

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Phenylephrine Vision 2.5%

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml of solution contains 25mg of the active ingredient Phenylephrine hydrochloride. (Phenylephrine hydrochloride 2.5 % W/V).

Excipients with known effect:

Each ml of solution contains 0.1 mg of benzalkonium chloride.
Each ml of solution contains 1.0 mg of sodium metabisulfite.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Eye drops, solution.
Clear liquid.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Phenylephrine is a direct-acting sympathomimetic which produces mydriasis after topical ocular administration. It has vasoconstrictor and decongestant action.

The medicine is used to dilate the pupil in diagnostic and/or therapeutic procedures:

- Surgical interventions;
- Refraction test without cycloplegia;
- Fundoscopy and other diagnostic tests.

4.2 Posology and method of administration

Posology

Adults

- Vasoconstriction and pupillary dilation

One drop of solution should be instilled in the eye/eyes.

If required, the dose may be repeated once, at least 1 hour after the first instillation.

Administration of a local anaesthetic few minutes before application of phenylephrine is recommended to prevent local irritation and subsequent dilution of tear fluid.

Phenylephrine is very suitable for achieving decongestion of conjunctival blood vessels, rapid and extensive dilation of the pupil without cycloplegia.

- Surgical intervention

Suitable in cases where it is necessary to achieve a short-term but wide dilation of the pupil. Instil 1 drop in the eye/eyes 30-60 min prior to surgery.

- Refraction

Phenylephrine potentiates the mydriatic effect of homatropine, cyclopentolate, tropicamide, and atropine. 1 drop of solution to be instilled in the eye/eyes.

- Ophthalmoscopy

15-30 min after instillation of 1 drop of solution provides for adequate mydriasis which lasts 1-3 hours.

- Retinoscopy

Phenylephrine vision 2.5% is used to achieve mydriasis without cycloplegia where necessary.

In all the above described procedures, more pigmented irises require higher concentration of phenylephrine.

- Diagnostic test for fading

Two drops of solution are instilled into a hyperaemic eye and within 5 min of instillation perilimbal hyperaemia could be observed. The fading is characteristic of conjunctival, superficial hyperaemia, which is more characteristic of conjunctivitis, and not iridocyclitis.

Elderly (over 65 years)

No dose adjustment is required in this patient group. In most cases repeated use is not required. Usually, the medicine is administered 5 minutes after the instillation of the selected cycloplegic medicine .

Paediatric population

To achieve adequate cycloplegia, combination with a fast-acting cycloplegic medicine may be required.

Method of administration

The drops should be instilled in the conjunctival sac; to reduce drug absorption through the nasal mucosa and facilitate local action, particularly in children and the elderly, compress the nasolacrimal duct with the fingers for 2-3 minutes or close the eye for 3 minutes after instillation.

During instillation, avoid contact between the dropper tip and the eyelids, eyelid skin or other surfaces to prevent contamination.

4.3 Contraindications

- Hypersensitivity to the active substance phenylephrine or to any of the excipients listed in section 6.1.
- Cardiac disorders;
- Hypertension;
- Tachycardia;
- Aneurysm;
- Thyrotoxicosis;
- Insulin-dependent type diabetes long-standing;

- Treatment with MAO inhibitors, tricyclic antidepressants and antihypertensives (incl. beta-blockers);
- Angle-closure glaucoma and patients with narrow chamber angle, where there is high predisposition of mydriatic-induced glaucoma.
- Premature neonates with low birth weight;
- During surgery, where there is impaired corneal epithelial barrier.

4.4 Special warnings and precautions for use

The medicine is intended for topical ocular use. The solution should not be instilled in the subconjunctival sac or directly in the anterior chamber.

The medicine should be administered with caution to patients suffering from diabetes, cerebral arteriosclerosis and long-standing asthma, as well as to children and the elderly.

In some cases, in adults there was reflex miosis after administration of phenylephrine, and further administration resulted in a less pronounced mydriasis. This effect may be clinically relevant in the dilation of the pupil prior to cataract extraction or surgery for retinal detachment.

