

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Katelyn Milligan

MEDICATION Ceftriaxone REVIEW MODULE CHAPTER \_\_\_\_\_

CATEGORY CLASS 3rd generation cephalosporin, Antibiotic

**PURPOSE OF MEDICATION**

**Expected Pharmacological Action**

Bind to bacterial cell membranes and inhibits cell wall synthesis

**Therapeutic Use**

Treat infections due to gram negative aerobic organisms, bloodstream infections, bone, joint, abdominal, lower respiratory, and skin infections. COPD.

**Complications**

Frequent: Oral thrush, mild diarrhea, abdominal cramping  
Occasional: Nausea, fever, joint pain  
Rare: Allergic reaction, thrombophlebitis

**Medication Administration**

IV: 1g/50mL, 2G/50mL, Q12-24hr

**Contraindications/Precautions**

Contraindications: History of sensitivity to ceftriaxone, hyperbilirubinemia neo plates, do not treat with calcium containing solutions  
Cautions: Hepatic impairment, GI disease history, Penicillin allergy.

**Nursing Interventions**

Monitor for flush, and bowel activity. Monitor I & O's, monitor renal function test, CBC. Alert for signs of infection.

**Interactions**

Drug: Probenecid, calcium salts  
Labs: Increase serum BUN, alkaline, phosphate, bilirubin, creatinine.

**Client Education**

Doses are evenly spaced, continue treatment for full length of time.

**Evaluation of Medication Effectiveness**

Assess for relief of infection  
Assess vitals (HR, BP, RR)  
CBC

### Compatibility

0.09% Nacl, Diltiazem (Cardiem), Heparin, Lidocaine, Metronidazole, Morphine, Propofol (Diprivan)

### Amount

1g/ 50mL every 12 hours over 30-60 minutes

### Rate of Administration

Infusion rate:  $50\text{mL}/0.5\text{ hr} = 100\text{mL/hr}$  (60min)

Gtt/min:  $50\text{mL} \times 10\text{gtt/mL} / 30\text{ min} = 500/30\text{min} = 16.67 = 17\text{ gtt/min}$

### Diluent

50-100 mL 0.9% Nacl, D5W

### Site, supplies, storage, stability

Stable for 2 days at room temperature, 10 days if refrigerated.