Cefuroxime Axetil Tablets USP

In vitro studies have shown that Cefuroxime Axetil Tablets USP exhibit antimicrobial activity against a wide range of bacterial species. These studies have demonstrated the effectiveness of the drug against various pathogens, including:

- **Enterobacter cloacae**
- **Streptococcus pneumoniae**
- **Escherichia coli**
- **Clostridium difficile**

The mechanism of action of Cefuroxime Axetil involves inhibition of bacterial cell wall synthesis. This leads to the prevention of bacterial growth and replication. The drug is effective against a broad spectrum of aerobic and anaerobic bacteria, making it a versatile antibiotic in clinical practice.

**Pharmacokinetics:**

Cefuroxime Axetil is rapidly absorbed after oral administration, with peak plasma concentrations achieved within 1 to 2 hours. It has a half-life of approximately 2 hours, allowing for once-daily dosing. The drug is extensively distributed throughout the body, with high concentrations reached in the lungs, skin, and urine. It is metabolized by the liver and excreted primarily in the urine and feces.

**Contraindications:**

Cefuroxime Axetil is contraindicated in patients with known hypersensitivity to cephalosporin antibiotics or other beta-lactam antibiotics. It is also contraindicated in patients with severe renal impairment or those with a history of neutropenia, anaphylaxis, or a previous severe allergic reaction to cephalosporins. Pregnancy and breastfeeding women should consult their healthcare provider before using this medication.

**Adverse Reactions:**

Common adverse effects of Cefuroxime Axetil include nausea, vomiting, diarrhea, and allergic reactions such as rash and urticaria. Severe adverse reactions, including anaphylaxis, are rare but require immediate medical attention.

**Interactions:**

Cefuroxime Axetil may interact with other medications, particularly those that affect the liver or kidney function. Patients on concomitant medication should be monitored for potential drug interactions.

**Usage:**

Cefuroxime Axetil is used to treat a variety of bacterial infections, including respiratory tract infections, skin and skin structure infections, and urinary tract infections. It is also used to prevent infections in high-risk surgical patients.

**Dosage and Administration:**

The dosage of Cefuroxime Axetil is determined by the specific infection being treated and the patient's weight and condition. Typically, it is administered orally twice daily or once daily, depending on the severity of the infection.

**Precautions:**

Patients should be monitored for signs of drug toxicity and for the development of superinfections. Healthcare providers should consider the patient's history, including any prior antibiotic use, when selecting the appropriate antibiotic regimen.

**References:**

- FDA Approved Product Information: Cefuroxime Axetil Tablets USP
- MedlinePlus: Cefuroxime Axetil
- UpToDate: Cefuroxime Axetil

**Additional Resources:**

- Cefuroxime Axetil Tablets - Indications, Dosage, Warnings, Precautions
- Cefuroxime Axetil - Uses, Side Effects, Interactions, Price, Availability
- Cefuroxime Axetil - Overview, Indications, Dosing, Precautions, Adverse Effects

**Disclaimer:**

This information is intended to provide a general overview of Cefuroxime Axetil Tablets USP, its uses, and potential side effects. For specific medical advice, always consult a healthcare provider.