NATAMYCIN b (Ophthalmic)

Category

Antifungal (ophthalmic).

Indications

Accepted

Blepharitis, fungal (treatment) or

Conjunctivitis, fungal (treatment)¾Ophthalmic natamycin is indicated in the treatment of fungal blepharitis and fungal conjunctivitis caused by susceptible organisms. 4

Keratitis, fungal (treatment)¾Ophthalmic natamycin is indicated in the treatment of fungal keratitis caused by susceptible organisms, including Fusarium solani. 4

Note: Not all species or strains of a particular organism may be susceptible to natamycin.

Pharmacology

Mechanism of action/Effect:

Natamycin probably exerts its antifungal effects by binding to sterols in the fungal cell membrane to produce a change in membrane permeability that allows loss of essential cellular constituents. 4 Following topical application, natamycin is retained in the conjunctival fornices and attains effective concentrations within the corneal stroma. Significant drug concentration is usually not attained in the intraocular fluid. 4

Precautions to Consider

Carcinogenicity/Mutagenicity

Studies have not been done. 4

Pregnancy/Reproduction

Fertility¾Studies have not been done. 4

Pregnancy¾Studies have not been done in humans. 4

Studies have not been done in animals. 4

FDA Pregnancy Category C. 4

Breast-feeding

It is not known whether natamycin is distributed into breast milk. 4 However, problems in humans have not been documented.

Pediatrics

Appropriate studies on the relationship of age to the effects of natamycin have not been performed in the pediatric population. Safety and efficacy have not been established. 4

Geriatrics

Appropriate studies on the relationship of age to the effects of natamycin have not been performed in the geriatric population. However, no geriatrics-specific problems have been documented to date.

Medical considerations/Contraindications

The medical considerations/contraindications included have been selected on the basis of their potential clinical significance (reasons given in parentheses where appropriate)¾ not necessarily inclusive (>> = major clinical significance).
Except under special circumstances, this medication should not be used when the following medical problem exists

>> Sensitivity to natamycin 4

Patient monitoring

The following may be especially important in patient monitoring (other tests may be warranted in some patients, depending on condition; >> = major clinical significance):
Monitoring of tolerance to medication

(recommended at least twice a week when natamycin is used in the treatment of fungal keratitis 4)

Side/Adverse Effects

The following side/adverse effects have been selected on the basis of their potential clinical significance (possible signs and symptoms in parentheses where appropriate)¾not necessarily inclusive:
Those indicating need for medical attention

Conjunctival chemosis or hyperemia 4 (eye irritation, redness, or swelling not present before therapy)

Patient Consultation

As an aid to patient consultation, refer to Advice for the Patient, Natamycin (Ophthalmic).
In providing consultation, consider emphasizing the following selected information (>> = major clinical significance):
Before using this medication

>> Conditions affecting use, especially:

Sensitivity to natamycin 4

Proper use of this medication

Proper administration technique for ophthalmic suspension

>> Compliance with full course of therapy

>> Proper dosing
Missed dose: Applying as soon as possible
>> Proper storage
Precautions while using this medication

Regular visits to physician to check progress during therapy

Checking with physician if no improvement within 7 to 10 days

Side/adverse effects

Signs of potential side effects, especially conjunctival chemosis or hyperemia

General Dosing Information

Although some manufacturers recommend a dose of 2 drops of an ophthalmic solution at appropriate intervals, the conjunctival sac will usually hold only 1 drop.
In fungal keratitis, therapy should be continued for 14 to 21 days or until the active keratitis is resolved; 4 however, if there is no improvement after 7 to 10 days of natamycin therapy, re-evaulation of the condition is recommended. 4

Ophthalmic Dosage Forms

NATAMYCIN OPHTHALMIC SUSPENSION 3 USP

Usual adult and adolescent dose

Blepharitis, fungal or
Conjunctivitis, fungal¾
Topical, to the conjunctiva, 1 drop every four to six hours initially. 2, 4

Keratitis, fungal¾
Topical, to the conjunctiva, 1 drop every one or two hours for the first three or four days, the dosage being reduced to 1 drop six to eight times a day thereafter. 4

Usual pediatric dose

Safety and efficacy have not been established. 4

Strength(s) usually available

U.S.¾5% (Rx)[Natacyn 4 (benzalkonium chloride 0.02%)]

Canada¾Not commercially available.

Packaging and storage:

Store below 40 °C (104 °F), preferably between 15 and 30 °C (59 and 86 °F), unless otherwise specified by manufacturer. Store in a tight, light-resistant container. Protect from freezing. 3, 4

Auxiliary labeling:

- For the eye.
- Shake well.
- Keep container tightly closed.
- Continue medicine for full time of treatment.