Transient occurrence of the pigment particles floating in the anterior chamber after administration of phenylephrine may be observed in older patients, particularly after administration of higher doses.

Blood pressure monitoring is required in adult patients with cardiovascular diseases. In children with heart defects, the medicine should be used with caution.

Conjunctival hyperaemia enhances the absorption of topical phenylephrine.

Use of doses higher than recommended, administration of phenylephrine postoperatively or to traumatized eyes, decreased lacrimation, anaesthesia may increase absorption and cause a vasopressor effect.

Corneal opacity may occur if phenylephrine is used at a higher concentration (10%) in patients with impaired corneal epithelium.

Important information about some of the ingredients:

Phenylephrin Vision 2.5% contains the excipient benzalkonium chloride.

Benzalkonium chloride may be absorbed by soft contact lenses and may change the colour of the contact lenses. The patient should remove contact lenses before using this medicine and put them back 15 minutes afterwards. Benzalkonium chloride may also cause eye irritation, especially if the patient have dry eyes or disorders of the cornea (the clear layer at the front of the eye). If the patient feels abnormal eye sensation, stinging or pain in the eye after using this medicine, he should refer to the doctor.

4.5 Interaction with other medicinal products and other forms of interaction

Antihypertensives

Topical application of phenylephrine is associated with possible reverse effect of antihypertensive agents, which in some cases may be fatal.

MAO-inhibitors

There is an increased risk of adrenergic reactions. This applies not only to concomitant administration, but also when MAO inhibitors have been administered up to three weeks prior to the use of phenylephrine.

Tricyclic antidepressants

Pressor response to adrenergic agents and the risk of cardiac arrhythmia may be potentiated in patients receiving tricyclic antidepressants, as well as a recent discontinuation.

Halothane

Due to an increased risk of ventricular fibrillation, phenylephrine should be used with caution during general anesthesia performed with anesthetics that increase myocardial sensitivity to sympathomimetics.

Cardiac glycosides or quinidine

There is an increased risk of arrhythmia.

Atropine

Concomitant use may potentiate the adrenergic effects and even cause tachycardia in some patients, especially in children.

4.6 Fertility, pregnancy and lactation

Pregnancy

The safety of phenylephrine during pregnancy in humans has not been established, and therefore the product can be used only after careful evaluation of the benefit to the mother/potential risk to the foetus and neonate.

Breastfeeding

The safety of phenylephrine during lactation in humans has not been established, and therefore the product can be used only after careful evaluation of the benefit to the mother/potential risk to the infant.

4.7 Effects on ability to drive and use machines

As with other topical ocular products, temporary blurred vision or other visual disturbances may occur after instillation of Phenylephrin Vision, which may affect the ability to drive and use machines.

If the patients experience blurred vision after administration of this product, they should be instructed to wait until vision clears before driving or using machines.

4.8 Undesirable effects

The following convention has been used for classification of adverse effects in terms of frequency: very common ($\geq 1 / 10$), common ($\geq 1 / 100$ to $< 1/10$), uncommon ($\geq 1 / 1000$ to $< 1/100$), rare ($\geq 1 / 10000$ to $< 1/1000$), very rare ($< 1/10\ 000$), not known (frequency cannot be estimated from the available data).

The following adverse reactions have been reported with phenylephrine 25 mg/ml eye drops. Frequency cannot be estimated from available data. When grouping, adverse drug reactions are listed in order of decreasing seriousness.

Eye disorders

Not known: Pain, irritation, temporary blurred vision and other visual disturbances, photophobia, increased conjunctival sensitivity, allergic reactions, ocular hyperaemia.

There have been reports of allergic blepharoconjunctivitis - the reaction usually starts 3-4 hours after administration of the product and may persist for approximately 12 hours, regression occurs gradually within 72 hours.

