Evaluation and Management of Possible Neonatal Sepsis
(≥ 35 weeks Gestation During the First Few Hours of Life)

**Signs of Neonatal Sepsis:** tachypnea, grunting, cyanosis, oxygen requirement, apnea, persistent temperature <36.5 or >37.5°C, hypotonia, poor feeding, or persistent unexplained hypoglycemia.
- Infants in mild respiratory distress w/o risk factors can be observed up to 2 h if stable and improving.

**Chorioamnionitis** (clinical diagnosis per OB)
- Yes
- No

**Previous infant with invasive GBS disease or Maternal temperature ≥ 38.0°C (100.4°F)**
- Yes
- No

**Cesarean delivery before onset of labor with intact membranes**
- Yes
- No

**GBS bacteriuria during current pregnancy (≥10^4 CFU)**
- Yes
- No

**Vaginal-rectal culture after 34 wks gestation**
- GBS Positive
- Unknown

**ROM ≥ 18h and < 37 wks gestation**
- Yes to either
- No to both

**CBC, CRP, Blood Culture, CXR** - if respiratory distress persists, LP - if sepsis suspected vs R/O. Repeat labs in 12 to 24h: Antibiotics at least 48h: guided by cultures, labs (WNL or normalize quickly) and benign clinical course. Antibiotics minimum 7-10 d: clinically not improving within hours, abnormal labs or presence of GBS risk factors, chorioamnionitis or inadequate intrapartum antibiotic prophylaxis.

**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. CBC I:T ratio < 0.16 (some use 0.20)
   I:T ratio = immature / total neutrophils
3. Absolute neutrophil count within normal limits

**Routine Newborn Care**
- If ROM > 18h consider screening CBC and CRP @ 6 -12h

**CBC, CRP, Blood Culture** Repeat labs in 12 to 24h
- Antibiotics at least 48h to 7 days
  (stop if culture negative, labs WNL or normalize quickly and benign clinical course)

**Routine Newborn Care: If ROM > 18h**

**CBC and CRP @ 6-12h**

**Observe at least 48h**
- consider screening CBC and CRP @ 6-12h

**Risk Factors**
- < 37 wks GA, maternal T ≥38°C, ROM ≥18h, previous infant w/GBS or current GBS bacteriuria

Created and Revised -R Roghair MD, Reviewed - J Klein MD Medical Director NICU: 9/30/05, 11/28/07, 3/30/11

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