

# Medication

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MEDICATION: Levofloxacin (levaquin) \*IVPB

CATEGORY CLASS: Fluoroquinolone (Antibiotic)

## Expected Pharmacological Action:

Inhibits DNA enzyme gyrase in susceptible microorganism, interfering with bacterial cell replication and repair (bactericidal)

## Therapeutic Use:

Tx of susceptible infection due to *S. pneumoniae*, *S. aureus*, *E. coli*, etc, including acute bacterial exacerbation of chronic bronchitis, bacterial sinusitis, community acquired pneumonia, complicated and uncomplicated UTI, mild to moderate skin infection; plaque

## Complications:

diarrhea; nausea; abd pain; dizziness; drowsiness; headache; flatulence; pain; inflammation; swelling in calves, hands, shoulders; chest pain; difficulty breathing; palpitations; edema; tendon pain

## Medication Administration:

IV adults/elderly: 250-750 mg q 24 hrs; 750 mg for severe or complicated infections

**Contraindications:** Hypersensitivity to levofloxacin and other fluoroquinolones

**Precautions:** CNS disorders; seizure disorders; renal impairment; rheumatoid arthritis; bradycardia; elderly; myasthenia gravis; severe cerebral arteriosclerosis; pts at risk for QT interval prolongation; diabetics at risk for tendon rupture; tendonitis;

## Nursing Interventions:

- question for hypersensitivity and precautions listed
- receive full med hx and screen for interaction (esp qt prolong meds)
- obtain baseline ECG
- monitor bowel movements and stool consistency
- report hypersensitivity reactions

**Interactions:** may decrease therapeutic effect of BCG (intravesical); Antacids, Sucralfate, and zinc decrease absorption; NSAIDs may increase risk of CNS stimulation and seizures; Medications that prolong QT interval (amiodarone, haloperidol, sotalol) may increase risk of arrhythmias. May increase anticoagulant effects of warfarin

**Also may alter glucose**

## Evaluation of Medication Effectiveness:

goal: decrease infection and symptoms relief

- monitor WBC and monitor for symptom improvement
- Monitor Glucose, renal function, and LFT

## Client Education:

- it is essential to complete drug therapy regardless of symptoms report and episodes of diarrhea (esp in the first few doses)
- severe allergic reactions can occur
- report bruising and swelling in the tendon areas
- immediately report nervous system problems such as anxiety, confusion, dizziness, nightmares, thoughts of suicide, etc
- do not take aluminum or magnesium antacids, multivitamins, or zinc at least 2 hrs before your dose or 6 hrs after
- drink plenty of fluids

**Compatibility**

Incompatible: Furosemide (lasix); heparin; insulin; nitroglycerin; propofol (Diprivan)

Compatible: Dexmedetomidine (Precedex), Dobutamine (Dobutrex), Dopamine, Fentanyl, lidocaine, lorazepam (ativan), magnesium, morphine)

**Amount:** 250 mg-750mg

**Rate of administration**

ML/hr: no order/info

gtt/min: no order/info

**Diluent:** for infusion using a single dose vial, withdraw desired amount (10 ml for 250 mg, 20 ml for 500mg). dilute each 10 ml with minimum of 40 ml NS, D5W, providing a concentration of 5mg/ml

**Site, supply, storage, stability**

-available in single dose 20 ml (500mg) vials and premixed with D5W

-diluted vials stable for 72 hr at room temperature, 14 days if refrigerated