours*)

3. Order Labs for AM: CBC, Chem 8 and Lactate Level

4. Physician to be notified of any new signs of sepsis. Physician to consider the following:

a. Stat antibiotics: \_\_\_\_\_

- Consider discontinuation of current antibiotic

b. Consultation with ID consultant and/or intensivist: \_\_\_\_\_

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- c. Additional labs: PT/INR, Chem-14, Ca++, ABG, Troponins, Lipase, etc.)
- d. Optimize IV fluids: \_\_\_\_\_ (please clarify goals, e.g., CVP > 15, intubated 10-14 - rate, urine output up to .5ml/kg/hr)
- e. Wound care orders:
  - o No change
  - o Change to (specify site): \_\_\_\_\_
- f. Other (radiologic tests, change central line, etc.): \_\_\_\_\_

**For the presence of ANY one sign of possible/suspected infection, nurse to initiate:**

- 1. Culture, if not done in last 5 days:
  - o Blood cultures x2 (Peripheral Draws)
  - o Sputum gram stain and culture if patient is intubated
  - o Urinalysis and urine culture
  - o Wound culture, site: \_\_\_\_\_ (obtain specimen in the OR if possible from most problematic site, otherwise with next scheduled dressing change, preferably post tubbing)
- 2. Order Labs for AM: CBC, Chem 8 and Lactate Level
- 3. Physician to be notified of any new signs of possible sepsis. Physician to consider:
  - a. Additional labs (e.g., Chem 14, Lipase, Troponins)
  - b. Change in antibiotics: \_\_\_\_\_
  - c. Specialist Consultation: \_\_\_\_\_
  - d. Other (Chest x-ray, CT scan, MRI, Ultrasound, ABG, ABG, EKG, change central line, etc.): \_\_\_\_\_

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**References:**

Greenhalgh et al , November/December 2007. American Burn Association Consensus Conference to Define Sepsis and Infection in Burns, *Journal of Burn Care and Research*.

Bone et al, June 1992. Definitions for Sepsis and Organ Failure and Guidelines for the Use of Innovative Therapies in Sepsis. *ACCP/SCCM Consensus Conference*.

Steer, JA, Papini RP, Wilson, AP, McGrouther DA, Parkhouse N., May 22, 1996 Pgs. 177 to 181. Quantitative Microbiology in the Management of Burn Patients. *Department of Microbiology, University College London Hospitals, U.K.*

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