South Australian Neonatal Medication Guidelines

Chloral hydrate

100mg/mL oral mixture

Note:
Practice poi

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

This is a High Risk Medication ⚠
Potentially toxic medication. An overdose can be rapidly fatal.

Dose and Indications

Sedation

Oral

8mg/kg/dose every 6 to 8 hours

Procedural sedation

Oral

25 to 75 mg/kg as a single dose, given 30 minutes before the procedure

Preparation and Administration

Oral

For oral use, the mixture should be diluted or administered after feeding to reduce gastric irritation

There are **TWO STEPS** to the dilution process.

STEP ONE: Draw up the dose of chloral hydrate using the 100mg/mL oral mixture

STEP TWO: Dilute with an equal volume of water for injection or enteral feed.

For preterm babies it is preferred to use water for injection as the choice of diluent.

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Adverse Effects

Common

Gastric irritation, vomiting and diarrhoea (particularly if given on an empty stomach), paradoxical excitement

Respiratory depression, cardiac depression with high or repeated dosing

Rare

Vasodilation, hypotension, arrhythmias, hyperbilirubinaemia

Monitoring

- Respiration
- Heart rate and oxygen saturation
- Blood pressure
- Liver function tests (if patient receiving regular dosing)

If used for procedural sedation monitor for at least 4 hours. Preterm infants have an increased risk of bradycardia for up to 24 hours post administration

Practice Points

- Chloral hydrate is of no use in the control of pain
- Onset of action is approximately 15 minutes with duration of action up to 2 hours
- Should be used with caution in patients with renal or hepatic disease due to the potential for accumulation
- Repeated administration can lead to accumulation
- May increase the elimination of phenytoin thereby reducing its therapeutic action
- Chloral hydrate is hyperosmolar. Use caution in in preterm infants at increased risk of necrotising enterocolitis
- Half-life of active metabolite of chloral hydrate may be prolonged in preterm infants, increasing the risk of prolonged recovery time and oxygen requirement

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