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Maternal Sepsis Evaluation Flow Chart

Based on the CMQCC Algorithm

Suspected Infection

WBC Screening / MEWT Triggers
MAP/SBP/Shock Index

Note: *If its just vital signs, consider alternative pathway*

Step 1) Initial Sepsis Screening - ***Positive if any 2 of 4 criteria met***

- Oral Temp < 36'C (96.8'F) or > 38' C (100.4'F)
- Heart rate > 100 beats per minute
- Respiratory rate > 24 breaths per minute
- WBCs > 15,000/mm^3 or < 4,000/mm^3 or 10% bands

Action: If suspected infection, start source-driven antibiotics and 1-2 L of fluids; increase monitoring and surveillance. Move to confirmation evaluation.

Note:
A MAP < 65 mm Hg (persistent after 30ml/kg fluid load) in settings of infection directly defines SEPTIC SHOCK

Step 2) Confirmation of Sepsis Evaluation – ***Confirmed if 1 or more criteria is met***

- Respiratory: New need for mechanical ventilation or PaO2/FiO2 < 300
- Coagulation: Platelets < 100 x 10^9/L or INR > 1.5 *or* PTT > 60 secs
- Liver: Bilirubin > 2 mg/dL
- Cardiovascular: SBP < 85 mm Hg or MAP < 65 mm Hg *or* > 40 mm Hg decrease in SBP (after fluids)
- Renal: Creatinine ≥ 1.2 mg/dL *or* doubling of creatinine *or* urine output < 0.5 ml/kg/hr x 2 hrs
- Mental Status: Agitated, confused, *or* unresponsive
- Lactic Acid: > 2 mmol/L in absence of labor

NOTE:

- *Fluid resuscitation is indicated for sepsis and improved tissue perfusion with labor.*
- *Repeat vitals every 1-2 hrs until stable with pulse < 120 bpm, temp < 39, RR <24. Once stable q4hrs until normal then q6hrs until discharge.*
- *Repeat lactate in 2 hrs if no improvement in clinical criteria after fluid resuscitation*
- *Repeat other labs in 12-24 hours if worsening based on source of infection. CBC will often be repeated in 24 hrs. Others may not need to be repeated at all.*

All Criteria NEGATIVE

Action: This group remains at high risk for sepsis and requires close supervision and re-evaluation.

≥ 1 Criterion POSITIVE defines SEPSIS

NOTE: *Take aggressive multidisciplinary approach involving intensivist and MFM*

Action: Start source-directed antibiotics, broad spectrum antibiotics if source is unclear; increase fluids to 30 ml/kg within 3 hours; collect blood cultures in not already obtained, maintain close surveillance, e.g. RRT, and repeat lactate. Escalate care as needed

Elevated lactate ONLY in Labor

Action: At a minimum, maintain close surveillance; consider additional fluids to reduce lactic acid level; repeat lactate. (See discussion of the role of lactic acid in the peripartum period in the CMQCC toolkit for more detail).

MAP < 65 mm Hg (with confirmation defines) SEPTIC SHOCK

Action: As above for Sepsis, admit to ICU. If hypotension persists after 30 ml/kg fluid load, assess hemodynamic status and consider vasopressor use.

Endorsed by: Women & Children's Institute
Created by: Maternal Sepsis Workgroup
Last Updated: 2/3/2022