

NOREPINEPHRINE (LEVOPHED)

Description

Levophed is a catecholamine, vasoconstrictor, sympathomimetic and alpha-adrenergic agent. It is an endogenous catecholamine that has shown a survival benefit over dopamine, with select treatment. It acts on both alpha 1 and 2 adrenergic receptors to cause vasoconstriction and a resulting increase in blood pressure through increased systemic vascular resistance. Levophed is also an inotropic stimulator and coronary artery dilator.

Indications

- Hypotension (secondary to volume correction)
 - Septic and Neurogenic Shock
 - Beta-blocker overdose
 - Calcium Channel blocker overdose
 - Tri-cyclic toxicity (use with caution)
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Contraindications

- Sulfite Allergy
 - Ischemic heart disease
 - Uncorrected hypovolemia
 - Mesenteric/peripheral thrombosis
 - MAO's
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Adverse Reactions

- HTN
 - Bradycardia
 - Tissue ischemia
 - Arrhythmias
 - Myocardial Infarction
 - Lightheadedness, anxiety, headache
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Dosage and Administration**Adult:**

Infusion (4 mg/250 D5W):

Starting Dose: 0.5 *micrograms/min*

- Increase by 0.5 microgram increments q 2 minutes until desired BP/MAP achieved
- Target BP: >100 mmHg systolic
- Target MAP: > 65 mmHg

Pediatric:

Infusion (4 mg/250 D5W):

Starting Dose: 0.1 *micrograms/min*

- Increase 0.1 microgram increments until desired MAP achieved
 - Target MAP: 45-55 mmHg
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Onset & Duration

- Onset: Immediate
 - Duration: 1-2 minutes
 - ½ Life: 3 minutes
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Special Considerations

- Monitor IV site - extravasation of Levophed is devastating. (Inject 10 ml NS at site if occurs)
 - (Antidote is injection of 5-10 mg Phentolamine in 10-15 ml NS to the extravasation site)
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