

## EARLY GOAL DIRECTED THERAPY SS

Early Goal Directed Therapy SS, Adult Severe Sepsis Phase 2

### ADMIT (Select only one)

- Transfer to MICU

**DIAGNOSIS:** Severe Sepsis / Septic Shock [Source](#)

### NURSING

- EGDT Clinical Instructions: Clinical instructions contain goals and 3 Steps of early goal direct therapy  
-Goals for the next 24 hours ▪ CVP 8-12 ▪ MAP 65-100 ▪ ScvO<sub>2</sub> > 70%  
▪ Urine output > 0.5 mL/Kg/Hr

After EGDT started for 24 hours re-evaluate goals and interventions with Intensivist

Step 1: Fluid Resuscitation: see eMAR for orders

\*If CVP < 8 consider crystalloids and/or colloids

\*When CVP >8 start and/or continue maintenance rate

\*If CVP > 15 consider Nitroglycerin

Step 2: Vasopressor support: see eMAR for orders

\*If MAP < 65 start Vasopressors

\*If MAP > 100 consider Nitroglycerin

Step 3: Adequate oxygen support: see intervention list for transfusion orders

\*If no ScvO<sub>2</sub> line, draw venous blood gas from distal port of central line

\*If ScvO<sub>2</sub> < 70% and hemoglobin <10 consider PRBC transfusions

\*If ScvO<sub>2</sub> <70% BUT hemoglobin > 10 consider Dobutamine. See eMAR for orders

- Blood glucose monitoring (BGM) x 1 [Evidence](#)
- Obtain signed consent for central line placement
- Consent for transfusion
- Central venous pressure (CVP) monitoring parameters: Goal CVP = 8-12 [Evidence](#)
- Monitor ScvO<sub>2</sub> Prn MAP 65 – 100. Re-check ScvO<sub>2</sub> Q 2 Hrs until ScvO<sub>2</sub> or ≥ 70%. (if no ScvO<sub>2</sub> monitor, draw from distal port of PICC or central line and process as a VBG)
- Insert indwelling urinary catheter; Reason: Strict intake and output
- Transfuse PRBCs for EGDT If:  
Pt meets EGDT Blood Transfusion criteria. Repeat CBC after transfusion(s) completed  
For ScvO<sub>2</sub> < 70% **and** Hgb 9-9.9 Transfuse 1 unit PRBC  
For ScvO<sub>2</sub> < 70% **and** Hgb 8-8.9 Transfuse 2 units PRBCs  
For ScvO<sub>2</sub> < 70% **and** Hgb < 8 Transfuse 3 units PRBCs

### RESPIRATORY

REMINDER: Use "Sedation for Intubated Patients" SS for patient on mechanical ventilation

- Apply oxygen (O<sub>2</sub>) with defined parameters to maintain SAT > 90%

- Ventilator Initial settings [Evidence](#)

Vent Mode:  AC  SIMV  CPAP  Other \_\_\_\_\_

Type:  Volume  Pressure  PRVC

Rate: \_\_\_\_\_ Tidal Volume: \_\_\_\_\_ FiO<sub>2</sub>: \_\_\_\_\_ PEEP: \_\_\_\_\_

Pressure Support: \_\_\_\_\_ Inspiratory Pressure: \_\_\_\_\_

Additional Instruction: \_\_\_\_\_

ABG PRN

Ventilator adjustment to be made by therapist to maintain

PH 7.35-7.45, PCO<sub>2</sub> 35-45, PO<sub>2</sub>>80, ABG PRN after Vent Changes

Daily Weaning Parameter Goal:

RSBI <100, NIF-30, RR<30 unless 'DO NOT institute Ventilator Weaning' is ordered

EARLY GOAL DIRECTED THERAPY\_V29 11.7.12 OK FOR PRINTING

MEDITECH NAME: EARLY GOAL DIRECTED THERAPY SS

MEDITECH MNEMONIC: MD.SEPEG

ZYNX-SEPSIS ADM ICU

LAMORENA/GHIASSI

V:\SJO ORDERSETS\ORDER SETS\MEDICAL INFECTIOUS DX\SEPSIS\EARLY GOAL DIRECTED THERAPY-ALL VERSIONS

## IV FLUIDS [Evidence](#)

- Albumin 25% 100 mL IVPB over 20 mins Q 2 Hrs Prn CVP < or = 4, repeat until CVP is > 4. Give in addition to saline boluses (if ordered).
- Sodium Chloride 0.9% 500 mL IV bolus over 30 mins Prn CVP < or = 8, repeat until CVP is > 8.
- Sodium Chloride 0.9% IV to run at 150 mL/Hr.

