PRODUCT INFORMATION

ALCAINE* (proxymetacaine hydrochloride)
Eye Drops 0.5%

NAME OF THE MEDICINE
ALCAINE* Eye Drops contain proxymetacaine hydrochloride. The chemical structure of proxymetacaine hydrochloride is:

Molecular weight: 330.9
Chemical name: 2-diethylaminoethyl 3-amino-4-propoxylbenzoate hydrochloride
Empirical formula: C₁₆H₂₆N₂O₃.HCl
CAS Number: 5875-06-9

DESCRIPTION
Proxymetacaine hydrochloride is a white or almost white, crystalline powder, odourless or almost odourless. It is soluble in water and in chloroform; very soluble in absolute ethanol, practically insoluble in ether.

ALCAINE Eye Drops have been formulated as a sterile, preserved solution for topical application to the eye. ALCAINE Eye Drops contain 5 mg/mL proxymetacaine hydrochloride, together with glycerol, hydrochloric acid and/or sodium hydroxide (to adjust pH) and purified water. The solution is preserved with benzalkonium chloride (0.1 mg/mL).

PHARMACOLOGY

Pharmacology and Pharmacological actions
Proxymetacaine hydrochloride is a rapid acting local anaesthetic suitable for ophthalmic use. With a single drop, the onset of anaesthesia usually begins within 30 seconds and persists for 15 minutes or longer.

Proxymetacaine hydrochloride is a potent topical anaesthetic of the ester type.

The main site of anaesthetic action is the nerve cell membrane where proxymetacaine interferes with the large transient increase in the membrane permeability to sodium ions that is normally produced by a slight depolarisation of the membrane. As the anaesthetic action progressively develops in a nerve, the threshold for electrical stimulation gradually increases and the safety factor for conduction decreases; when this action is sufficiently well developed, block of conduction is produced.

The exact mechanism whereby proxymetacaine and other local anaesthetics influence the permeability of the cell membrane is unknown; however, several studies indicate that local anaesthetics may limit sodium ion permeability through the lipid layer of the nerve cell.
membrane. This limitation prevents the fundamental change necessary for the generation of the action potential.

**Pharmacokinetics**
After topical administration, proxymetacaine hydrochloride is absorbed into the system and generally decomposes quickly in the plasma; however, high doses can cause undesirable systemic effects.

**INDICATIONS**
ALCAINE Eye Drops are indicated for procedures in which a rapid and short-acting topical ophthalmic anaesthetic is indicated such as in cataract surgery and suture removal from the cornea, and in tonometry, gonioscopy, removal of corneal foreign bodies, conjunctival scraping for diagnostic purposes, and other short corneal and conjunctival procedures.

**CONTRAINDICATIONS**
ALCAINE is contraindicated in patients with known hypersensitivity to proxymetacaine hydrochloride or any of the excipients (see DESCRIPTION)

**PRECAUTIONS**
NOT FOR INJECTION INTO THE EYE

Prolonged use of a topical ocular anaesthetic may produce a diminished duration of the effect, thus more and more of the medication is required to produce the desired anaesthetic effect. Prolonged use or abuse may result in corneal epithelial toxicity and may manifest as epithelial defects, subsequent corneal damage, corneal infection, corneal perforation and/or corneal opacification with accompanying permanent loss of vision. The long term toxicity of proxymetacaine hydrochloride is unknown; prolonged use may possibly delay wound healing. Although exceedingly rare with ophthalmic application of local anaesthetics, it should be borne in mind that systemic toxicity (manifested by central nervous system stimulation followed by depression) may occur.

Local anaesthetics should be used cautiously and sparingly in patients with known allergies, epilepsy, cardiac disease, hyperthyroidism or in patients with respiratory problems. Patients who suffer from myasthenia gravis are particularly sensitive to the effects of anaesthetics. Patients with a low amount of acetylcholinesterase in the plasma, and patients being treated with cholinesterase inhibitors exhibit an increased risk for systemic side effects during topical application of ester-type anaesthetics.

Protection of the eyes from irritating chemicals, foreign bodies and rubbing during the period of anaesthesia is very important. Tonometers soaked in sterilising or detergent solutions should be thoroughly rinsed with sterile distilled water prior to use.

Advise patients that, due to the effect of the anaesthetic, their eyes will be insensitive and that care should be taken to avoid accidental eye injuries.

ALCAINE Eye drops may cause allergic contact dermatitis. Avoid contact with the skin.

**Effects on Fertility**
No study has been conducted to determine the possible adverse effects of proxymetacaine hydrochloride on fertility.
Use in Pregnancy
Category B2
Animal reproduction studies have not been conducted with ALCAINE* Eye Drops. It is not known whether proxymetacaine hydrochloride can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity. Proxymetacaine hydrochloride should be administrated to a pregnant woman only if clearly needed.

Use in lactation
It is not known whether this drug is excreted in human milk however, a risk to the suckling child cannot be excluded. Because many drugs are excreted in human milk, caution should be exercised when proxymetacaine hydrochloride is administered to a breastfeeding woman. Use only when considered essential by the physician.

Paediatric Use
Controlled clinical studies have not been performed with ALCAINE Eye Drops to establish safety and effectiveness in children; however, the literature cites the use of proxymetacaine hydrochloride as a topical ophthalmic anaesthetic agent in children.

Use in the elderly
There is no information available for use in patients above 65 years of age.

