

HEALTHEAST MEDICAL TRANSPORTATION
MEDICAL OPERATIONS MANUAL

NITROGLYCERIN INFUSION

Drug Classification: Vasodilator

BACKGROUND

Pharmacodynamics

This medication relaxes vascular smooth muscle, dilating peripheral arteries and veins. This causes pooling of venous blood and decreased venous return to the heart, decreasing preload. Nitro also reduces left ventricular systolic wall tension, which decreases afterload.

Indications¹

- Chest pain of cardiac origin that does not subside after 3 or more doses of sublingual nitroglycerin.
- Acute pulmonary edema
- Symptomatic hypertension

Contraindications

- Allergy or known hypersensitivity to the medication.
- Do not administer to patients who have taken sildenafil (Viagra or Revatio) or vardenafil (Levitra) within the past 24 hours or tadalafil (Cialis) within the past 48 hours.
- Head Trauma with suspected increased intracranial pressure.
- Systolic blood pressure less than 100 mmHg.

Cautions

- This medication can cause dramatic decreases in blood pressure. Monitor patients closely for symptoms of hypotension.

DOSAGE and ADMINISTRATION

ADULT	PEDIATRICS (less than 60 kg)
<p><u>For acute coronary syndrome</u></p> <ol style="list-style-type: none">1. Begin infusion at 0.1 mcg/kg/min.2. Titrate in increments of 0.2 mcg/kg/min every 5 minutes to reduce symptoms while maintaining systolic blood pressure greater than 100 mmHg.3. Do not exceed maximum dose of 0.5 mcg/min	<ol style="list-style-type: none">1. Contact Medical Control for orders.

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ADULT	PEDIATRICS (less than 60 kg)
<p><u>For acute pulmonary edema</u></p> <ol style="list-style-type: none">1. Begin infusion at 0.5 mcg/kg/min.2. Titrate upwards at 0.5 mcg/kg/min increments every 5 minutes until symptoms improve and/or systolic blood pressure <100. Max dose 4 mcg/kg/min <p><u>For symptomatic hypertension</u></p> <ol style="list-style-type: none">1. Contact Medical Control for orders.	

ADVERSE REACTIONS/SIDE EFFECTS

- Headache, which may be severe and persistent and may occur immediately after administration
- Marked sensitivity to the hypotensive effects of nitrates
- Syncope due to nitrate vasodilation

NOTES

¹ This medication may only be administered via infusion pump.

REFERENCE GUIDELINE:

2A Chest Pain/Acute Coronary Syndrome (ACS)

2M Symptomatic Hypertension

3C Acute Pulmonary Edema