Initial Date: 07/19/2023
Revised Date: 08/11/2023

Ceftriaxone

Pharmacological Category: Antibiotic, Cephalosporin (Third Generation)

Indications:
1. Open fractures
2. Partial/complete amputations
3. Major soft tissue injuries (e.g., mangled extremity).

Contraindications:
1. Patients ≤ 2 months old (any administration of ceftriaxone)
2. Infusion <7 years of age (volume for infusion is larger than allowable fluid bolus).
3. Allergies to cefepime (Maxipime) or cefotaxime (Claforan)

Side effects:
1. Rapid administration can result in tachycardia, restlessness, diaphoresis, and palpitations, pain at injection site.

Notes:
Slow IV push dilution of ceftriaxone
1. Dilute 2 gm ceftriaxone with 20 mL NS:
    a. Inject two 10 mL flushes into one 2 gm vial of ceftriaxone
    OR
    b. Inject one 10 mL flush into each 1 gm vial of ceftriaxone.
2. Resulting concentration is 100 mg/mL

Infusion dilution of ceftriaxone
1. Add ceftriaxone dosage (slow IV push dilution) to 100 mL bag of NS:
    a. Adults: add 20 mL (2 gm of slow IV push dilution) to 100 mL bag of NS
    b. Pediatrics > 7 years of age: volume of diluted ceftriaxone added to 100 mL bag of NS will be calculated weight-based dosage.

Dosing: SOFT TISSUE AND ORTHOPEDIC INJURIES
Indication: Partial/complete amputations, major soft tissue injuries (e.g., mangled extremity) and open fractures.
Adults administer:
1. Ceftriaxone Slow IVP: 2gm (slow IV push dilution), slow IVP over 3-5 minutes
    OR
2. Ceftriaxone Infusion: 2gm (slow IV push dilution) added to a 100 mL bag of NS. Infuse over 15-30 minutes.

Pediatrics
1. Pediatrics > 2 months old ceftriaxone slow IV push administer:
    a. Ceftriaxone (slow IV push dilution) according to MI MEDIC cards.

ii. If MI MEDIC cards are not available administer ceftriaxone (slow IV push dilution) 50 mg/kg slow IVP over 3-5 minutes. Maximum dose 2 gm.

OR

2. Pediatrics ≥ 7 years of age ceftriaxone infusion administer:

a. Ceftriaxone infusion according to MI MEDIC cards

i. If MI MEDIC cards are not available administer ceftriaxone (slow IV push dilution) 50 mg/kg added to 100 mL bag of NS. Max dose 2 gm. Infuse over 15-30 minutes.

Used in the Following Protocol(s):

Soft Tissue and Orthopedic Injuries (Section 2 Trauma and Environmental)