**Evaluation and Management of Suspected Early-Onset Neonatal Sepsis in the Well Newborn Nursery**

**Signs of Neonatal Sepsis:** persistent respiratory distress, hypoxia, temperature instability (<36.5°C or >37.5°C), hypotonia, apnea, poor feeding, or persistent unexplained hypoglycemia

**Blood Culture, CBC, CRP**, start antibiotics
Consider chest x-ray and/or lumbar puncture (LP)

**Antibiotics at least 48h:** guided by culture and clinical course

**Antibiotics minimum 5-7 d:** clinical concerns and/or positive culture(s)**

**Chorioamnionitis** (clinical diagnosis per OB)

- Yes
  - Blood Culture, CBC, CRP, start antibiotics. If culture (-) and benign clinical course, discontinue antibiotics at 24 - 36h with no need for repeat labs but continue observation until 48h of life. If continuing antibiotics, consider repeat CBC and CRP.*

- No
  - Previous infant with invasive GBS disease

- Yes
  - Cesarean delivery before onset of labor with intact membranes

- No
  - GBS bacteriuria during current pregnancy

- No
  - Vaginal-rectal culture after 34 wks GA

- Yes (GBS+)
  - GBS

- Unknown GBS

- No to both

- Yes to either

- ROM > 18h or GA < 37 wks

- No to both

**Mom received 1 or more dose(s) of targeted antibiotic prophylaxis (penicillin, ampicillin, or cefazolin) ≥ 4h prior to delivery?**

- Yes
  - Observe clinically for 48h. No antibiotics unless infant develops signs of infection.

- No
  - ROM > 18h or GA < 37 wks

Blood culture, CBC, CRP*, start antibiotics. If culture (-) and benign clinical course, discontinue antibiotics at 24 - 36h with no need for repeat labs but continue observation until 48h of life. If continuing antibiotics, consider repeat CBC and CRP*.

**Antibiotics for Suspected Sepsis**
1. Ampicillin 100 mg/kg/dose IV q12h
2. Gentamicin 4 mg/kg/dose IV q24h

**Normal Lab Values** (institution specific)
1. CRP < 0.5 mg/dL*
2. I:T ratio < 0.16 (some use 0.20)
   - I:T ratio = immature / total neutrophils
3. Absolute neutrophil count normal (NL term infant > 3500/mm³)

*Positive CRP alone should not be used to extend antibiotic treatment.

**Transfer to NICU if culture(s) positive. LP indicated.**

Created: R Roghair, J Klein (NICU) Revised: 9/30/05, 11/28/07, 3/30/11, 6/1/15, 5/1/19

CDC. Prevention of Perinatal GBS Disease. MMWR 11/19/2010: 59;No. RR-10:1-32