Guidelines for Use of Ceftriaxone Sodium (Rocephin)®

CONTRAINDICATED IN NEONATES <30 DAYS OF AGE DUE TO THE RISK OF HYPERBILIRUBINEMIA/KERNICTERUS AND RISK OF CALCIUM/CEFTRIAXONE BYPRODUCT. USE OF CEFOTAXIME MAY BE MORE APPROPRIATE.

Recommended Neonatal Dose, Route, and Interval

- **Sepsis and disseminated Gonococcal infections:** 50 mg/kg/dose q24h IM, IV
- **Meningitis:** 100 mg/kg/loading dose, then 80 mg/kg q 24hr IM, IV
- **Uncomplicated Gonococcal ophthalmia or prophylaxis:** 50 mg/kg/dose IM, IV single dose; **max dose:** 125 mg/dose. Topical antibiotic therapy alone is inadequate and is unnecessary if systemic treatment is administrated.

**IM administration:** To reduce pain at injection site, request that pharmacy reconstitute with 1% lidocaine (WITHOUT epinephrine)

**Chief Indications**

1. Treatment of neonatal sepsis and meningitis caused by susceptible gram-negative organisms - e.g., E. coli, pseudomonas, Klebsiella, H. influenzae
2. Gonococcal infections

**Possible Adverse Reactions**

1. Local reactions: pain, tenderness, phlebitis
2. Nephrotoxicity
3. GI upset: diarrhea
4. Skin rash
5. Increased bleeding time, BUN, creatinine, AST, ALT, biliary sludging
6. Eosinophilia, thrombocytosis, leukopenia

**CONTRAINDICATIONS/PRECAUTIONS:**

1. Bilirubin levels > 5 mg/dl (displaces bilirubin from albumin binding sites)
2. **Concurrent administration of Ceftriaxone and calcium-containing solutions or products is contraindicated in neonates**
3. Penicillin allergic patients
4. Hepatic or renal dysfunction
Nursing Implications

1. Observe for signs of adverse reactions
2. Monitor renal, hepatic, hematopoietic functions
3. In newborn period, obtain bilirubin level prior to starting therapy
4. IV administration: Infusion by syringe pump over 30 minutes.
5. Avoid administration of calcium-containing solutions or products within 48 hours of the last administration of ceftriaxone

Special Considerations and Calculations

1. Solution compatibility: D5W, D10W, NS
2. Serum half-life in newborns: 5 - 16 hours
3. Has NOT been shown to be superior to Ampicillin & Gentamicin for treatment of sepsis or meningitis
4. Third generation cephalosporin – cefotaxime may be more appropriate to use.

References:
1. Neofax 2010

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