

# Medication

STUDENT NAME: Hannah Rossi

MEDICATION: Ceftriaxone

CATEGORY CLASS: Third generation cephalosporin (antibiotic)

## Expected Pharmacological Action:

Binds to bacterial cell membranes, inhibits cell wall synthesis

## Complications:

oral candidiasis, mild diarrhea, mild cramping, vaginal candidiasis, nausea, allergic reaction (pruritus, rash, urticaria), thrombophlebitis (pain, redness, swelling at the injection site).

\*Adverse reactions: colitis, superinfection, hypersensitivity\*

## Contraindications/Precautions:

Contraindications: Hx of hypersensitivity/anaphylactic reaction to ceftriaxone or cephalosporins.

Hyperbilirubinemia neonates, (especially premature infants), and do not administer with calcium containing IV solutions.

Precautions: hepatic impairment, hx GI disease (ulcerative colitis, antibiotic associated colitis), hx of penicillin allergies

## Interactions:

Probenecid (increases effect), calcium salt (toxic effect).

Note: may increase LFT and serum BUN and creatine

## Evaluation of Medication Effectiveness:

decreased wbc and relief of signs and symptoms caused by infection

## Therapeutic Use:

Used for treatment of gram negative and some gram positive organisms including respiratory tract infections, GU tract, skin, bone and joint, intra-abdominal, PID, biliary tract/urinary tract infections, meningitis, and ear infections.

## Medication Administration (IM/IV) (adults)

- 1-2 g q12-24 hr
  - Maximum 4 g/day

## Nursing Interventions:

- obtain CBC and renal function test
- question about hx allergies (specifically to penicillin and cephalosporins)
- Assess oral cavity for thrush
- monitor daily bowel movements
- monitor i&os for renal function
- be alert for superinfections

## Client Education:

- discomfort may occur with IM injections
- doses should be evenly spaced
- continue med for full length of treatment

## Compatibility

Incompatible: Amphotericin B complex (Abelcet, AmBisome, Amphotec), famotidine (Pepcid), fluconazole (Diflucan), labetalol, lactated ringers injection, vancomycin

Compatible: NS, D5W, Diltiazem (Cardizem), heparin, lidocaine, metronidazole (Flagyl), morphine, propofol (Diprivan)

## Amount:

## Rate of administration

ML/hr:

gtt/min:

**Infuse over 30 minutes for IVPB**

## Diluent:

Add 2.4 mL of sterile water for injection to each 250 mg to provide concentration of 100 mg/ml may further dilute with 50ml-100ml NS or D5W

## Site, supply, storage, stability :

- Appears slightly yellow to amber
- IVPB is stable for 2 days at room temperature, 10 days if refrigerated
  - discard if precipitate forms