HOMATROPINE (Ophthalmic)

Accepted

Refraction, cycloplegic 8, 29 ¾Homatropine is indicated for measurement of refractive errors. 60

Uveitis (treatment) 8, 29 ¾Homatropine is indicated for pupil dilation 91 and ciliary muscle relaxation, which are desirable in acute 43 inflammatory conditions of the uveal tract.

Mydriasis, postoperative or 8

Mydriasis, preoperative 8 ¾ Homatropine may be indicated to produce mydriasis in some preoperative and postoperative conditions.

Lens opacities, axial 8, 60 ¾Homatropine is indicated as an optical aid in some cases of axial lens opacities.

Precautions to Consider

Cross-sensitivity and/or related problems

Patients sensitive to any of the other belladonna alkaloids may be sensitive to homatropine also.

Carcinogenicity

No long-term studies in animals have been done. 8

Pregnancy/Reproduction

Pregnancy¾Studies have not been done in humans; however, ophthalmic homatropine may be systemically absorbed. 8

Studies have not been done in animals. 8

FDA Pregnancy Category C. 8

Breast-feeding

It is not known whether homatropine is distributed into breast milk. 8 Problems in humans have not been documented; however, ophthalmic homatropine may be systemically absorbed.

Pediatrics

An increased susceptibility to homatropine and similar drugs (such as atropine) has been reported in infants 59 and young children 59 and in children with blond hair, 59 blue eyes, 59 Down's syndrome, 59 spastic paralysis, 59 or brain damage. 59 Only homatropine 2% should be used in these and other pediatric patients. 8

Geriatrics 8, 60

Geriatric patients are more susceptible to the effects of homatropine 59 and similar drugs (such as atropine), 59 thus increasing the potential for systemic side effects.

Drug interactions and/or related problems

The following drug interactions and/or related problems have been selected on the basis of their potential clinical significance (possible mechanism in parentheses where appropriate)¾not necessarily inclusive (>> = major clinical significance):

Note: Combinations containing any of the following medications, depending on the amount present, may also interact with this medication.

Anticholinergics or medications with anticholinergic activity, other (See Appendix II )

(if significant systemic absorption of ophthalmic homatropine occurs, concurrent use of other anticholinergics or medications with anticholinergic activity may result in potentiated anticholinergic effects)

Antiglaucoma agents, cholinergic, long-acting, ophthalmic 78, 79, 80

(concurrent use with homatropine may antagonize the antiglaucoma and miotic actions of ophthalmic long-acting cholinergic antiglaucoma agents, such as demecarium, echothiophate, and isoflurophate; concurrent use with homatropine may also antagonize the antiaccommodative convergence effects of these medications when they are used for the treatment of strabismus 91 )

Antimyasthenics or 85

Potassium citrate 84 or

Potassium supplements 83

(if significant systemic absorption of ophthalmic homatropine occurs, concurrent use may increase the chance of toxicity and/or side effects of these systemic medications because of the anticholinergic-induced slowing of gastrointestinal motility)

Carbachol or 91

Physostigmine or 91

Pilocarpine 91

(concurrent use with homatropine may interfere with the antiglaucoma action of carbachol, physostigmine, or pilocarpine. Also, concurrent use counteracts the mydriatic effect of homatropine; 91 this counteraction may be used to therapeutic advantage)

CNS depression-producing medications (See Appendix II )

(if significant systemic absorption of ophthalmic homatropine occurs, concurrent use of medications having CNS effects, such as antiemetic agents, phenothiazines, or barbiturates, may result in opisthotonos, convulsions, coma, and extrapyramidal symptoms 82 )

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 problems exist

>> Glaucoma, primary, or predisposition to angle closure 8

>> Sensitivity to homatropine 8

Risk-benefit should be considered when the following medical problems exist

Brain damage, in children 59

Down"s syndrome (mongolism), in children and adults 59

Keratoconus

(homatropine may produce fixed dilated pupil 8 )

Spastic paralysis, in children 59

Synechiae between the iris and lens 91

Side/Adverse Effects

Note: An increased susceptibility to homatropine and similar drugs (such as atropine) has been reported in infants, 59 young children, 59 children with blond hair 59 or blue eyes, 59 adults and children with Down's syndrome, 59 children with brain damage 59 or spastic paralysis, 59 and the elderly. 59 This susceptibility increases the potential for systemic side effects.

Prolonged use of homatropine may produce local irritation, resulting in follicular conjunctivitis, vascular congestion, edema, exudate, contact dermatitis, or an eczematoid dermatitis. 8

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