South Australian Neonatal Medication Guidelines

Chloral hydrate
100mg/mL oral mixture

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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.

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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

Sedation¹

Oral

8mg/kg/dose every 6 to 8 hours

Sedation prior to imaging procedures

Oral

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

Preparation and Administration

Oral

Dilute 1mL of chloral hydrate 100mg/mL with 1mL water for injection to make a 50mg/mL mixture.

<table>
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<th>Dose</th>
<th>10mg</th>
<th>20mg</th>
<th>40mg</th>
<th>80mg</th>
<th>100mg</th>
<th>150mg</th>
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<tbody>
<tr>
<td>Volume</td>
<td>0.2mL</td>
<td>0.4mL</td>
<td>0.8mL</td>
<td>1.6mL</td>
<td>2mL</td>
<td>3mL</td>
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Discard the remainder of the diluted solution immediately.

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

Common
Respiratory depression, cardiac depression, vomiting, diarrhoea (particularly if given on an empty stomach), paradoxical excitement.

Rare
Vasodilation, hypotension, arrhythmias, hyperbilirubinaemia.

Monitoring
> Respiration
> Heart rate and oxygen saturation
> Liver function tests
> Blood pressure

Practice Points
> Onset of action is approximately 15 minutes with duration of action up to 2 hours.
> Chloral hydrate is of no use in the control of pain
> Should be used with caution in patients with renal or hepatic disease due to the potential for accumulation.
> May increase the elimination of phenytoin thereby reducing its therapeutic action.
> Chloral hydrate is hyperosmolar. Use caution in preterm infants at increased risk of necrotising enterocolitis.
> Repeated administration can lead to accumulation.
> Flumazenil may be of some value in the management of an overdose

References
Document Ownership & History

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<td>V1.1</td>
<td>SA Health Safety and Quality Strategic Governance Committee</td>
<td>Review date extended to 5 years following risk assessment. New Template.</td>
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