

STUDENT NAME Princess IweanyaMEDICATION Levofloxacin

REVIEW MODULE CHAPTER _____

CATEGORY CLASS _____

PURPOSE OF MEDICATION**Expected Pharmacological Action**

Inhibition of bacterial topoisomerase IV and DNA gyrase (both of which are type II topoisomerases) enzymes required for DNA replication, transcription, repair and recombination

Therapeutic Use

It works by stopping the growth of bacteria.
Treat a variety of bacterial infections

Complications

Tendon problems, side effects on your nerves (which may cause permanent nerve damage), serious mood or behaviour changes (after just one dose), or low blood sugar (which can lead to coma).

Medication Administration

The usual dose of levofloxacin injection is 250 mg or 500 mg administered by slow infusion over 60 minutes every 24 hours or 750 mg administered by slow infusion over 90 minutes every 24 hours.

Contraindications/Precautions

Diarrhea from an infection with *Clostridium difficile* bacteria, diabetes, low blood sugar, glucose-6-phosphate dehydrogenase (G6PD) deficiency.

Nursing Interventions

Assess for infection through vital signs; appearance of wound, sputum, urine, and stool;
WBC; urinalysis; frequency and urgency of urination; cloudy or foul-smelling urine at beginning of and during therapy

Interactions

Aspirin, aspirin, benedryl, ibuprofen, lasix, metoprolol, eptac
colitis
CNS disorders
myasthenia gravis
Peripheral neuropathy

Client Education

Take levofloxacin with water at the same time each day. Drink extra fluids to keep your kidneys working properly while taking this medicine. You may take levofloxacin tablets with or without food. Take levofloxacin oral solution on an empty stomach, at least 1 hour before or 2 hours after a meal.

Evaluation of Medication Effectiveness

Treat bacterial infection by inhibiting bacterial growth.

System Disorder

STUDENT NAME Princess IweanyaDISORDER/DISEASE PROCESS Pneumonia

REVIEW MODULE CHAPTER _____

Alterations in Health (Diagnosis)

Ineffective Airway Clearance

Pathophysiology Related to Client Problem

Inability to clear secretions or obstructions from the respiratory tract to maintain a clear airway.

Health Promotion and Disease Prevention

Start an Evidence-Based pneumonia Quality Improvement program, and educate the poor community

ASSESSMENT

Risk Factors

Smoking; Smoke Inhalation; Second-hand Smoke; Airway Spasm; retained secretions; excessive mucus; secretions in bronchi; exudate in alveoli; Neuromuscular dysfunction; hyperplasia of bronchial walls; Chronic obstructive pulmonary disease

Expected Findings

Dyspnea; diminished breath sounds; crackles; adventitious breath sounds (Crackles, wheezes); cough; ineffective or absent sputum production; cyanosis; difficulty vocalizing; wheezes; changes in respiratory rate and rhythm; restlessness.

Laboratory Tests

- CBC - elevated (may not be present in older adults)
- ABGs - Hypoxemia
- Blood Culture
- Serum electrolytes

Diagnostic Procedures

- Chest X-ray
- pulse oximetry - usually less than expected reference range

SAFETY

CONSIDERATIONS

Anxiety, Cognitive Impairment, fatigue, fear, Pain perception, Surgery, Trauma

Risk for falls, Skin break down, Incontinence, dermatitis, and Altered mental status related to low oxygenation

PATIENT-CENTERED CARE

Nursing Care

Patients will maintain clear open airways as evidence by normal breath sounds, normal rate and depth of respiration, and ability to effectively cough up secretions after treatment

Medications

Levofloxacin
Corticosteroids
Antibiotics
Bronchodilators
Fluid replacement
Antipyretic
NSAIDs

Client Education

Teach about influenza and pneumococcal vaccines. A cool mist humidifier may help breathing at home. Antibiotic medication compliance.

Therapeutic Procedures

Administer humidified oxygen, Chest PT, and hour repositioning, Incentive Spirometer

Interprofessional Care

Home health nursing to monitor for medication compliance and nutrition status. Dietitian for meal planning and nutritional needs. Social working for medication assistance and home health care.

Complications

Bacteria in the bloodstream (bacteremia)

fluid accumulation around the lungs (pleural effusion)

Lung abscess. An abscess occurs if pus forms in a cavity in the lung.