

**cefdinir** (sef-di-nir)

**Classification**
Therapeutic: anti-infection
Pharmacologic: third-generation cephalosporin

**Pregnancy Category B**

**Indications**
Treatment of the following infections caused by susceptible organisms: Community-acquired pneumonia (adults only), Acute exacerbations of chronic bronchitis (adults only), Acute maxillary sinusitis, Pharyngitis and tonsillitis, Uncomplicated skin and skin structure infections, Acute bacterial otitis media (children only).

**Action**
Binds to bacterial cell wall membrane, causing cell death. Therapeutic Effects: Bactericidal action against susceptible bacteria.

**Spectrum**
Active against the following gram-positive organisms: Staphylococcus aureus, Streptococcus pneumoniae, Streptococcus pyogenes. Active against the following gram-negative organisms: Haemophilus influenzae (including -lactamase-producing strains), Haemophilus parainfluenzae (including -lactamase-producing strains), Moraxella catarrhalis (including -lactamase-producing strains). Not active against methicillin-resistant staphylococci or enterococci.

**Pharmacokinetics**

**TIME/ACTION PROFILE (blood levels)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>rapid</td>
<td>2–4 hr</td>
<td>12–24 hr</td>
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</tbody>
</table>

- *G* = General Implication

**Contraindications/Precautions**
Contraindicated in: Hypersensitivity to cephalosporins; Serious hypersensitivity to penicillins.

**Use Cautiously in:**

- Renal impairment (dose reduction recommended if CCr < 30 mL/min); Diabetes (suspension contains sucrose); History of GI disease, especially colitis; Geri: Dose adjustment due to age-related renal function may be necessary; OB, Lactation, Pedi: Pregnancy, lactation, or children <6 mo (safety not established). Suspension contains sodium benzoate, avoid in neonates.

**Adverse Reactions/Side Effects**
CNS: SEIZURES, headache.
GI: PSEUDOMEMBRANOUS COLITIS, diarrhea, vomiting, abdominal pain, nausea, GE: vaginal moniliasis, vaginitis.
GU: vaginal moniliasis, vaginitis.
Derm: rash, pruritus.
Misc: allergic reactions including ANAPHYLAXIS.

**Interactions**
Drug-Drug: Antacids and iron supplements (absorption administered at least 2 hr before or 2 hr after).
Probenecid (excretion and blood levels).

**Route/Dosage**

| PO (Adults and Children ≥13 yr): | 300 mg every 12 hr or 600 mg every 24 hr (twice daily dosing must be used for community-acquired pneumonia or uncomplicated skin and skin structure infections). |
| Renal Impairment (Adults and Children ≥13 yr): | CCr/30 mL/min—300 mg every 24 hr. |
| PO (Children 6 mo–12 yr): | 7 mg/kg every 12 hr or 14 mg/kg every 24 hr (not to exceed 600 mg/day); Twice daily dosing must be used for uncomplicated skin and skin structure infections. |

**NURSING IMPLICATIONS**

**Assessment**
- Assess patient for infection (vital signs, appearance of wound, sputum, urine, and stool; WBC) at beginning of and throughout therapy.
- Before initiating therapy, obtain a history to determine previous use of and reactions to penicillins or cephalosporins. Persons with a negative history of penicillin sensitivity may still have an allergic response.

**NURSING CONSIDERATIONS**

- *Discontinued*
● Obtain specimens for culture and sensitivity before initiating therapy. First dose may be given before receiving results.
● Observe patient for signs and symptoms of anaphylaxis (rash, pruritus, laryngeal edema, wheezing). Discontinue drug and notify physician or other health care professional immediately if these symptoms occur. Keep epinephrine, an antihistamine, and resuscitation equipment close by in case of an anaphylactic reaction.
● Monitor bowel function. Diarrhea, abdominal cramping, fever, and bloody stools should be reported to health care professional promptly as a sign of pseudomembranous colitis. May begin up to several weeks following cessation of therapy.
● Lab Test/Considerations: May cause positive results for Coombs’ test.
● May cause increased serum AST, ALT, alkaline phosphatase, bilirubin, LDH, and BUN.
● May rarely cause leukopenia, eosinophilia, lymphocytosis, and thrombocytosis.

Potential Nursing Diagnoses
Risk for infection (Indications) (Side Effects)
Diarrhea (Adverse Reactions)
Deficient knowledge, related to medication regimen (Patient/Family Teaching)

Implementation
● PO: Administer around the clock. May be administered without regard to food. Shake oral suspension well before administering. Suspension can be stored at room temperature for up to 10 days.
● Do not administer within 2 hr before or after antacids or iron supplements.

Patient/Family Teaching
● Instruct patient to take medication around the clock at evenly spaced times and to finish the medication completely as directed, even if feeling better. Take missed doses as soon as possible, but do not double doses. Instruct patients to use calibrated measuring device with suspension. Advise patient that taking the medication may be dyspeptic.
● Advise patient to report signs of superinfection (furry overgrowth on the tongue, vaginal itching or discharge, loose or foul-smelling stools) and allergy.
● Instruct patient to notify health care professional of fever and diarrhea, especially if diarrhea contains blood, mucus, or pus. Advise patient not to treat diarrhea without consulting health care professional.

Evaluation/Desired Outcomes
● Resolution of signs and symptoms of infection. Length of time for complete resolution depends on the organism and site of infection.

Why was this drug prescribed for your patient?