Tropicamide
Newborn Use Only

2018

Alert	Watch for apnoeas and abdominal distension following administration. Lower concentration solutions and regimens minimising number of additional drops are recommended.
Indication	Induction of mydriasis and cycloplegia for diagnostic and therapeutic ophthalmic procedures.
Action	Anticholinergic drug that produces pupillary dilatation by inhibiting the sphincter pupillae muscle and paralysis of accommodation.
Drug Type	Antimuscarinic.
Trade Name	Minims Tropicamide Eye Drops Mydriacyl Eye drops
Presentation	Minims Tropicamide Eye Drops 0.5%, 1.0% solution. Mydriacyl Eye drops 0.5%, 1.0% 15 mL (multidose—excipients benzalkonium chloride 0.01%, sodium chloride, disodium edetate, hydrochloric acid and/or sodium hydroxide, purified water).
Dosage/Interval	Use in combination with phenylephrine 2.5% with or without cyclopentolate 0.5%. **<u>REGIMEN 1:</u>** 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. **<u>REGIMEN 2:</u>** Phenylephrine 2.5% + tropicamide 0.5% eye drops [5-7]. 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 agent. REGIMEN 2: 4 drops of each agent.
Route	Topical instillation into the eyes from the container or use a microdrop (5–7 microL) cannula.
Preparation/Dilution	
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	Blood pressure, heart rate, oxygen saturation in infants with bronchopulmonary dysplasia or at risk of apnoea. Signs of ileus.
Contraindications	Necrotising enterocolitis (NEC) at the time of examination.
Precautions	Bronchopulmonary dysplasia. 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	Cyclopentolate, phenylephrine, tetracaine (amethocaine)
Adverse Reactions	Feeding intolerance, abdominal distension and increased gastric residuals. Apnoea, transient bradycardia (especially infants on respiratory support). Stinging or burning of eye. Rarely dry mouth, urinary retention, fever, tachycardia, vasodilatation, restlessness, agitation, seizures.
Compatibility	Phenylephrine, cyclopentolate, tetracaine (amethocaine)
Incompatibility	No information.

Tropicamide
Newborn Use Only

2018

Stability	Discard immediately after use.
Storage	Store in refrigerator at 2°C to 8°C. Do not freeze. Protect from light.
Special Comments	Without lacrimal sac occlusion, approximately 80% of each drop may pass through the nasolacrimal system and be available for rapid systemic absorption by the nasal mucosa. Consider withholding feeds for four hours from administration of the last drops. Used in conjunction with topical anaesthetic, e.g. tetracaine (amethocaine).
Evidence summary	Refer to full version.
References	Refer to full version.

Original version Date: 13/03/2018	**Author: NMF Consensus Group**
Current Version number: 1.0	**Current Version Date:** 13/03/2018
Risk Rating: Medium	**Due for Review:** 13/03/2021
Approval by: JHCH CQ&PCC	**Approval Date: 24/07/2018**

Authors Contribution

Original author/s	Himanshu Popat
Expert review	Mark Jacobs, Hughie Tsang, Kimberley Tan
Evidence Review	David Osborn
Nursing Review	Eszter Jozsa
Pharmacy Review	Jing Xiao, Mariella De Rosa
Final content and editing review of the original	Ian Whyte
Electronic version	Mariella De Rosa, Cindy Chen, Ian Callander
Facilitator	Srinivas Bolisetty