

mupirocin (myoo-peer-oh-sin)

Bactroban

Classification

Therapeutic: anti-infectives

Pregnancy Category B

Indications

Topical: Treatment of: Impetigo, Secondarily infected traumatic skin lesions (up to 10 cm in length or 100 cm² area) caused by *Staphylococcus aureus* and *Streptococcus pyogenes*. **Intranasal** Eradicates nasal colonization with methicillin-resistant *S. aureus*.

Action

Inhibits bacterial protein synthesis. **Therapeutic Effects:** Inhibition of bacterial growth and reproduction. **Spectrum:** Greatest activity against gram-positive organisms, including: *S. aureus*, Beta-hemolytic streptococci. Resolution of impetigo. Eradication of *S. aureus* carrier state.

Pharmacokinetics

Absorption: Minimal systemic absorption.

Distribution: Remains in the stratum corneum after topical use for prolonged periods of time (72 hr).

Metabolism and Excretion: Metabolized in the skin, removed by desquamation.

Half-life: 17–36 min.

TIME/ACTION PROFILE (anti-infective effect)

| ROUTE | ONSET | PEAK | DURATION |
|----------|---------|----------|----------|
| Nasal | unknown | unknown | 12 hr |
| Topical† | unknown | 3–5 days | 72 hr |

†Resolution of lesions

Contraindications/Precautions

Contraindicated in: Hypersensitivity to mupirocin or polyethylene glycol.

Use Cautiously in: Renal impairment; Burn patients; **OB, Lactation:** Safety not established.

☼ = Canadian drug name.

⊠ = Genetic Implication.

CAPITALS indicate life-threatening, underlines indicate most frequent.

~~Strikethrough~~ = Discontinued.

Adverse Reactions/Side Effects

CNS: *nasal only*—headache. **EENT:** *nasal only*—cough, itching, pharyngitis, rhinitis, upper respiratory tract congestion. **GI:** nausea *nasal only*, altered taste.

Derm: *topical only*—burning, itching, pain, stinging.

Interactions

Drug-Drug: Nasal mupirocin should not be used concurrently with other **nasal products**.

Route/Dosage

Topical (Adults and Children ≥2 mo): Ointment: Apply 3–5 times daily for 5–14 days.

Topical (Adults and Children ≥3 mo): Cream: Apply small amount 3 times/day for 10 days.

Intranasal (Adults and Children ≥1 yr): Apply small amount nasal ointment to each nostril 2–4 times/day for 5–14 days.

NURSING IMPLICATIONS

Assessment

- Assess lesions before and daily during therapy.

Potential Nursing Diagnoses

Impaired skin integrity (Indications)

Risk for infection (Indications) (Patient/Family Teaching)

Implementation

- **Topical:** Wash affected area with soap and water and dry thoroughly. Apply a small amount of mupirocin to the affected area 3 times daily and rub in gently. Treated area may be covered with gauze if desired.
- **Nasal:** Apply one half of the ointment from the single-use tube to each nostril twice daily (morning and evening) for 5 days. After application, close nostrils by pressing together and releasing sides of the nose repeatedly for 1 min.

Patient/Family Teaching

- Instruct patient on the correct application of mupirocin. Advise patient to apply medication exactly as directed for the full course of therapy. If a dose is missed, apply as soon as possible unless almost time for next dose. Avoid contact with eyes.
- **Topical:** Teach patient and family appropriate hygienic measures to prevent spread of impetigo.

- Instruct parents to notify school nurse for screening and prevention of transmission.
- Patient should consult health care professional if symptoms have not improved in 3–5 days.

Evaluation/Desired Outcomes

- Healing of skin lesions. If no clinical response is seen in 3–5 days, condition should be re-evaluated.
- Eradication of methicillin-resistant *S. aureus* carrier state in patients and health care workers during institutional outbreaks.

Why was this drug prescribed for your patient?