Pediatric Sepsis/Severe Sepsis/Septic Shock Algorithm

Sepsis Screening Protocol

Does the history support acute infection?

Yes

Does the patient meet 2 SIRS criteris?

Yes

Consider obtaining Lactate

Is there evidence of organ dysfunction or tissue hypoperfusion due to the infection

Yes

SEVERE SEPSIS is present

Initiate Resuscitation Bundle
1. Collect blood cultures
2. Administer broad spectrum antibiotics within 1 hour
3. Begin fluid resuscitation (initial bolus of at least 20ml/kg crystalloid or colloid equivalent) Up to 60 ml/kg
4. Admit to PICU
5. Repeat serum lactate if initial value is >4.

If Respiratory failure/Hypoxemia present
Supplemental O2
ETT with mechanical ventilation (if necessary)
Target SaO2 of greater than or equal to 90%

Persistent hypotension despite fluid resuscitation
OR
Lactate value >4?

Yes

SEPTIC SHOCK is present.

No

Continue to monitor

If Indicated
1. Collect blood culture, CBC, Chem 8, Urine Culture, UA
2. Administer antibiotics
**Pediatric Sepsis/Severe Sepsis/Septic Shock Algorithm**

1. **A**
   - CVP < 8 mm Hg: Insert CV catheter
   - CVP ≥ 8 mm Hg: Start Vasopressors (norepinephrine or dopamine preferred)

2. **Transfuse if HCT < 30**
   - Consider Dobutamine or epinephrine

3. **ScvO2**
   - < 70%
   - > 70%

4. **Administer Stress dose steroids**
   - Yes
   - Vasopressors still required
   - Yes
   - Achieve ALL goals?
   - No
   - Increase vasopressors
   - Consider adding additional vasopressors
   - Consider steroids

5. **Resuscitation complete. Establish re-evaluation intervals**

* in circumstances where MAP is judged to be critically low, vaso pressors may be started at any point in this algorithm.

** If pulmonary artery catheter is used, a mixed venous O₂ saturation is an acceptable surrogate and 65% would be the target.