

**Atraumatic Chest Pain/Discomfort**

**Initial actions:**

- Conduct scene size up, primary assessment, & immediate life-saving interventions. Have an AED nearby & ready.
- In patients exhibiting shortness of breath or hypoxia (SPO<sub>2</sub> < 94%), Administer oxygen to improve respiratory symptoms or saturation (94-99%).
- Avoid exerting the patient (ie. If possible, patient should be carried) & place in a position of comfort unless necessitated by other factors.
- Request Advanced Life Support (ALS) considering their availability & hospital proximity. Consider transport to a receiving facility with emergency cardiac catheterization (PCI) capability. Minimize on scene time.
- Obtain baseline vital signs, SAMPLE history, & conduct a secondary assessment attentive to contraindications to fibrinolytic therapy (recent bleeding, surgery, etc.) and cardiac compromise.

**Initiate each of the following two treatments as indicated & appropriate if the patient is an adult still experiencing atraumatic chest pain or discomfort of known or suspected cardiac origin. If both are ready to be administered at the same time, give ASA before NTG. Otherwise they can be given in either order.**

**Prompt transport is important – DO NOT delay transport to administer these treatments.**

Therapy	Oral acetylsalicylic acid (aspirin, ASA)	Sublingual nitroglycerin (NTG) or glyceryl trinitrate (GTN)
<b>Form</b>	Oral tablet or powder	Sublingual tablet or spray
<b>Source</b>	Available at the scene or supplied by EMT/agency under a Medical Director.	Must be prescribed for, & supplied by the patient.
<b>Authorization</b>	All EMTs	All EMTs
<b>Age</b>	19 years or older	18 years or older
<b>Indications</b>	Patient currently experiencing chest discomfort	
<b>Contraindications</b>	<ul style="list-style-type: none"> <li>• Known hypersensitivity or allergy to ASA</li> <li>• 325mg ASA taken in the past 24 hours</li> <li>• Bleeding or active bleeding disorder</li> <li>• Pregnancy</li> <li>• Suspicion of thoracic or AAA</li> <li>• ASA is expired</li> </ul>	<ul style="list-style-type: none"> <li>• 3 doses of NTG within a 15-minute period prior to or during this episode</li> <li>• Systolic BP &lt;100</li> <li>• Recent head injury</li> <li>• Phosphodiesterase (PDE) inhibitor (erectile dysfunction drugs such as viagra® &amp; cialis®) use within 72 hours</li> <li>• NTG is expired</li> </ul>
<b>Adverse Effects</b>	<ul style="list-style-type: none"> <li>• Anaphylaxis</li> <li>• Nausea</li> <li>• Bleeding</li> <li>• Angioedema</li> <li>• Vomiting</li> <li>• Stomach irritation</li> </ul>	<ul style="list-style-type: none"> <li>• Headache</li> <li>• Cardiovascular collapse</li> <li>• Lightheadedness</li> <li>• Methemoglobinemia</li> <li>• Bradycardia</li> <li>• Flushing</li> <li>• Hypotension</li> </ul>
<b>Administration</b>	<ul style="list-style-type: none"> <li>• Administer non-enteric coated tablets/powder to a cumulative dose of 324mg (using 81 or 162 mg tablets) or 325 mg (using regular adult tablets)</li> <li>• Have the patient thoroughly chew then swallow the ASA tablet(s), even if the tablet is not "chewable" ASA. A small sip of water may be given if the patient can't chew well (e.g., dentures are not in)</li> <li>• Minimize interrupting mask oxygen</li> </ul>	<ul style="list-style-type: none"> <li>• Assist with one tablet or spray under the tongue</li> <li>• Reassess chest discomfort using 1-10 pain scale &amp; vital signs after 1-2 minutes</li> <li>• Repeat one dose of NTG every 5 minutes until a maximum of three has been administered for any one episode</li> <li>• Contact medical control if appropriate</li> </ul>
<b>Documentation</b>	Note dose(s), time(s) of administration & patient response & communicate this during transfer of care to ALS and/or receiving facility staff	

**REMEMBER: WHEN QUESTIONS OR CONCERNS ARISE, CONTACT MEDICAL CONTROL!**