

HydrALAzine

Classification

Antihypertensive, vasodilator

Indications

- CCP: Hypertensive emergency
- CCP: Hypertensive emergency in pregnancy or postpartum

Contraindications

- Hypersensitivity to hydralazine
- Coronary artery disease
- Mitral valve rheumatic heart disease
- Severe tachycardia and heart failure with high cardiac output
- Myocardial insufficiency due to mechanical obstruction (aortic or mitral stenosis, constrictive pericarditis)
- Isolated right ventricular heart failure due to pulmonary hypertension
- Acute dissecting aortic aneurysm
- Porphyria

Adult dosages

- CCP: Hypertensive emergency
 - 10-20 mg IV/IM every 4-6 hours as required.
- CCP: Hypertensive emergency in pregnancy or postpartum
 - 5-10 mg IV, may repeat 5-10 mg doses every 20 minutes if blood pressure continues to exceed thresholds. Consider alternative agent if blood pressure remains elevated after a total of 20-30 mg.

Caution: significant drug interactions exist. Consult drug interaction database for additional information.

Pediatric Considerations And Dosing

- CCP: Hypertensive emergency
 - 0.1-0.2 mg/kg/dose every 4-6 hours, titrated as required. Usual dose range: 0.2-0.6 mg/kg/dose

Caution: significant drug interactions exist. Consult drug interaction database for additional information.

Mechanism Of Action

Causes direct vasodilation of arterioles, decreasing systemic resistance. May occur due to inhibition of calcium release from sarcoplasmic reticulum and inhibition of myosin phosphorylation in arterial smooth muscle cells.

Pharmacokinetics

Following intravenous administration:

- Onset: 10-80 minutes
- Duration: up to 12 hours
- Metabolism: hepatic
- Half-life: 3-7 hours

Adverse Effects

Cardiovascular: Acute myocardial infarction, angina pectoris, edema, flushing, hypotension, myocardial stimulation, palpitations, paradoxical response to antihypertensive, tachycardia

Dermatologic: Pruritus, skin rash (including eczema), urticaria

Gastrointestinal: Anorexia, constipation, diarrhea, nausea, paralytic ileus, vomiting

Genitourinary: Difficulty in micturition

Hematologic & oncologic: Agranulocytosis, decreased hemoglobin, decreased red blood cells, eosinophilia, leukopenia, lymphadenopathy, purpuric disease, splenomegaly

Hepatic: Hepatitis

Nervous system: Chills, dizziness, headache, peripheral neuritis, psychotic reaction (including anxiety, depression, disorientation, euphoria, hypomania, nervousness)

Neuromuscular & skeletal: Arthralgia, muscle cramps, tremor

Ophthalmic: Conjunctivitis, lacrimation

Respiratory: Dyspnea, nasal congestion

Miscellaneous: Fever

Source: HydrALazine. In: Lexicomp Online, UpToDate, Waltham, MA. (Accessed November 20, 2020.)

Warning And Precautions

Consider concurrent use of beta blocker: hydrALazine is associated with reflex tachycardia.

Drug Interactions

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