

Medication: Nitroglycerin	PDN: 6963.03	Last Updated: October 23, 2013	PMD: Andrew Travers*	PDC: Steven Carrigan*	Page 1 of 2
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NITROGLYCERIN

1.0 Classification

- Nitrate
- Vascular smooth muscle relaxant

2.0 Mechanism of Action

- Reduces peripheral vascular resistance, blood pressure, venous return, and cardiac workload.

3.0 Indications

- Ischemic chest pain (or other signs of acute coronary syndrome)
- Congestive heart failure/pulmonary edema

4.0 Contraindications

- Systolic blood pressure less than 90 mmHg
- Bradycardia (less than 50 bpm)
- Tachycardia (greater than 150 bpm)
- Known hypersensitivity
- Patients who have used a phosphodiesterase inhibitor for erectile dysfunction (Viagra within previous 24 hours; Cialis, Levitra, Staxyn within previous 36 hours)

5.0 Precautions

- Should be given with caution in patients with inferior wall MI, as the right ventricle may be involved (which has significant pre-load dependence)
- Patients should be sitting or lying when nitroglycerin is administered

6.0 Route

- May be given SL

7.0 Dosage

Adult

- 1 spray SL q 3-5 minutes as needed

8.0 Supplied

- Spray canister with 0.4 mg/spray

9.0 May Be Given By

- For ischemic chest pain: PCP/ICP/ACP/CCP
- For congestive heart failure/pulmonary edema: ICP/ACP/CCP

10.0 Adverse effects

- Hypotension
- Dizziness
- Decreased LOC
- Headache

11.0 Special notes

- It is important to check a blood pressure before and after nitroglycerin administration. Hypotension may be more pronounced in a patient who has not previously taken nitroglycerin.
- Pregnancy category C [if the patient will benefit from a Category C drug, it is generally used]

12.0 References

- Respiratory Distress Clinical Practice Guideline
- Chest Pain Clinical Practice Guideline
- Compendium of Pharmaceuticals and Specialties (CPS)

*Electronically Signed

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