## MEDICATIONS

### Analgesic/Antipyretic medications: Mild Pain/HA/Fever

- Acetaminophen (Tylenol) 650 mg Po Q 6 Hrs Prn HA, mild pain (scale 1-3), or Temp > 101° F.  
\*Total Acetaminophen not to exceed 4,000 mg/24 Hrs\*
- Acetaminophen (Tylenol) 650 mg PR Q 6 Hrs Prn HA, mild pain (scale 1-3), or Temp > 101° F.  
If patient is unable to take Po acetaminophen (if ordered).  
\*Total Acetaminophen not to exceed 4,000 mg/24 Hrs\*

### Antibiotic medications

- AZIthromycin (Zithromax) 500 mg IVPB x 1 STAT, after cultures, within 1 Hr of Presentation then Q 24 Hrs.
- Cefepime (Maxipime) 2 Gm IVPB x 1 STAT, after cultures, within 1 Hr of presentation then Q 8 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: [Sepsis](#)
- CefTRIAxone (Rocephin) 1 Gm IVPB Q 24 Hrs. 1<sup>st</sup> dose STAT, after cultures, within 1 Hr of presentation. Indication: [Sepsis](#)
- Ciprofloxacin (Cipro) 400 mg IVPB x 1 STAT, after cultures, within 1 Hr of presentation then Q 8 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: [Sepsis](#)
- Meropenem (Merrem) 1 Gm IVPB x 1 STAT, after cultures, within 1 Hr of presentation then Q 8 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: [Sepsis](#)
- MetroNIDAZOLE (Flagyl) 500 mg IVPB x 1 STAT, after cultures, within 1 Hr of Presentation then Q 8 Hrs.
- Levofloxacin (Levaquin) 500 mg IVPB x 1 STAT, after cultures, within 1 Hr of presentation then Q 24 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: [Sepsis](#)
- Levofloxacin (Levaquin) 750 mg IVPB x 1 STAT, after cultures, within 1 Hr of presentation then Q 24 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: [Sepsis](#)
- Piperacillin-tazobactam (Zosyn) 3.375 Gm IVPB x 1 STAT, after cultures, within 1 Hr of presentation then Q 6 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: [Sepsis](#)
- Piperacillin-tazobactam (Zosyn) 4.5 Gm IVPB x 1 STAT, after cultures, within 1 Hr of presentation then Q 6 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: [Sepsis](#)
- Tobramycin IV (Nebcin) Per Pharmacy protocol. Indication: [Sepsis](#). Give 1<sup>st</sup> dose STAT after cultures, within 1 Hr of presentation.
- Vancomycin IV (Vancocin) per Pharmacy protocol to achieve target trough levels of 15 – 20 mg/L. Give 1<sup>st</sup> dose STAT after cultures, within 1 Hr of presentation. Indication: [Sepsis](#)

### Antibiotic medications: Aztreonam

#### **RESTRICTION CRITERIA:** Aztreonam (Azactam)

1) *Pts with a DOCUMENTED IgE mediated Beta Lactam Allergy (bronchospasm, angioedema, severe rash)*

- Aztreonam (Azactam) 2 Gm IVPB x 1 STAT, after cultures, within 1 Hr of presentation then Q 8 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: [Sepsis](#)

### Antibiotic medications: DAPTOmycin

#### **RESTRICTION CRITERIA:** [DAPTOmycin](#) (Cubicin)

- 1) *Management of patients with suspected or confirmed vancomycin-resistant Enterococcus species infections*
- 2) *Management of patients intolerant to vancomycin or with infections that are refractory to vancomycin therapy*
- 3) *Empiric therapy for suspected MRSA bacteremia in patients with Hx of infection caused by MRSA with high vanco MIC (Etest >1mCg/mL)*

- 4) *Directed therapy (culture positive) for bacteremia caused by MRSA with high vanco MIC (Etest >1mCg/mL)*
  - 5) *Management of osteomyelitis*
  - 6) *Patients with risks of ototoxicity (Vancomycin therapy > 14 days **OR** hearing test indicates baseline hearing loss **OR** use of hearing aid device **OR** Ataxia)*
- DAPTOmycin (Cubicin) 6 mg/Kg IVPB x 1 STAT after cultures, within 1 Hr of presentation then Q 24 Hrs. Pharmacy to adjust per renal dosing protocol. Indication: Sepsis

