Division: Emergency Medical Services Agency Effective Date: 01/01/2025

Protocol #640

ADULT CARDIAC CHEST PAIN/ACUTE CORONARY SYNDROME

FOR USE IN ADULT PATIENTS

BLS

- Universal Protocol #601 Pulse Oximetry
 - O₂ administration per Airway Management Protocol #602
- Aspirin 162 mg PO (non-enteric coated) chewable tablets
- May assist with administration of patient's prescribed Nitroglycerin with SBP ≥ 100 mmHg

ALS Standing Orders

- Obtain 12-lead ECG early
- Nitroglycerin 0.4 mg SL tablet or spray
 - Repeat every 5 min
- Nitroglycerin Paste 1 inch (1 Gm) may be considered after initial dose(s) of SL Nitroglycerin
- HOLD NITROGLYCERIN and consult base if:
 - 500 mL fluid bolus has been administered and SBP is trending towards or drops < 100 mmHg or in the presence of other signs/symptoms of hemodynamic instability.
 - Evidence of Right Ventricular Infarction (RVI) see Notes

MODERATE or SEVERE PAIN

- Refractory to Nitroglycerin
 - Fentanyl 25-50 mcg SLOW IV (over 1 min), titrated to pain improvement, maintain SBP ≥ 100 mmHg
 - May repeat after 5 min if needed (not to exceed 200 mcg total)

If difficulty obtaining IV

- Fentanyl 50-100 mcg IM/IN (use 1 mcg/kg as guideline)
 - May repeat after 15 min if needed (not to exceed 200 mcg total)

Base Hospital Orders Only

- Nitroglycerin with
 - o Significant decrease in SBP after administration
 - Patients taking erectile dysfunction medications
 - Atrial fibrillation with RVR
 - Evidence of RVI
- Additional Fentanyl

Persistent hypotension

- Additional Normal Saline bolus up to 500 mL
- Push-Dose Epinephrine 10 mcg/mL 1mL IV/IO every 1-3 min
 - Repeat as needed to maintain SBP >90 mmHg
 - See notes for mixing instructions

OR

- Epinephrine Drip start at 10 mcg/min IV/IO infusion
 - Consider for extended transport
 - See formulary for mixing instructions
- As needed

Notes

- Acute Coronary Syndrome a group of conditions resulting from acute myocardial ischemia –
 including: chest/upper body discomfort, shortness of breath, nausea/vomiting, or diaphoresis
- Evidence for RVI: All inferior STEMI should be evaluated for ST elevation in V4R

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- Atrial fibrillation with RVR is atrial fibrillation with a ventricular rate > 100
- Early notification of the SRC with "STEMI Alert" with a 12-lead ECG reading of ***Acute MI Suspected*** or equivalent based on monitor type.
- Large bore IVs are preferred in "STEMI Alerts".
- "STEMI Alerts" consider a secondary large bore IV with NS lock to assist the Cath Lab in tubing changes
- Have defibrillation pads out and ready on all "STEMI Alerts".
- On "STEMI Alerts," clear the patient's chest of clothing or any obstructions to the rapid placement of defibrillation pads, not including safety harnesses.
- Mixing Push-Dose Epinephrine 10 mcg/mL (1:100,000): Mix 9 mL of Normal Saline with 1 mL of Cardiac Epinephrine 1:10,000 (0.1 mg/mL), mix well