South Australian Neonatal Medication Guidelines

adrenaline (diluted) for resuscitation

0.1mg/mL injections (1 in 10 000)

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 ⚠

An overdose can be rapidly fatal.

There are two strengths of adrenaline available. This guideline uses the dilute 0.1mg/1mL form.

For information on undiluted adrenaline, see adrenaline (undiluted) 1mg/mL

Synonyms

Epinephrine

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NeoMed@health.sa.gov.au

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SA Health

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Dose and Indications

Resuscitation

Endotracheal

Gestation	Dose of 0.1mg/mL adrenaline
Preterm	1mL (0.1mg)/dose as a bolus dose
Term	3mL (0.3mg)/dose as a bolus dose

Repeat after 2 to 3 minutes if necessary

50 to 100micrograms/kg (0.5 to 1mL/kg of 1 in 10 000), but as weight is usually not available at birth use above table.

Endotracheal route should only be used if no intravenous access available; if an intratracheal dose is not effective an intravenous dose should be administered as soon as possible.

Intravenous

Gestation	Dose of 0.1mg/mL adrenaline
Preterm	0.5mL (0.05mg)/doseas a bolus dose
Term	1mL (0.1mg)/doseas a bolus dose

Repeat after 2 to 3 minutes if necessary

10 to 30micrograms/kg (0.1 to 0.3mL/kg of 1 in 10 000), but as weight is usually not available at birth use above table.

Preparation and Administration

Endotracheal

Administered undiluted followed by positive pressure ventilation (PPV)

Intravenous

Only administer dilute adrenaline 1mg/10mL (1 in 10,000) for resuscitation.

Gestational Age	Preterm	Term
Dose	0.05mg (=50micrograms)	0.1mg (=100micrograms)
Volume	0.5mL	1mL

Administered as a push.

Discard remaining solution.

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Compatible Fluids

Glucose 5%, glucose 10%, sodium chloride 0.9%, glucose / sodium chloride combinations

Adverse Effects

Common

Tachycardia, tremor, sweating and hyperglycaemia. Refer to the monograph on adrenaline (undiluted) for a more extensive list of adverse effects.

Monitoring

- Cardiac monitoring and continuous medical supervision.

Practice Points

- Caution - there are two strengths of adrenaline available
- There is insufficient evidence for the use of endotracheal adrenaline, but it is likely that a higher dose will be required to achieve similar blood levels and effect
- Adrenaline is sensitive to light and air. Protection from light is recommended

Reference

1. Australian Resuscitation Council Guideline 13.7 Medication or fluids for the resuscitation of the newborn infant. December 2010

Version control and change history

PDS reference:OCE use only

Version	Date from	Date to	Amendment
1.0	November 2012	current	Original version

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