Use in patients with hepatic or renal impairment
The safety and efficacy of proparacaine ophthalmic solution in patients with hepatic or renal impairment have not been established.

Carcinogenicity
The carcinogenic potential of proxymetacaine hydrochloride has not been investigated in long-term animal studies. No study has been conducted to determine the potential mutagenicity of proxymetacaine hydrochloride.

Contact lenses
ALCAINE contains the preservative benzalkonium chloride which may cause eye irritation, discolor and be deposited in soft (hydrophilic) contact lenses. Contact lens wear is not recommended until the anaesthetic effect has worn-off.

Effects on ability to drive and use machines
Temporary blurred vision or other visual disturbances may affect the ability to drive or use machines. If blurred vision occurs after administration, the patient must wait until the vision clears before driving or using machinery.

INTERACTIONS WITH OTHER MEDICINES
The metabolism of local anaesthetics derived from esters may be inhibited by anticholinesterases thus increasing the risk of systemic toxicity.

ADVERSE EFFECTS
Pupillary dilatation or cycloplegic effect have rarely been observed with proxymetacaine hydrochloride. The drug appears to be safe for use in patients sensitive to other local anaesthetics, but local or systemic sensitivity occasionally occurs. Instillation of proxymetacaine in the eye at recommended concentration and dosage usually produces little or no initial irritation, stinging, burning, conjunctival redness, lacrimation or increased winking. However, some local irritation and stinging may occur several hours after instillation.
Rarely, a severe, immediate-type, apparently hyperallergic corneal reaction may occur which include acute, intense and diffuse epithelial keratitis; a grey, ground-glass appearance; sloughing of large areas of necrotic epithelium; corneal filaments and, sometimes, iritis and descemitis.

Allergic contact dermatitis with drying and fissuring of the fingertips has been reported. Softening and erosion of the corneal epithelium and conjunctival congestion and haemorrhage have been reported.

**Post Marketing Experience**
The following adverse reactions have been reported following use of proxymetacaine topical ocular preparations. Frequencies cannot be estimated from the available data. Within each System Organ Class, adverse reactions are presented in order of decreasing seriousness.

<table>
<thead>
<tr>
<th>System Organ Classification</th>
<th>MedDRA Preferred Term (v.18.1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immune system Disorders</strong></td>
<td>Hypersensitivity</td>
</tr>
<tr>
<td><strong>Nervous system Disorders</strong></td>
<td>Syncope</td>
</tr>
<tr>
<td><strong>Eye Disorders</strong></td>
<td>Corneal erosion, corneal opacity, keratitis, vision blurred, photophobia, mydriasis, eye pain, eye irritation, eye swelling, ocular discomfort, ocular hyperaemia, lacrimation increased.</td>
</tr>
</tbody>
</table>

Additionally, overuse, uncontrolled use or abuse of the product may lead to ocular lesions due to the toxic effects of the anaesthetic to the epithelium.

**DOSAGE AND ADMINISTRATION**
For ocular use only.

Single patient use only.

After cap is removed, if tamper evident snap collar is loose, remove before using product.

If more than one topical ophthalmic product is being used, the products must be administered at least 5 minutes apart. Eye ointments should be administered last.

To prevent contamination of the dropper tip and solution, care must be taken not to touch the eyelids, surrounding areas or other surfaces with the dropper tip. Keep the bottle tightly closed when not in use.

For tonometry and other procedures of short duration, instil one or two drops just prior to evaluation. For minor surgical procedures such as foreign body or suture removal, instil one to two drops every five to ten minutes for one to three doses. For prolonged anaesthesia as in cataract extraction, instil one to two drops in the eye(s) every five to ten minutes for three to five doses.

Note: Because the "blink" reflex is temporarily eliminated it is suggested that the eye be covered with a patch following this procedure.
Patients should be advised to avoid touching or rubbing the eye until the anaesthesia has worn off.

**OVERDOSAGE**
In the event of overdose or accidental ingestion, systemic effects may manifest as central nervous system (CNS) stimulation and may include nervousness, tremors or convulsions; followed by depression in CNS which may result in loss of consciousness and respiratory depression. A topical overdose of ALCAINE* Eye Drops can be flushed from the eyes with warm water. Appropriate symptomatic treatment is indicated if any systemic effects are observed.

In Australia, contact Poisons Information Centre on 13 11 26; in New Zealand call 0800 POISON or 0800 764 766 for advice on management.

**PRESENTATION AND STORAGE CONDITIONS**
Store at 2° to 8° C. Refrigerate do not freeze. Protect from light.
Shelf life: 24 months
Discard container 4 weeks after opening

ALCAINE* Eye Drops:
15 mL DROP-TAINER* dispenser, containing proxymetacaine hydrochloride 0.5% (5 mg/mL). AUST R 24299

**NAME AND ADDRESS OF THE SPONSOR**
ALCON LABORATORIES (Australia) Pty Ltd
25 Frenchs Forest Road
Frenchs Forest NSW 2086

In New Zealand this product is distributed by:
Pharmaco (NZ) Ltd
4 Fisher Crescent
Auckland 1060 New Zealand

**POISON SCHEDULE OF THE MEDICINE**
Prescription Only Medicine (Schedule 4)

**DATE OF FIRST INCLUSION IN THE ARTG**
15 October 1991

**DATE OF MOST RECENT AMENDMENT**
07 July 2016

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