South Australian Neonatal Medication Guidelines

Phenylephrine

 $2.5\%\ eye\ drops$ © Department for Health and Wellbeing, Government of South Australia. All rights reserved.

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

Dose and Indications

Mydriasis

Topical

1 drop into the appropriate eye 30 to 60 minutes prior to eye examination

Preparation and Administration

Topical

Neonates are particularly prone to systemic absorption. Apply gentle finger pressure to the lacrimal sac (the inner corner of the eye to block the tear duct) for up to 2 minutes following application. Wipe away any excess medication.

Avoid touching the conjunctiva with the tip of the dispenser and discard unused solution.

Adverse Effects

Common

Stinging on instillation, wincing, rebound miosis and hyperaemia.

Infrequent

Periorbital blanching of skin (benign).

Increases in blood pressure have been described and are likely to be more frequent than clinically recognised.



Phenylephrine 2.5% eye drops

Monitoring

> Preterm babies undergoing an examination for retinopathy should be monitored for at least 24 hours if less than 36 week post-conception or if they have reacted with apnoea to the previous examination. Babies greater than 36 weeks post-conception do not require routine monitoring.

Practice Points

- > Maximal mydriasis occurs after 60–90 minutes; duration of action is 5–7 hours. Does not affect accommodation of the eye.
- > Mydriasis can precipitate acute angle-closure glaucoma (usually in those who are predisposed to the condition because of a shallow anterior chamber).
- > A second application of drops may be required after 15 minutes if pupils have not started dilating, especially in babies with darker irides.
- > Usually used in combination with cyclopentolate.
- If multiple eye drops or doses are required, separate doses by 2-5 minutes to allow for absorption.
- > May cause decreased pulmonary compliance, tidal volume, and peak air flow in babies with bronchopulmonary dysplasia
- > Caution in patients receiving beta-blockers (e.g. propranolol) due to risk of hypertension, from subsequent unopposed adreno-adrenergic activity
- Increases in blood pressure are unlikely to be of clinical significance for most babies. However, acute blood pressure increases may be significant in preterm babies at risk of IVH and with pre-existing hypertension. Care should be exercised in these circumstances and consideration given to using cyclopentolate alone.

Document Ownership & History

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Endorsed by: Safety and Quality, Clinical Support and Improvement, SA Health

Next review due: 29/06/2027

ISBN number: 978-1-76083-645-0

CGSQ reference: NMG026

Policy history: Is this a new policy (V1)? **N**

Does this policy amend or update and existing policy? Y

If so, which version? V2

Does this policy replace another policy with a different title? N

If so, which policy (title)?

Approval Date	Version	Who approved New/Revised Version	Reason for Change
18/10/2023	V2.1	Domain Custodian, Clinical Governance, Safety and Quality	Change in administration time
29/06/2022	V2	Domain Custodian, Clinical Governance, Safety and Quality	Reviewed in line with 5 year review schedule
6/10/2017	V1	SA Maternal & Neonatal Clinical Network	Original SA Maternal & Neonatal Clinical Network approved version.