South Australian Neonatal Medication Guidelines

Chlorothiazide

250 mg/5 mL (SAS)

Note:

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.

SA Health does not accept responsibility for the quality or accuracy of material on websites linked from this site and does not sponsor, approve or endorse materials on such links.

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

Treatment of Mild to Moderate Fluid Overload States Including Congestive Heart Failure, Bronchopulmonary Dysplasia and Mild to Moderate Hypertension.

Oral

10 mg/kg every twelve hours

> Dose may be increased up to 20 mg/kg every twelve hours.

> Usually used in combination with spironolactone, with spironolactone acting to spare potassium and avoid potassium supplementation.

Fluid Retention Associated with Hyperinsulinaemia Hypoglycaemia Treated with Diazoxide

Oral

5 mg/kg/dose every twelve hours

Preparation and Administration

Oral

The 250 mg/5 mL SAS solution (Diuril®) contains 50 mg/mL chlorothiazide:

Dose	5 mg	10 mg	15 mg	20 mg	25 mg	30 mg
Volume	0.1 mL	0.2 mL	0.3 mL	0.4 mL	0.5 mL	0.6 mL

This product is not registered in Australia and is accessed under the Special Access Scheme (SAS). Parental consent must be received prior to use and an SAS form completed.

Government of South Australia
SA Health

Adverse Effects

Common

Polyuria, hypotension, hyponatraemia, hypokalaemia, hyperuricaemia, hypochloraemic alkalosis, hypomagnesaemia, constipation, diarrhoea, vomiting, hyperglycaemia.

Infrequent

Rash, dyslipidaemia, leucopenia.

Rare

Intrahepatic cholestatic jaundice, cholecystitis, pancreatitis, agranulocytosis, aplastic anaemia, haemolytic anaemia, thrombocytopenia, dermatitis, urticaria, photosensitivity, toxic epidermal necrolysis, purpura, necrotising vasculitis.

Monitoring

- Serum electrolytes, calcium, phosphorus, and glucose.
- Urine output.
- Blood pressure.

Practice Points

- Contraindicated in patients with anuria.
- Use cautiously in patients with hepatic or renal impairment and patients with significant electrolyte dysfunction (particularly hypercalcaemia).
- Potassium and sodium depletion is a common side effect and supplementation may be necessary with prolonged therapy.
- Additional potassium loss may occur if given with other drugs that reduce potassium concentrations (e.g. frusemide).
- Caution may be needed if co-administered with digoxin as cardiotoxicity is more likely in patients with hypokalaemia.
- As chlorothiazide may displace bilirubin from albumin it should be used with caution in neonates with significant jaundice.

References

Kapoor RR, Flanagan SE, James C, Shield J, Ellard S, Hussain K. Hyperinsulinaemic hypoglycaemia. Archives of Disease in Childhood. 2009 Jun 1;94(6):450-7.

Stewart, 2011, Diuretics acting on the distal renal tubule for preterm infants with (or developing) chronic lung disease (Review), Cochrane Database of Systematic Reviews, The Cochrane Collaboration

Dionne et al, 2010, Hypertension in infancy: diagnosis, management and outcome, Pediatric Nephrol, vol 27, pp 17-32

Suggested citation:

Neonatal Community of Practice. Chlorothiazide 250 mg/5mL NMG064 [Internet]. South Australian Neonatal Medication Guideline. SA Health, Government of South Australia. 2024 [updated 30 July 2024, version 3.0]. Available from: http://www.sahealth.sa.gov.au/neonatal.

OFFICE USE ONLY

Document Ownership & History

Developed by: Maternal, Neonatal & Gynaecology Strategic Executive Leadership Committee
Contact: Health.NeoMed@sa.gov.au
Approved by: Clinical Guideline Domain Custodian
Next review due: 30/07/2029
CGSQ Number: NMG064
History: Is this a new Neonatal Medication Guideline (V1)? **N**
Does this policy amend or update and existing Neonatal Medication Guideline? **Y**
If so, which version? **V2.1**
Does this policy replace another Neonatal Medication Guideline with a different title? **N**
If so, which Neonatal Medication Guideline (title)?

Approval Date	Version	Who approved New/Revised Version	Reason for Change
30/07/2024	V3	Clinical Guideline Domain Custodian	Formal review
06/08/2019	V2.1	SA Health Safety and Quality Strategic Governance Committee	Change in product and strength
05/07/2018	V2	SA Health Safety and Quality Strategic Governance Committee	Formally reviewed in line with 5 year scheduled timeline for review.
11/2012	V1	SA Maternal & Neonatal Clinical Network	Original SA Maternal & Neonatal Clinical Network approved version.

Government of South Australia
SA Health