

**SECTION: C-4**

**PROTOCOL TITLE: GENERAL CARDIAC CARE/ACS**

**REVISED: 08 June 2006**

**GENERAL COMMENTS:** The community standard of care for AMI is rapid catheterization. A key component of this would be the rapid assessment of the patient, 12 lead EKG acquisition, and transmission of all pertinent data to the appropriate hospital to allow for decreased door to cath lab time. In the case of likely MI (manifested by 12 lead changes, unstable angina patterns, or failure to respond to treatment) care should be focused with this goal in mind.

**BLS SPECIFIC CARE:**

- Basic BLS care and assessments including oxygen administration and v/s every 5 minutes.
- Coordinate resources to insure prompt arrival of ALS care to the patient.
- NTG 0.4 mg SL spray/tab PRN for ACTIVE chest discomfort of suspected cardiac origin. The EMT-basic may assist the patient with his prescribed NTG for a total of 3 doses prior to medical control contact.

**HOLD FOR:**

- B/P <90 mm/hg
- *Ingestion of Viagra or similar drugs within prior 24 hours.*
- AED at patient side. Pads may be placed (but do not turn AED on unless pulses are lost) if patient appears in extreme distress.
- Consider assisted ventilations with signs of severe respiratory distress.

**ILS SPECIFIC CARE:**

- IV access (to a max of three attempts) only if needed due to severity of underlying injury or illness, otherwise defer until arrival of ALS providers.
- *Limit fluid administration unless symptomatic, hypotensive, and with clear lung sounds.*
- An end goal of 3 IV lines (any combination of single or multi-lumen lines) is a desirable goal to facilitate cath lab/thrombolytic care.

**ALS SPECIFIC CARE:**

- NTG Spray: For discomfort suspicious of cardiac origin.
  - SL: 0.4 mg SL spray/tab every 3-5 minutes PRN.
  - Hold for B/P <90, or Viagra use (or similar drug) within previous 24 hours. Use with caution in suspected right-sided MI.
- NTG Paste: Initiate if NTG is successful in reducing discomfort.
  - TD: 0.5-1.5 inches applied topically (TD) to non-hairy area of trunk. Hold for B/P <90, or Viagra use (or similar drug) within previous 24 hours. Use with caution in suspected right-sided MI.
  - Wipe off if hypotension develops.

Matt Conklin, M. D.  
Medical Director

Troy M. Hagen, Paramedic  
Director

Murray B. Sturkie, D. O.  
Medical Director

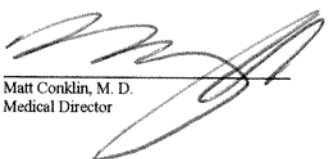
# Protocol C-4

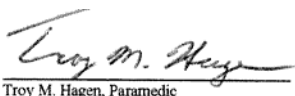
## General Cardiac Care/A.C.S.

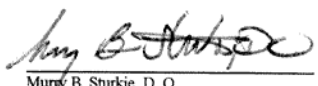
- Aspirin:
  - PO: 324 mg ASA PO, chewed and swallowed. Hold if sensitivity/allergy to ASA, or in setting of recent bleeding or at risk for bleeding issues.
  - Administer ASA even if pt has received a normal daily dose within 24 hours.
- Morphine Sulfate: For discomfort suspicious of cardiac origin.
  - IV/IM: 2-5 mg IV, repeated every 5-10 minutes PRN for discomfort to a max of 20 mg. Hold for B/P <90.
- Fentanyl: To be used if allergic to morphine.
  - IV/IM: 25-50 mcg IV, repeated every 5-10 minutes PRN for discomfort to a max of 100 mcg.
- 12 lead ECGs: To be obtained and transmitted to the receiving hospital with the patient's name inputted whenever possible. When 12 lead is interpreted as an ST segment elevation MI, the receiving hospital shall be informed of an incoming STEMI patient as soon as possible.

### PHYSICIAN PEARLS:

- Remember that many patients will have atypical presentations, including female patients, diabetics, the elderly, and those with a history of hyper-dynamic drug use. Many recent studies also suggest that women and younger patients are under-triaged, and under-treated for cardiac events. The provider should keep a high index of suspicion for potential cardiac events and assess/treat accordingly.
- 12 lead ECG transmission is a crucial component of decreasing door to lab/drug time. All 12 lead ECGs shall be transmitted to the receiving hospital whenever feasible.
- The goal of NTG administration is not only to reduce pain through increased coronary artery perfusion, but also to improve cardiac hemodynamics secondary to increased venous capacitance. Patients with ACS should receive SL NTG spray (Followed by transdermal NTG paste) as long as systolic BP remains above 90 mm/Hg. (Even if pain is resolved with less than 3 SL NTG spray, follow with transdermal NTG paste as long as hemodynamic status is maintained) Use nitrates with caution in patients with a suspected right ventricular infarction.

  
Matt Conklin, M. D.  
Medical Director

  
Troy M. Hagen, Paramedic  
Director

  
Murry B. Sturkie, D. O.  
Medical Director