bacitracin (bad-it-tra-sin)
BACiiM, Baciject, Bacitin

Classification
Therapeutic: anti-infections
Pharmacologic: none assigned

Pregnancy Category UK

Indications

Action
Inhibits bacterial cell wall synthesis by preventing transfer of mucopeptides into growing cell wall. Therapeutic Effects: Bactericidal action.

Spectrum: Notable for activity against: Staphylococci, Streptococci.

Pharmacokinetics
Absorption: Well absorbed after IM administration. Poorly absorbed from mucous membranes.
Distribution: Poor penetration into CSF.
Metabolism and Excretion: 10–40% excreted in urine within 24 hr.
Half-life: Unknown.

TIME/ACTION PROFILE (blood levels)

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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</thead>
<tbody>
<tr>
<td>IM</td>
<td>unknown</td>
<td>1–2 hr</td>
<td>unknown</td>
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Contraindications/Precautions
Contraindicated in: Hypersensitivity; Renal impairment.
Use Cautionally in: Dehydration; OB, Lactation: Safety and effectiveness unknown.

Adverse Reactions/Side Effects
Derm: rash.
GI: PSEUDOMEMBRANOUS COLITIS, nausea, vomiting.
GU: renal failure.
Local: pain at injection site.

Interactions
Drug-Class: 1 incidence of nephrotoxicity with other nephrotoxic drugs; avoid concomitant use.

Route/Dosage
Topical (Adults and Children): Apply 1–5 times daily.
IM (Infants 2.5 kg): 1000 units/kg/day in 2–3 divided doses.
IM (Infants >2.5 kg): 900 units/kg/day in 2–3 divided doses.

NURSING IMPLICATIONS

Assessment
● IM: Monitor signs and symptoms of infection (fever, chills, respiratory status, mucous secretions) prior to and periodically during therapy.
● Topical: Assess lesions prior to and periodically during therapy.

● 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.

Patient/Family Teaching
Instruct patient to use only as long as prescribed; prolonged use may cause overgrowth of resistant organisms.

● Caution patient to notify health care professional if fever and diarrhea occur, especially if stool contains blood, pus, or mucus. Advise patient not to treat diarrhea without consulting health care professional. May occur up to several weeks after discontinuation of medication.
Topical: Advise patient to only use on minor cuts or burns. Do not use on animal bites, puncture wounds, serious burns, or deep cuts. Instruct patient that topicalform may cause contact dermatitis or pruritus.

Evaluation/Desired Outcomes
- Resolution of infection

Why was this drug prescribed for your patient?