

CYCLOPENTOLATE

Trade Name	Cyclopentolate Hydrochloride Minims 0.5%, Chauvin Pharmaceuticals Ltd UK.
Class	Mydriatic and cycloplegic
Mechanism of Action	Tertiary amine anticholinergic: relaxes sphincter muscle of iris, and blocks accommodation of ciliary muscle of lens
Indications	Ophthalmic examination (used with phenylephrine for fundus examination)
Contraindications	Allergy to cyclopentolate
Supplied As	Cyclopentolate Hydrochloride 0.5% single use (no preservative)
Dilution	Add 0.5mL sterile water to minim to dilute to 0.25% just before administration
Dosage	1 microdrop of 0.25% per eye
Interval	30-60 minutes before examination
Administration	Draw up the 0.25% cyclopentolate from the minim into a 1mL syringe. Take a 24g cannula, remove the needle and attach the cannula to the 1mL syringe and administer one microdrop topically into the eye
Compatible With	Phenylephrine, sodium chloride, sterile water
Incompatible With	N/A
Monitoring	For adverse reactions – see below
Stability	0.5% - manufacturer's expiry on box 0.25% - discard unused solution immediately after use do not use the same minim for multiple patients
Storage	Fridge (2- 8°C) Protect from light (make sure the minims are stored in a closed box or dark coloured container -the neonatal fridges always have their lights on)
Adverse Reactions	Increased intraocular pressure, burning sensation in the eye, systemic anticholinergic effects especially with prolonged use, fever, tachycardia, vasodilation, dry mouth, restlessness, feed intolerance, reduced gastric motility (historical reports of NEC).
Metabolism	Peak effects at 15-60 minutes; recovery can take up to 24 hours, but thought to be sooner if phenylephrine used. Systemic absorption occurs.

Comments	If systemic side effects seen, can minimise these by applying pressure to lacrimal sac during and for 1-2 minutes after eyedrop administration (reduces systemic absorption).
References	<ol style="list-style-type: none"> 1. Lexi-comp's Pediatric Dosage Handbook 6th ed 1999-2000 2. Neofax 2000 3. American Hospital Formulary Service AHFS 2001 4. www.medsafe.govt.nz
Updated By	<p>K. Simonsen; P Schmidt & B Robertshawe October 2005</p> <p>A Lynn, B Robertshawe June 2012 (re-order profile)</p> <p>A Lynn, B Robertshawe, N Austin April 2013 (change to 0.25%)</p> <p>A Lynn, B Robertshawe March 2021</p> <p>A Lynn, N Austin, C Muir Sept 2022 (based on Little Eye Study)</p>