Neonatal Sepsis
• Infection spreads rapidly through blood
• Usually see staph and strep in nursery
  • Strep comes from staff, nurse, mom (somebody has a cold!)
  • Staph comes from the skin (not good handwashing)
• 1 to 5 incidences per 1000 births
• Risk increases in NICU
• High mortality rate

Sepsis: Risk Factors
• Maternal low SES
• Prolonged labor
• Premature labor
• Maternal UTI
• PROM
• Twin gestation
• there are more

Sepsis: Signs & Symptoms
• Apnea, bradycardia
• Tachypnea
• Grunting, nasal flaring
• Retractions
• Decreased O2 saturation
• Sepsis: Signs & Symptoms
• Acidosis
• Decreased cardiac output
• Hypotension
• Decreased perfusion
• there are more

Diagnostic Tests for Neonatal Sepsis
• CBC with diff
• Chest X-ray
• Serology
• Gram stains
• Cultures obtained
  • Blood (2)
  • Spinal fluid
  • Urine
  • Skin
  • Nasopharyngeal, rectal, ear canal & gastric aspirate

Neonatal Sepsis: Therapy
• Instituted before results of workup are obtained
• Two antibiotics, usually ampicillin and gentamicin
• 7 to 14 days
• Goal: maintain resp., hemodynamic, nutritional, & metabolic homeostasis

TORCH Infections
• Toxoplasmosis S&S
  • Convulsions
  • Coma
  • Microcephaly
• Hydrocephalus
  Survivors: blind, deaf, severely retarded

• Rubella
  Congenital cataracts, sensorineural deafness, congenital heart defects
  Infectious at birth
  Isolate
  Tx: Prevention. Give mom the vaccine as the VERY LAST thing you do. Tell her not to get pregnant for 3 months.

• Cytomegalovirus
  Infects 0.5-2.5% of newborns
  20-30% mortality rate
  Mental retardation/auditory deficits/learning disabilities
  Microcephaly, hydrocephaly, CP, mental retardation
  Neonate typically SGA
  Blood, brain, liver

• Herpes Simplex
  Route of birth
  Lesion present? Then mom has to have C/S
  Risk of transmission-50% (vaginal, primary lesion present)
  Recurrent lesion present-risk of transmission 0-3%
  Preferred delivery: C-section
  Symptoms develop 2-12 days after birth
  • Fever or hypothermia
  • Jaundice
  • Seizures
  • Poor feeding
  • Lesions
  Treatment
  • Drugs

Infections
• Gonorrhea
  Ophthalmia neonatorum
  Corneal ulcerations/discharge
  Sepsis:
  • Temp instability
  • Poor feeding
  • Hypotonia
  • Jaundice
  • Erythromycin ointment

• Syphilis: Signs & Symptoms
  Fissures-mouth
  Red rash
  Copper-colored rash
  Irritability
  Gen. edema
  Rhinitis
  there are more...see slide

• Syphilis: Treatment
  • Isolation
  • Penicillin

• Hepatitis B
  Perinatal transmission-at or during childbirth
  Routine vaccination
• Immunoprophylaxis to all newborns with infected mothers

• HIV
  • Vertical transmission: 13-40%
  • Opportunistic diseases
  • Testing infants: HIV DNA PCR-24 hour results
    • Before 48 hours of age
    • 1-2 months and 4-6 months

• HIV: Signs/Symptoms
  • Enlarged spleen/liver
  • Swollen glands
  • Recurrent resp infections
  • Rhinorrhea
  • Interstitial pneumonia
  • there are more

• HIV: Nursing Care
  • Comfort
  • Nutrition
  • Facilitating growth
  • Protect from infections
  • Promote attachment
  • Universal precautions
  • Good skin care

Bacterial Infections
• Group B Strep
  • Risk factors:
    • Prematurity
    • Maternal IP fever
    • ROM > 24 hours
    • Previously infected infant
    • GBS bacteriuria in current pregnancy

• Group B Strep
  • Signs/Symptoms
    • Resp distress or pneumonia
    • Apnea
    • Shock
    • Meningitis (late-onset)
    • Long term
      • Neurologic complications

• Group B Strep: Therapy
  • Screening
  • Antibiotic prophylaxis

• Chlamydia Trachomatis
  • Newborn conjunctivitis
  • Pneumonia
  • Erythromycin ointment

• Other Bacterial Infections
  • E. Coli
  • Tuberculosis
    • Active: Infant should not have direct contact with mother
  • Listeriosis
  • Fungal Infections
  • Candidiasis
May contract thrush, diaper rash
  • A baby that has this will have thrush about 1 week after birth, will have a diaper rash is right around the rectal opening and in the creases.
  • 5-7 days after birth
  • Nystatin is the best one, gentian violet (mouth) at West Cupcake Community Hospital