## South Australian Neonatal Medication Guidelines

# Hydralazine © Department for Health and Wellbeing, Government of South Australia. All rights reserved.

#### 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 quideline 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

#### Hypertension

#### Intravenous

0.1 to 0.5mg/kg/dose every 6 to 8 hours, titrating according to response up to a maximum of 2mg/kg/dose every 6 hours.

#### Oral

0.25 to 1mg/kg/dose every 8 hours, titrating according to response up to a maximum of 3mg/kg/dose every 8 hours.



# Preparation and Administration

#### Intravenous

There are **TWO STEPS** to this process.

**STEP ONE:** Add 1mL of Water for Injection to the ampoule (20mg) and shake gently to dissolve. The resulting solution contains 20mg/mL hydralazine.

**STEP TWO:** Further dilute 0.5mL of the 20mg/mL hydralazine solution with 9.5mL of sodium chloride0.9% (final volume of 10mL). The resulting solution contains 1mg/mL hydralazine.

| Dose   | 0.1mg | 0.2mg | 0.3mg | 0.4mg | 0.5mg | 1mg | 2mg |
|--------|-------|-------|-------|-------|-------|-----|-----|
| Volume | 0.1ml | 0.2ml | 0.3ml | 0.4ml | 0.5ml | 1ml | 2ml |

Administer dose by slow intravenous injection over 5 to 20 minutes.

#### Oral

The injection may be given orally. Add 2mL of Water for Injection to the ampoule (20mg) and shake gently to dissolve. The resulting solution contains 10mg/mL hydralazine.

| Dose   | 1 mg  | 2mg   | 3mg   | 4mg   | 5mg   |
|--------|-------|-------|-------|-------|-------|
| Volume | 0.1ml | 0.2ml | 0.3ml | 0.4ml | 0.5ml |

Administer oral hydralazine with food to enhance absorption

## **Compatible Fluids**

Sodium chloride 0.9%

## Adverse Effects

## Common

Flushing, tachycardia, palpitations, oedema, gastrointestinal disturbances

## Rare

Blood dyscrasia, rash, fever, nasal congestion



## Monitoring

- > Blood pressure
- > Heart rate
- > Urea and electrolytes at commencement and at any change in therapy
- > Anti-nuclear factor during prolonged treatment

# **Practice Points**

- > Hydralazine is contraindicated in patients with severe tachycardia.
- > It is recommended to use hydralazine with a beta blocker to enhance the antihypertensive effect and decrease the side effect of reflex tachycardia.
- > Intravenous labetalol is more effective in the initial urgent control of any acute hypertensive crisis and oral nifedipine may provide better long term control.
- > Hydralazine is rapidly inactivated by contact with solutions containing glucose.
- > Hydralazine hydrochloride may react with metals (e.g. metal filters or needles) to yield discoloured solution, often pink or yellow. Prepare just prior to use and avoid prolonged contact with metals.

## Document Ownership & History

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| 16/05/2019 V1.2  | 1/1.2   | SA Health Safety and Quality                                   | Removal of compounded oral solution  |  |
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