Alaska Statewide STEMI Recommendations

Developed by the South Central Alaska STEMI Committee (updated May 2017)

12-Lead EKG diagnostic for STEMI

Consult with on-call cardiologist
Initiate emergency transport to PCI hospital

Standard ACS Therapy:
IV access: 2 or more secure IVs
Non-enteric coated ASA 162-325 mg PO chewed (except active hemorrhage or true allergy)
NTG SL and infusion or paste
Opiate analgesic IV: Morphine or Fentanyl
Monitor and Oxygen to maintain SpO_2 96-98%
Atorvastatin 80 mg PO x1
Labs: CBC, BMP, Troponin, PT/PTT, Liver Function Tests, Magnesium

NOTE: See Reverse for Drug Doses and Additional Information

DIDO: Door-in, Door-out
FMC: First Medical Contact

DIDO ≤30 min AND
FMC-device ≤120 min

YES

PCI
- Rapid ALS transport to PCI hospital
- Enoxaparin[1] <75yo: 30 mg IV plus 1mg/kg SQ (max 100mg SQ) (≥75yo: no IV bolus 0.75mg/kg SQ—max 75mg)
  OR Heparin[2]
- ADP Receptor Antagonist:
  Brilinta[1] (Ticagrelor) 180 mg PO
- Call Cardiologist for recommendations

NO

Fibrinolysis Available
- If no contraindications, give fibrinolysis within 30 min of presentation.
- Plavix[1] (Clopidogrel) <75yo: 300 mg PO (≥75yo: 75 mg PO)
- Enoxaparin[1] <75yo: 30 mg IV plus 1mg/kg SQ (max 100mg SQ) (≥75yo: no IV bolus 0.75mg/kg SQ—max 75mg)
  OR Heparin[2]
- Arrange transport to PCI hospital ASAP

Fibrinolysis NOT Available
- Enoxaparin[1] <75yo: 30 mg IV plus 1mg/kg SQ (max 100mg SQ) (≥75yo: no IV bolus 0.75mg/kg SQ—max 75mg)
  OR Heparin[2]
- Arrange transport to PCI hospital ASAP
- ADP Receptor Antagonist:
  Brilinta[1] (Ticagrelor) 180 mg PO
- *Consider*: IIb/IIIa Inhibitor (Integrilin)
- Call cardiologist for recommendations

1. ***See reverse for contraindications***
2. ***See reverse for dosage***

Non-PCI facilities should anticipate fibrinolysis ASAP!

Contact the on-call cardiologist at Alaska Heart Institute for any assistance:
907-561-3211

MEDICATION DOSES, CONTRAINDICATIONS & ADDITIONAL INFORMATION

NITRATES

SL Nitroglycerin (NTG) should be given as front-line therapy in patients who are *not* hypotensive [systolic blood pressure (SBP) <100 mmHg]. In addition, IV NTG (start infusion at 5-10 mcg) may be used as needed for ischemic pain in patients who are *not* hypotensive. Nitrates should be titrated to target SBP.

BETA-BLOCKER

It is reasonable to administer IV β-blockers promptly to STEMI patients who are hypertensive or have ongoing ischemia. Hold if hypotension, pulmonary edema, severe bradycardia, heart block, history of severe asthma, severe chronic obstructive pulmonary disease or ***RISK*** *for* ***cardiogenic shock*** (Age >70yrs, SBP <120, sinus tachycardia >110, HR <60, increased time since onset of symptoms of STEMI. The greater the number of risk factors present, the higher the risk of developing cardiogenic shock.).
Recommended regimen: IV Metoprolol 5 mg given over 2 minutes, repeated every 5 minutes for a total of 3 doses (15 mg).

ENOXAPARIN

If <75 y/o 30 mg IV bolus, followed by 1 mg/kg SUBQ (max 100 mg SQ)
If ≥75 y/o: no bolus, 0.75 mg/kg SUBQ (max 75 mg SQ)
Regardless of age, if CrCl <30 mL/min: 1 mg/kg SUBQ q 24 hrs

OR

HEPARIN

60 units/kg IV bolus (max 4000 units), followed by 12 units/kg/hr IV infusion (max 1000 units/hr)

ADENOSINE DIPHOSPHATE (ADP) RECEPTOR ANTAGONISTS:

Note: No ADP antagonists should be given if the patient is actively bleeding.

BRILINTA (Ticagrelor): Recommended for Primary PCI patients. 180 mg PO loading dose (regardless of whether the patient was already taking Clopidogrel, Prasugrel or Ticagrelor). Contraindications: second degree (or greater) heart block or concomitant oral or IV therapy with strong CYP3A inhibitors (e.g. Ketoconazole, Clarithromycin), CYP3A substrates (e.g. Cyclosporine, Quinidine), or strong CYP2A inducers (e.g. Rifampin/Rifampicin, Phenytoin).

EFFIENT (Prasugrel) 60 mg PO loading dose. (May be substituted for Ticagrelor.)
Absolute Contraindication to Effient (Prasugrel): Prior transient ischemic attack or cerebrovascular accident

Contraindications to both Brilinta (Ticagrelor) and Effient (Prasugrel):
Dialysis, known moderate or severe liver disease, known hemoglobin <10 g/dL or known platelet count <100,000 cells/mm^3, major bleed within 2 months, major surgery within 1 month, oral anticoagulation therapy that cannot be stopped, **fibrinolytic therapy planned or given within the previous 24 hours**, or if the patient will refuse blood transfusion.

PLAVIX (Clopidogrel): Recommended for patients treated with Fibrinolytic therapy.
<75 yo**:** 300 mg PO loading dose followed by 75 mg PO daily.
≥75 yo: No loading dose. 75 mg PO daily

References: ***ACCF/AHA 2013 STEMI Guideline Update***
Rosner, G.F. et al. (2012). Updating an Institutional Chest Pain Algorithm. *Critical Pathways in Cardiology, Vol 11*, 107-113.