What is the current practice for choosing drugs for the prevention and treatment of sepsis in the newborn?

Best practices and guidelines

- Guidelines for use of maternal intrapartum antibiotic prophylaxis to prevent neonatal early-onset sepsis caused by Group B *Streptococcus* and other perinatal pathogens are provided by the Centers for Disease Control and Prevention, the American College of Obstetrics and Gynecology, the American Academy of Pediatrics
- Guidance on the administration of empiric antibiotics due to concern for neonatal early-onset sepsis is informed by national epidemiologic data and provided by the American Academy of Pediatrics
- Optimal antibiotic choice for the administration of empiric antibiotics due to concern for neonatal early-onset sepsis can also be informed by local data on the antibiotic sensitivity profiles of local infecting organisms

Major recommendations

- Review and utilize national guidance on intrapartum and neonatal antibiotic choice for prevention and empiric treatment of neonatal early-onset sepsis
- Collaborate with infection control personnel to obtain local data on the antibiotic sensitivity profiles of infecting organisms to optimize empiric antibiotic choice
- Minimize prolonged use of antibiotics when cultures are sterile
- Utilize the narrowest-spectrum effective antibiotic when antibiotic sensitivity data is obtained for infecting organisms
- Account for the gestational age, postnatal age, and renal and liver function of the individual infant when choosing drug dose and dosing interval

Summary statement

Optimal drug choices for neonatal sepsis prevention and treatment are informed by microbiologic data, utilize the narrowest-spectrum effective antibiotic, and account for gestational age, postnatal age and organ function to optimize antibiotic effectiveness, minimize drug toxicities and avoid resistance-promoting selection pressures.

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