

LEVEL 1 CARDIAC CARE PROTOCOL

STEMI

For patients with ST Elevation Myocardial Infarction (STEMI) with onset of symptoms less than 12 hours:

- Activate EMS transfer to AWH
- Call Aspirus Physician Connect at 877-697-4324 to arrange transport and to speak with the CVA Cardiologist and request level 1 activation
- Monitor, Oxygen, IV with saline.
- Aspirin 81 mg, (give 4 chewable) PO.
- Clopidogrel (Plavix) 600 mg PO. ** Discuss with Cardiologist options for Plavix resistance patients
- Nitroglycerin 0.4 mg SL (repeat as needed or IV).
- Atorvastatin (Lipitor) 80 mg PO
- Heparin: Loading dose of 60 units/kg (4,000 units max) followed by continuous infusion at 12 units/kg (1,000 units/hr max).
- Beta Blocker: Metoprolol tartrate (Lopressor) 25 mg, PO unless contraindicated. Hold if SBP <120 or HR <50 or HR >110 in sinus rhythm or is in congestive heart failure.
- Chest X-ray: Portable. Send with patient. (Only if time)
- Morphine Sulfate as needed for pain.
- Second IV, saline locked.
- Attach portable hands-free defibrillator pads
- Sedation: Consider Versed for transport.
- Remove clothing prior to transport including undergarments (Only if time)
- If the anticipated time from your ED arrival to Aspirus Wausau Hospital arrival is going to exceed 90 minutes, consider thrombolytics (Give ½ dose TNKase IVP).
- In-the-door to out-the door goal is less than 30 minutes
- Aspirus Wausau Hospital Nursing Supervisor will contact your facility to verify information
- Fax EKG, Labs, ED record, Ht and Wt to Aspirus Wausau Hospital Emergency Department at 715-847-0466
- Call report to Cardiac ICU (CICU) at. 715-847-2771

HYPOTHERMIA

For patients post cardiac arrest to induce hypothermia:

- Patient inclusion criteria
 - Age 18 or greater
 - Initial rhythm VF or VT
 - Comatose after resuscitation
 - No known pregnancy
 - MAP >60
- Procedure for cooling:
 - Ensure adequate airway
 - IV lines, patent and secure
 - Place ice packs to one side of neck, axilla, and groin
 - Consider cooling the room air (ED and ambulance) as much as possible
 - Have ice packs available for the ambulance transport
 - Insert foley catheter with temperature [probe, if available. Target core temperature is 33° C.

Non-STEMI

For patients with Non-ST Elevation MI and Unstable Angina:

- Call for help – For any patient for whom PCI is a reasonable treatment option, early inter-hospital transfer is encouraged. The cardiologist on-call for Cardiovascular Associates can be reached at Aspirus Physician Connect [877-697-4324](tel:877-697-4324).
- All patients should receive a standard combination of medicines:
 - Aspirin 325mg
 - IV Unfractionated Heparin 60u/kg as a bolus (maximum=4000u) with a continuous infusion of 12u/kg/hr (Max=1000u/hr).
 - Metoprolol 5mg IV at 5 min intervals for a total of 15mg, followed immediately by 50mg orally. Contraindications include heart failure, hypotension and bradycardia.
- High-risk patients (abnormal bio-markers or ischemic EKG ST and T wave changes) should also receive Tirofiban (Aggrastat) 25 mcg/kg bolus followed by infusion at 0.15 mcg/kg/min.
- We prefer that Clopidogrel not be used in these patients prior to cardiac catheterization.

Thrombolysis in STEMI

Absolute contraindications for Thrombolysis in STEMI

- Any prior ICH
- Known structural cerebral vascular lesions (e.g. AVM)
- Known malignant intracranial neoplasm (primary or metastatic)
- Ischemic stroke within 3 months EXCEPT acute ischemic stroke within 3 hours
- Suspected aortic dissection
- Active bleeding or bleeding diathesis (excluding menses)
- Significant closed head or facial trauma within 3 months

Relative contraindications for Thrombolysis in STEMI

- History of chronic severe, poorly controlled hypertension
- Severe uncontrolled hypertension on presentation (SBP greater than 180 mm or Hg or DBP greater than 110 mm Hg)
- History of prior ischemic stroke greater than 3 months, dementia or known intracranial pathology not covered in contraindications
- Traumatic or prolonged (greater than 10 minutes) CPR or major surgery (less than 3 weeks)
- Recent (within 2 to 4 weeks) internal bleeding
- Noncompressible vascular punctures
- For streptokinase/anistreplase: prior exposure (more than 5 days ago) or prior allergic reaction to these agents
- Pregnancy
- Active peptic ulcer
- Current use of anticoagulants: the higher the INR, the higher the risk of bleeding.

Patients given thrombolysis

- Give Plavix 300 mg PO (call Cardiology if patient is older than 75 years of age)
- continue with all other medications for STEMI as on page 1

*This information is intended only as a guideline.
Please use your best judgment in the treatment of patients.*