

DIAGNOSTIC AGENTS > DYES

Fluorescein sodium

● INDICATIONS AND DOSE

Detection of lesions and foreign bodies

- ▶ TO THE EYE
- ▶ Child: Use sufficient amount to stain damaged areas

- **PRESCRIBING AND DISPENSING INFORMATION** Although multi-dose fluorescein eye drops commonly contain preservatives, preservative-free unit dose vials may be available.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

Eye drops

- ▶ **Fluorescein sodium** (Bausch & Lomb UK Ltd)
Fluorescein sodium 10 mg per 1 ml Minims fluorescein sodium 1% eye drops 0.5ml unit dose | 20 unit dose [P] £9.25
- Fluorescein sodium 20 mg per 1 ml Minims fluorescein sodium 2% eye drops 0.5ml unit dose | 20 unit dose [P] £9.25

MIOTICS > PARASYMPATHOMIMETICS

Acetylcholine chloride

● INDICATIONS AND DOSE

Cataract surgery | Penetrating keratoplasty | Iridectomy | Anterior segment surgery requiring rapid complete miosis

- ▶ TO THE EYE
- ▶ Child: (consult product literature)

- **UNLICENSED USE** Not licensed for use in children.
- **CAUTIONS** Asthma · gastro-intestinal spasm · heart failure · hyperthyroidism · peptic ulcer · urinary-tract obstruction
- **SIDE-EFFECTS** Bradycardia · corneal decompensation · corneal oedema · dyspnoea · flushing · hyperhidrosis · hypotension
- **PREGNANCY** Avoid unless potential benefit outweighs risk—no information available.
- **BREAST FEEDING** Avoid unless potential benefit outweighs risk—no information available.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

Irrigation

- ▶ **Miochol-E** (Bausch & Lomb UK Ltd)
Acetylcholine chloride 20 mg Miochol-E 20mg powder and solvent for solution for intraocular irrigation vials | 1 vial [PoM] £7.28
- ▶ **Miphtel** (Farmigee S.p.A.)
Acetylcholine chloride 20 mg Miphtel 20mg powder and solvent for solution for intraocular irrigation ampoules | 6 ampoule [PoM] £43.68 (Hospital only)

SYMPATHOMIMETICS > VASOCONSTRICTOR

Phenylephrine hydrochloride

● INDICATIONS AND DOSE

Mydriasis

- ▶ TO THE EYE
- ▶ Child: Apply 1 drop, to be administered before procedure, a drop of proxymetacaine topical anaesthetic may be applied to the eye a few minutes before using phenylephrine to prevent stinging

- **CONTRA-INDICATIONS** 10% strength eye drops in children · 10% strength eye drops in neonates (in neonates) · aneurysms · cardiovascular disease · hypertension · thyrotoxicosis

- **CAUTIONS** Asthma · corneal epithelial damage · darkly pigmented iris is more resistant to pupillary dilatation and caution should be exercised to avoid overdose · diabetes (avoid eye drops in long standing diabetes) · mydriasis can precipitate acute angle-closure glaucoma in the very few children who are predisposed to the condition because of a shallow anterior chamber · neonates are at an increased risk of systemic toxicity · ocular hyperaemia · susceptibility to angle-closure glaucoma

- **INTERACTIONS** → Appendix 1: sympathomimetics, vasoconstrictor

- **SIDE-EFFECTS** Arrhythmias · conjunctivitis allergic · eye discomfort · hypertension · myocardial infarction (usually after use of 10% strength in patients with pre-existing cardiovascular disease) · palpitations · periorbital pallor · vision disorders

- **PREGNANCY** Use only if potential benefit outweighs risk.

- **BREAST FEEDING** Use only if potential benefit outweighs risk—no information available.

- **PRESCRIBING AND DISPENSING INFORMATION** Although multi-dose phenylephrine eye drops commonly contain preservatives, preservative-free unit dose vials may be available.

● **PATIENT AND CARER ADVICE**

- Driving and skilled tasks Patients should be warned not to undertake skilled tasks (e.g. driving) until vision clears after mydriasis.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug. Forms available from special-order manufacturers include: eye drops

Eye drops

EXCIPIENTS: May contain Disodium edetate, sodium metabisulfite

- ▶ **Phenylephrine hydrochloride** (Bausch & Lomb UK Ltd)
Phenylephrine hydrochloride 25 mg per 1 ml Minims phenylephrine hydrochloride 2.5% eye drops 0.5ml unit dose | 20 unit dose [P] £11.87

4.1 Post-operative pain and inflammation

Eye, surgical and peri-operative drug use

Ocular peri-operative drugs

Drugs used to prepare the eye for surgery and drugs that are injected into the anterior chamber at the time of surgery are included here.

Sodium hyaluronate p. 698 is used during surgical procedures on the eye.

Apraclonidine p. 710, an alpha₂-adrenoceptor agonist, reduces intra-ocular pressure possibly by reducing the production of aqueous humour. It is used for short-term treatment only.

Balanced Salt Solution is used routinely in intra-ocular surgery.

Povidone-iodine p. 702 is used for peri-ocular and conjunctival antiseptics before ocular surgery to support postoperative infection control.

Ocular local anaesthetics

Oxybuprocaine hydrochloride p. 704 and tetracaine p. 704 are widely used topical local anaesthetics. Proxymetacaine hydrochloride p. 704 causes less initial stinging and is useful for children. Oxybuprocaine hydrochloride or a combined preparation of lidocaine hydrochloride p. 852 and fluorescein sodium above is used for tonometry. Tetracaine produces a more profound anaesthesia and is suitable for use before