

Alert	Watch for apnoeas and abdominal distension following administration. Lower concentration solutions and regimens minimising number of additional drops are recommended.
Indication	Mydriatic (dilates the pupil) and cycloplegic (prevents accommodation of the eye) for ophthalmic examinations and therapeutic procedures.
Action	Muscarinic acetylcholine receptor competitive antagonist. Prevents the accommodative muscle of the ciliary body and the sphincter muscle of the iris from responding to cholinergic stimulation.
Drug Type	Antimuscarinic.
Trade Name	Minims® Cyclopentolate hydrochloride.
Presentation	Cyclopentolate hydrochloride 0.5% single-use preservative free eye drop, 0.5 mL per minim.
Dosage/Interval	Cyclopentolate 0.5% is used in combination with phenylephrine 2.5% with or without tropicamide 0.5%. Suggested regimens are: REGIMEN 1: Phenylephrine 2.5% + cyclopentolate 0.5% + tropicamide 0.5% eye drops [1-4]. Instil one drop of each agent (5 minutes apart) into each eye 60 minutes prior to examination. Repeat if pupillary dilatation inadequate. Perform examination 60 to 120 minutes after instillation. REGIMEN 2: Phenylephrine 2.5% + cyclopentolate 0.5% eye drops [5]. Instil one drop of each agent (5 minutes apart) into each eye 60 minutes prior to examination. Repeat if pupillary dilatation inadequate. Perform examination 60 to 120 minutes after instillation. Dark irides may require additional drops.
Maximum daily dose	REGIMEN 1: 3 drops of each eye drop. REGIMEN 2: 4 drops of each eye drop.
Route	Topical instillation into the eyes from the minim or use a microdrop (5–7 microL) cannula.
Preparation/Dilution	Not applicable.
Administration	Apply pressure to the lacrimal sac during and for 60 seconds after instillation of eye drop to minimise systemic absorption. Wipe away excess medication. Consider withholding feeds for four hours from administration of the last drops to reduce incidence of feed intolerance.
Monitoring	Heart rate and oxygen saturation in infants with bronchopulmonary dysplasia. Signs of ileus.
Contraindications	Necrotising enterocolitis (NEC) at the time of eye examination.
Precautions	Bronchopulmonary dysplasia – may increase absorption and decrease clearance. ^{22,26} Severe neurological impairment – may increase risk of seizures. Feeding intolerance. Lower concentration solutions and regimens minimising number of additional drops are recommended to minimise toxicity.
Drug Interactions	
Adverse Reactions	Feeding intolerance, abdominal distension and increased gastric residuals. Apnoea, transient bradycardia (especially infants on respiratory support). Stinging or burning of eye. Tachycardia and increased blood pressure. Rarely, dry mouth, urinary retention, fever, vasodilatation, restlessness, agitation, seizures.

Cyclopentolate

Newborn Use Only

2018

Compatibility	Phenylephrine, tropicamide, amethocaine
Incompatibility	No information.
Stability	Discard unused portion immediately after use.
Storage	Store in refrigerator at 2°C to 8°C. Do not freeze. Protect from light.
Special Comments	Check correct strength of Minims® Cyclopentolate Eye Drops. Do NOT use 1% in neonates.
Evidence summary	Refer to full version.
References	Refer to full version.

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