Cardiac disorders

Not known: palpitations, tachycardia, extrasystoles, cardiac arrhythmias and hypertension.

Serious cardiac disorders such as spasm of the coronary artery, ventricular arrhythmia, tachycardia and myocardial infarction were observed after administration of eye drops solution at a concentration of 10% phenylephrine.

These adverse effects, which in some cases can be fatal, were usually observed in patients with cardiovascular disorders and elderly patients.

There have been reports of a sharp increase in blood pressure in premature neonates as well as in children and adults with idiopathic orthostatic hypotension.

Immune system disorders

Not known: hypersensitivity.

Nervous system disorders

Not known: dizziness.

Skin and subcutaneous tissue disorders

Not known: contact dermatitis.

Respiratory, thoracic and mediastinal disorders

Not known: pulmonary oedema, dyspnoea.

Paediatric population

Not known (frequency cannot be estimated from the available data): periorbital pallor in premature patients.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorization of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Any suspected adverse events should be reported to the Ministry of Health according to the National Regulation by using an online form: <https://sideeffects.health.gov.il>.

4.9 Overdose

The likelihood of an overdose with topical application of the product is low. Severe toxic effects associated with overdose of phenylephrine occur rapidly and resolve quickly, treatment is supportive. They are usually manifested by sympathetic stimulation - palpitations, tachycardia followed by bradycardia, hypertension, pulmonary edema and cardiac arrest.

Rapid intravenous administration of a fast-acting alpha-adrenergic blockers, such as phentolamine (2-5 mg i.v.) is recommended.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Ophthalmologicals, Mydriatics and cycloplegics, Sympathomimetics, excl. antiglaucoma preparations; ATC code: S01FB01

Mechanism of action

Phenylephrine is a direct sympathomimetic that stimulates alpha-adrenergic receptors.

Pharmacodynamic effects

Ocular instillation causes mydriasis, usually does not exert cycloplegic action. Time to full mydriasis is usually 15 to 60 minutes.

The maximum duration of mydriasis is 60-90 minutes and full resolution occurred within 3-7 hours after administration.

Mydriatic effect is antagonized by thymoxamine.

5.2 Pharmacokinetic properties

At physiological pH, phenylephrine is a weak base. Penetration rate in ocular tissues and structures is determined by the condition of the ocular cornea. Intact cornea acts as a physical barrier to the penetration of phenylephrine, and this effect is supplemented by some metabolic activity of this ocular structure.

In case of impaired integrity of the corneal epithelium the extent of absorption of phenylephrine may be increased.

There is evidence that following topical application of phenylephrine (10% solution) into the eye, the maximum plasma concentrations were in the range of 10.2 ± 7.9 ng/ml and were attained within 10 min after instillation.

5.3 Preclinical safety data

Preclinical data reveal no special risk for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenicity, reproductive toxicity and developmental toxicity.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Boric acid
Sodium metabisulphite
Benzalkonium chloride
Disodium edetate
Sodium hydroxide and/or hydrochloric acid (to adjust pH)
Water for injections

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

The expiry date of the product is indicated on the packaging materials.
For shelf life after opening please refer to clause 6.4.

6.4 Special precautions for storage

Store below 25°C.

Do not freeze.

Keep out of sight and reach of children.

Shelf life and storage conditions After first opening of the bottle: 28 days at temperature not above 25°C in a tightly closed container.

6.5 Nature and contents of container

White plastic bottle of low-density polyethylene (LDPE) with LDPE plastic applicator-dropper, closed with a white HDPE plastic screw cap with a protective "tamper-evident" ring.

1 (one) bottle of 5 ml with a package leaflet is packed in a carton box.

6.6 Special precautions for disposal

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER AND IMPORTER

RAZ PHARMACEUTICS LTD.,
31 Gesher Haetz, Industrial Park, Emek Hefer, Israel

8. MARKETING AUTHORISATION NUMBER(S)

176-02-37582-99.

This leaflet was approved in January 2025 according to the MoH's guideline.