

GENTAMICIN (Ophthalmic)

Category

Antibacterial (ophthalmic).

Indications

Accepted

Blepharitis, bacterial (treatment)

Blepharoconjunctivitis (treatment)

Conjunctivitis, bacterial (treatment)

Corneal ulcers (treatment)

Dacryocystitis (treatment)

[Episcleritis (treatment)]

Keratitis, bacterial (treatment)

Keratoconjunctivitis, bacterial (treatment) or

Meibomianitis (treatment) % Ophthalmic gentamicin is indicated in the treatment of blepharitis, blepharoconjunctivitis, conjunctivitis, dacryocystitis, keratitis, keratoconjunctivitis, and acute meibomianitis caused by coagulase-negative and coagulase-positive staphylococci, *Streptococcus pyogenes*, *S. pneumoniae*, *Pseudomonas aeruginosa*, indole-positive and indole-negative *Proteus* species, *Escherichia coli*, *Klebsiella pneumoniae*, *Hemophilus influenzae*, *H. aegyptius*, *Enterobacter aerogenes* (*Aerobacter aerogenes*), *Moraxella lacunata* (*Morax-Axenfeld bacillus*), *Serratia marcescens* and *Neisseria* species, including *N. gonorrhoeae*. 3, 4, 6, 17

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

Precautions to Consider

Cross-sensitivity and/or related problems

Patients sensitive to one aminoglycoside may be sensitive to other aminoglycosides also.

Pregnancy/Reproduction

Problems in humans have not been documented.

Pregnancy Category C. Postpartum

Gentamicin given to pregnant rats in daily doses approximately 500 times the maximum recommended ophthalmic human dose resulted in offspring with decreased body and kidney weights. 3, 6

Breast-feeding

Problems in humans have not been documented. 3, 6, 17

Pediatrics

Appropriate studies on the relationship of age to the effects of this medicine have not been performed in neonates. Safety and efficacy have not been established. 3, 6

Geriatrics

Appropriate studies on the relationship of age to the effects of this medicine 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).

Risk-benefit should be considered when the following medical problem exists

Sensitivity to gentamicin 3, 6

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

Incidence less frequent

Allergic reaction or Hypersensitivity 3, 6 (itching, redness, swelling, or other sign of irritation not present before therapy); Conjunctivitis 3, 6 (redness of eye, eyelid, or inner lining of eyelid)

Incidence rare

Corneal ulcers, bacterial or fungal 3, 6 (blurred vision, eye pain, sensitivity to light, and/or tearing); Hallucinations 3, 6 (seeing, hearing, or feeling things that are not there); Thrombocytopenia 3, 6 (black, tarry stools; blood in urine or stools; unusual bleeding or bruising)

Those indicating need for medical attention only if they continue or are bothersome

Incidence less frequent

Burning or stinging 6

Those not indicating need for medical attention

For ophthalmic ointment dosage form only

Blurred vision

Patient Consultation

As an aid to patient consultation, refer to Advice for the Patient, Gentamicin (Ophthalmic).

In providing consultation, consider emphasizing the following selected information (>> = major clinical significance):

Before using this medication

>> Conditions affecting use, especially:

Sensitivity to gentamicin or to any related antibiotic, such as amikacin, kanamycin, neomycin, netilmicin, streptomycin, or tobramycin

Proper use of this medication

Proper administration technique

>> Compliance with full course of therapy

>> Proper dosing

Missed dose: Applying as soon as possible; not applying if almost time for next dose

>> Proper storage

Precautions while using this medication

Check with physician if no improvement within a few days

Avoid wearing contact lenses during treatment

Side/adverse effects

Blurred vision may occur for a few minutes after application of ophthalmic ointments

Signs of potential side effects, especially allergic reaction or hypersensitivity, conjunctivitis, bacterial or fungal corneal ulcers, hallucinations, or thrombocytopenia

General Dosing Information

Gentamicin sulfate ophthalmic solution is not for subconjunctival injection or for direct injection into the anterior chamber of the eye. 3

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.

At night the ophthalmic ointment may be used as an adjunct to the ophthalmic solution to provide prolonged contact with the medication.

In infections of the tear sacs (dacryocystitis), often occurring in children with nonpatent tear passages, hot compresses and gentle massage of the area over the tear duct may be useful adjuncts to treatment with the ophthalmic solution.