

CLINICAL HOUSE WIDE PROTOCOL

Lactic Acid Protocol		
Applicable Campus: Salem Hospital	Department Name: Critical Care - Sepsis Affinity	
Final Approval: December 2015	Effective: December 2015	Next Review Date: December 2018
List all stakeholder(s) and date of approval:		
Stakeholder: MEC	Date: 12/2015	Reviewed <input checked="" type="checkbox"/> Revised <input type="checkbox"/>
Stakeholder: Clinical Operations	Date: 12/2015	Reviewed <input checked="" type="checkbox"/> Revised <input type="checkbox"/>

Describe the most recent revision made to this policy, procedure or protocol & why:

A new protocol for lactic acid testing.

Definitions:

- See Appendix A for Severe Sepsis and/or Septic Shock Indicators*

POLICY

It is the policy of Salem Hospital to provide the health care team with standing orders for in-patient laboratory testing of serum lactate under the specific circumstances outlined in Surviving Sepsis Campaign. When a Lactic Acid Protocol order is checked and activated by the provider the following procedures take place.

PROTOCOL

Steps / Key Points in Lactic Acid Protocol:

1. Determine if a lactic acid has been drawn, note time of draw and note lactic acid.
2. If not yet done, obtain a lactic acid STAT.
3. Evaluate lactic acid level: if greater than 2 mmol/L, obtain a second lactic acid at *5 hours after* the first lactic acid level.

Appendix A. Typical Clinical Indicators for Progression of Sepsis to Severe Sepsis and/or Septic Shock in the presence of a suspected or documented infection

1) GENERAL VARIABLES

- Fever (>38.3C)
- Hypothermia (core temp <36C)
- Heart rate >90/min or more than two SD above the normal value for age
- Tachypnea > 20
- Altered mental status
- Significant edema or positive fluid balance (>20ml/kg over 24 hr)
- Hyperglycemia (plasma glucose > 140mg/dL, or 7.7 mmol/L) in the absence of diabetes

2) INFLAMMATORY VARIABLES

- WBC count > 12,000uL
- WBC COUNT < 4000uL
- Normal WBC count with greater than 10% immature forms
- Plasma C-reactive protein more than two SD above the normal value

- Plasma Procalcitonin *more than two SD above the normal value (See SH Lab policy titled *Procalcitonin on the Vidas attached*)

3) HEMODYNAMIC VARIABLES

- Arterial hypotension (SBP <90mm/Hg, MAP <70mm/Hg, or an SBP decrease > 40 mm/Hg in adults or less than two SD below normal for age)

4) ORGAN DYSFUNCTION VARIABLES

- arterial hypoxemia (PaO₂/FiO₂<300)
- acute oliguria (urine output < 0.5mL/kg/hr for at least 2 hrs despite adequate fluid resuscitation)
- Creatinine increase >0.5mg/dL or 44.2 umol/L
- INR >1.5 or PTT>60s
- Ileus
- Thrombocytopenia Platelet count < 100,000 uL
- Hyperbilirubinemia plasma total bilirubin > 4mg/dL or 70 umol/L

5) TISSUE PERFUSION VARIABLES

- hyperlactatemia >2.0 mmol/L (SH) New International Guidelines > 1.0 mmol/L
- decreased capillary refill or mottling

Equipment/Supplies: N/A

Form Name & Number or Attachment Name: N/A

Author Position: Sepsis Affinity Team, Critical Care CNS, Sepsis Coordinator

Review/Revision Authority: Critical Care Nursing Director

Expert Consultant(s): Salem Pulmonary Associates, Emergency Department Physicians, Patient Safety

References:

<http://www.sccm.org/Documents/SSC-Guidelines.pdf>

<http://www.uptodate.com/contents/evaluation-and-management-of-severe-sepsis-and-septic-shock-in-adults>

<http://www.uptodate.com/contents/sepsis-and-the-systemic-inflammatory-response-syndrome-definitions-epidemiology-and-prognosis>

Is there a Regulatory Requirement: Yes ☒ No ☐

If yes, insert requirement information here: CMS Core Measures for Sepsis

Review History (No Changes):
mo/year

Revision History:
New 12/15

Policy, Procedure or Protocol Cross Reference Information: