



MONOGRAPH

Hydralazine

Scope (Staff):	Medical, Pharmacy, Nursing, Anaesthetic Technicians
Scope (Area):	All Clinical Areas

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this [DISCLAIMER](#)

QUICKLINKS

[Dosage/Dosage Adjustments](#)

[Administration](#)

[Compatibility](#)

[Monitoring](#)

DRUG CLASS

Antihypertensive^[1]

INDICATIONS AND RESTRICTIONS

- Hypertensive emergency^[1]
- Refractory hypertension^[1]

CONTRAINDICATIONS

- Hypersensitivity to hydralazine or any component of the formulation^[2]
- Idiopathic systemic lupus erythematosus or related diseases^[1]
- Dissecting aortic aneurysm, severe tachycardia and heart failure with high cardiac output (e.g. hyperthyroidism), heart failure due to mechanical obstruction (e.g. aortic stenosis), porphyria or cor pulmonale^[1, 2]

Myocardial insufficiency due to mechanical obstruction^[3]

PRECAUTIONS

- Cardiovascular disease – use with caution in patients with cerebral vascular accidents and suspected coronary artery disease. The myocardial stimulation produced by hydralazine can cause anginal attacks and electrocardiogram changes of myocardial ischemia^[4]

- Increased intracranial pressure – use with caution. Lowering blood pressure may result in increased cerebral ischemia^[5]
- Hepatic impairment – use with caution. Dose reduction may be required^[1]
- Renal impairment – use with caution. Dose reduction may be required^[1]

FORMULATIONS

Listed below are products available at PCH, other formulations may be available, check with pharmacy if required:

- Hydralazine 20 mg ampoule
- Hydralazine 25 mg tablet

Imprest location: [Formulary One](#)

DOSAGE & DOSAGE ADJUSTMENTS

Neonates: [Refer to Neonatal Medication Protocols](#)

[Dosing in Overweight and Obese Children:](#) Dose based on measured body weight^[4, 5]

Intravenous (Children ≥ 4 weeks):

Intravenous Injection:

- 0.1 – 0.2 mg/kg (maximum 20 mg/dose) every 4 – 6 hours^[4]
 - Titrate dose as needed to a maximum of 0.6 mg/kg/dose (maximum 20 mg/dose)^[4]
 - Usual daily maximum: 3 mg/kg/day (maximum 60 mg per day)^[3]

Continuous Intravenous Infusion:

- 50 kg or less:
 - 1 – 6 microgram/kg/minute (maximum 300 micrograms/minute)^[1]
 - For the treatment of hypertensive emergencies, consider a starting rate between 4 – 6 microgram/kg/minute and reducing as tolerated^[1]
- Above 50 kg:
 - 50 – 300 microgram/minute (maximum 300 micrograms/minute)^[1]
 - For the treatment of hypertensive emergencies, consider a starting rate between 200 – 300 microgram/minute and reducing as tolerated^[1]

Oral:

- ≥ 4 weeks – 11 years: 0.25 – 0.5 mg/kg (maximum 25 mg/dose) every 8 – 12 hours^[1, 3, 4]
 - Maximum: 7.5 mg/kg/day (maximum 200 mg per day)^[3]
- 12 – 17 years: initially 25 mg every 12 hours^[3]
 - Increase to 50 – 100 mg every 12 hours^[3]
 - Maximum: 200 mg/day^[3]

Renal impairment:

- [eGFR calculator](#)
- For oral and intermittent intravenous dosing, consider the below adjustments:^[4]
 - > 50 mL/minute/1.73m²: No adjustment necessary^[4]
 - 10 to 50 mL/minute/1.73m²: Consider increasing dosing interval to administer at least every 8 hours^[3, 4]
 - < 10 mL/minute/1.73m²: Administer every 12 – 24 hours^[4]

Hepatic impairment:

- No specific dosing information.^[2, 4, 5]
- Hydralazine is extensively metabolized in the liver. Consider using lower doses and titrating to response in patients with severe hepatic impairment^[2, 4, 5]

RECONSTITUTION & ADMINISTRATION**Intravenous Administration:**

- Extravasation Risk – monitor frequently for signs of extravasation^[6]

Reconstitution:

- Reconstitute 20 mg ampoule with 1 mL water for injection to give a final concentration of 20 mg/mL^[6]

Intravenous Injection:

- Inject undiluted or dilute to a suitable volume with a compatible fluid and administer as a slow IV push over at least 5 minutes (maximum rate 5 mg/minute)^[6, 7]

Continuous Intravenous Infusion:

- Dilute 20 mg to a final volume of 50 mL with sodium chloride 0.9% (400 micrograms/mL)^[6]

Oral Administration:

- Give consistently with regards to meals^[4]
- Food enhances hydralazine bioavailability^[4]

COMPATIBILITY (LIST IS NOT EXHAUSTIVE)

Compatible fluids: Sodium chloride 0.9%, Hartmann's solution, Ringer's solution^[7]

Compatible at Y-site: Plasma-Lyte 148, heparin^[7]

Only commonly used drugs are listed below. This is not a complete list of incompatible drugs.

[Compatibilities of IV drugs](#) must be checked when two or more drugs are given concurrently.

INCOMPATIBLE drugs: Aciclovir, aminophylline, ampicillin, azathioprine, cefazolin, cefotaxime, cefoxitin, ceftazidime, ceftriaxone, cefuroxime, ertapenem, foscarnet, furosemide, ganciclovir,

glyceryl trinitrate, meropenem, methylprednisolone sodium succinate, piperacillin-tazobactam, potassium acetate, sodium acetate, sodium nitroprusside^[6]

MONITORING

- Blood pressure^[5]
- Heart rate^[5]
- Liver function test^[5]
- Urea and electrolytes^[5]
- Full blood count and antinuclear factor before starting and during prolonged treatment (> 6 months) as prolonged therapy may induce a lupus-like syndrome^[1, 5]

ADVERSE EFFECTS

Common: flushing, headache, dizziness, tachycardia, palpitations, oedema (sodium and water retention)^[1]

Infrequent: angina, nasal congestion, lupus-like syndrome^[1]

- Lupus-like syndrome: symptoms may include fever, arthralgia, myalgia and malaise; risk factors include hydralazine dose (>100 mg daily for >6 months) and female gender.^[1]

Rare: blood dyscrasia, rash, paraesthesia, vasculitis^[1]

STORAGE

Ampoule: Store below 25°C. Protect from light^[2]

Tablets: Store below 25°C. Protect from light^[2]

Infusion solution: Prepare immediately before use^[6]

- On dilution, colour changes occur in most infusion solutions within 8 to 12 hours, without affecting potency. Solutions may discolour, often yellow or pink when in contact with metal. Avoid prolonged contact and discoloured solutions should be discarded.^[6]

INTERACTIONS

This medication may interact with other medications; consult PCH approved references (e.g. [Clinical Pharmacology](#)), a clinical pharmacist or PCH Medicines Information Service on extension 63546 for more information.

Please note: The information contained in this guideline is to assist with the preparation and administration of **Hydralazine**. Any variations to the doses recommended should be clarified with the prescriber prior to administration

REFERENCES

1. AMH Australian Medicines Handbook Pty Ltd. Hydralazine. Australian Medicines Handbook [Online]: Australian Medicines Handbook Pty Ltd. Accessed June 6, 2025. <https://amhonline-amh-net->

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