**Cardiac medications: Vasoactive Agents** [Evidence](#)

- Norepinephrine (Levophed) 4 mg/250 mL D5W continuous IV infusion Prn MAP < or = 65 or SBP < or = 90, start at 4 mCg/min and titrate by 2-4 mCg/min Q 5-15 mins up to a max of 30 mCg/min to maintain MAP > 65 or SBP > 90. Titrate down by 1-4 mCg/min Q 15 mins. Hold if HR > or = 120. Must be discontinued upon patient transfer out of Critical Care/Critical Care equivalent units.
- Vasopressin (Pitressin) 50 units/250 mL NS continuous IV infusion Prn MAP < or = 65 or SBP < or = 90 despite being on Norepinephrine > or = 10 mCg/min, start and maintain at 0.04 units/min FIXED DOSE, DO NOT TITRATE. Must be discontinued upon patient transfer out of Critical Care/Critical Care equivalent units.
- NitroGLYcerin (Tridil) 25 mg/250 mL D5W continuous IV infusion Prn CVP > or = 15 or MAP > 100, start at 5 mCg/min and titrate by 5 mCg/min Q 3-5 mins up to max of 200 mCg/min to maintain CVP < 12 and MAP < 90. Titrate down by 5 -15 mCg/min Q 15 mins. Call MD if dose > 100 mCg/min. Must be discontinued upon patient transfer out of Critical Care/Critical Care equivalent units.
- DOBUTamine (Dobutrex) 500 mg/250 mL D5W continuous IV infusion Prn ScvO<sub>2</sub> < 70% after blood transfusions completed, start at 2 mCg/Kg/min and titrate by 1-2 mCg/Kg/min Q 10 mins up to a max of 20 mCg/Kg/min to maintain ScvO<sub>2</sub> ≥ 70%. Titrate down by 1-2 mCg/Kg/min Q 60 mins. Must be discontinued upon patient transfer out of Critical Care/Critical Care equivalent units.

**Endocrine medications: Diabetic Therapy**

REMINDER: For Subcutaneous Insulin Orders - Use Subcutaneous Insulin Short Set/Order Form  
 REMINDER: For Insulin drip orders – Use Critical Care Insulin Drip Short Set/Order Form

**Endocrine medications: Steroids** [Evidence](#)

- REMINDER: Avoid the routine use of high-dose corticosteroids [Evidence](#)  
 REMINDER: For patients with septic shock who require vasopressor therapy to maintain adequate blood pressure despite adequate fluid resuscitation, low-dose corticosteroids should be given if there are no contraindications [Evidence](#)
- Hydrocortisone (Solu-CORTEF) 50 mg IV Push Q 6 Hrs
- Fludrocortisone (Florinef) 50 mCg Po daily
- Cosyntropin (Cortrosyn) 250 mCg IV Push over 2 mins x 1 dose after baseline Cortisol level is obtained.

Other medications: \_\_\_\_\_

**\*All labs/diagnostics will be drawn/done routine now unless otherwise specified**

**BLOOD BANK**

REMINDER: Avoid the routine use of fresh frozen plasma to correct laboratory clotting abnormalities

**LABORATORY – Chemistry**

REMINDER: Procalcitonin can be used for patients with suspected gram negative sepsis to rule out other etiology of similar symptoms

- Cortisol random- STAT [Evidence](#)
- Cortisol random-in AM

**LABORATORY – Urine**

Urinalysis Reflex to culture - STAT Specimen Description: \_\_\_\_\_

**MICROBIOLOGY**

REMINDER: Blood cultures should be obtained before administering antimicrobial therapy | [Evidence](#)

Culture, Blood x 2 (1 set drawn peripherally and 1 from each vascular access device) | [Evidence](#)

Fungus Blood Culture

Culture, Respiratory

Culture, Wound [Evidence](#)

Stool for C. difficile toxin

Urine Culture

Legionella Urinary Antigen

**DIAGNOSTIC – Cardiology**

Electrocardiogram (12-lead EKG); Reason: HYPOTENSION

Echocardiogram; Reason: HYPOTENSION

**DIAGNOSTIC – Radiography**

Chest X-Ray (1View) Portable; Reason: DYSPNEA [Evidence](#)

Chest X-Ray (1View) Portable-In AM; Reason for exam: DYSPNEA

**DIAGNOSTIC – CT**

CT brain without contrast; Reason for exam: \_\_\_\_\_

CT abdomen/pelvis without contrast Reason for exam: \_\_\_\_\_ [Evidence](#)

CT abdomen/pelvis with IV contrast Reason for exam: \_\_\_\_\_ [Evidence](#)

CT chest without contrast Reason for exam: \_\_\_\_\_

CT chest with IV contrast Reason for exam: Pulmonary Embolism (PE protocol)

**MD CONSULTS**

REMINDER: Consider specialty referral

MD \_\_\_\_\_

MD \_\_\_\_\_

MD \_\_\_\_\_

**REQUESTS FOR SERVICE**

Consult for Nutrition; Reason for consult: Nutrition Assessment

Consult for Enterostomal Therapy; Reason for consult: Wound care