**NEONATAL SEPSIS**

Early onset neonatal sepsis (EONS): sepsis within the first 7 days of life.
Late onset neonatal sepsis (LONS): sepsis from 7-28 days of life.

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**INVESTIGATIONS – FULL SEPTIC WORK-UP**

- **Blood**: culture, CBC+diff, CRP
- **Urine** (catheter sample): culture, urinalysis
- **CSF**: culture, protein, glucose, cell count, viral PCR (HSV, VZV, and enterovirus).
- **Consider**: blood gas, CXR, respiratory virus panel, and swabs of any lesions.

**RISK FACTORS FOR EONS**

- Prolonged rupture of membranes (≥ 18 hours)
- Maternal fever (≥ 38°C)
- Maternal GBS colonization
- GBS bacteriuria anytime in pregnancy
- Invasive GBS disease in a previous infant
- Chorioamnionitis

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**MANAGEMENT OF TERM INFANTS (≥ 37 WEEKS) AT RISK FOR EARLY ONSET NEONATAL SEPSIS**

- **Does the baby appear unwell?**
  - YES → Prompt investigations
  - YES → Full septic work-up (CBCdiff, blood cultures, LP) +/- CXR
  - YES → Start empiric IV antibiotics

- **Is the mother GBS positive?**
  - YES → Other risk factors?
  - NO → Routine newborn care

- **Any other risk factors?**
  - YES → Only 1 risk factor present?
  - NO → Multiple risk factors

- **Did mom receive intrapartum abx prophylaxis?**
  - YES → Examine at birth
  - YES → Observe closely for at least 24 h
  - YES → Vitals q3-4h
  - YES → Reassess & counsel prior to D/C
  - YES → Routinely newborn care

- **Other risk factors?**
  - YES → Individualize investigations and treatment
  - YES → Observe closely for at least 24 h
  - YES → Vitals q3-4h
  - YES → Reassess & counsel prior to D/C

**RISK CALCULATOR: [https://neonatalesepsiscalculator.kaiserpermanente.org](https://neonatalesepsiscalculator.kaiserpermanente.org)

**IV Antimicrobial Therapy**: start ampicillin (GBS and Listeria coverage) + gentamicin (E. coli coverage) +/- acyclovir (if concerned about HSV). Ampicillin and gentamicin are generally preferred; however, local antibiotic resistance patterns and special circumstances must be considered.

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Katharine V. Jensen (Medical Student, University of Alberta) and Dr. Krystyna Ediger (Neonatal Perinatal Medicine Subspecialty Resident, University of Alberta) for www.pedscases.com