EMS System for Metropolitan Oklahoma City and Tulsa 2018 Medical Control Board Treatment Protocols

Review and Approval 1/3/18, Effective 4/1/18, replaces all prior versions

5C - ACUTE CORONARY SYNDROME ADULT

TREATMENT PRIORITIES

2 in 5 minutes of patient contact:
1. Vital signs
2. ECG rhythm (if paramedic present)

5 in 10 minutes of patient contact:
1. ASA
2. IV
3. 12 lead ECG
4. NTG or fluids (BP/Inf. MI?)
5. Repeat vital signs

Color key: EMERGENCY MEDICAL DISPATCHER · EMERGENCY MEDICAL RESPONDER · EMT · EMT-INTERMEDIATE 85 · ADVANCED EMT · PARAMEDIC

EMD

ADVISE TO AVOID PHYSICAL EXERTION
OR ENVIRONMENTAL STRESS (TEMP EXTREMES).
ADVISE ASPIRIN (ASA) 324/325 mg CHEWED BY PT
(unless contraindicated).
ADVISE NITROGLYCERIN (NTG)
PT SELF-ADMINISTRATION
IF PREVIOUSLY PRESCRIBED FOR SIMILAR SYMPTOMS

EMR | EMT

GENERAL SUPPORTIVE CARE
OBTAIN VITAL SIGNS
AVOID O_2 VIA NC or NRB UNLESS DYSPNEA or PULSE OX <94% AT ROOM AIR
APPLY CARDIAC MONITOR/OBTAIN 12-LEAD ECG (if equipped)
TRANSMIT 12-LEAD ECG TO RECEIVING EMERGENCY DEPARTMENT
ASA 324/325 mg CHEWED BY PT (hold if taken < 6 hours or contraindicated)
ASSIST NTG SELF-ADMINISTRATION 0.4 mg (hold if Sys BP ≤ 100 mmHg)
IF PARAMEDIC OR OLMCP DIAGNOSES ACUTE STEMI, PLACE DEFIB PADS ANTERIOR-POSTERIOR CHEST WALL

EMT-I85 | AEMT

IV ACCESS
IV NS TKO if SYS BP > 100 mmHg
IV NS 250 mL BOLUS if SYS BP ≤ 100 mmHg IF NO SIGNS OF PULMONARY EDEMA

PARAMEDIC

TREAT ANY CARDIAC DYSRHYTHMIAS/SHOCK BY THE RESPECTIVE PROTOCOLS
ANALYZE 12-LEAD ECG – TREAT PER FOLLOWING FLOWCHART
NOTIFY RECEIVING HOSPITAL IMMEDIATELY IF SUSPECTED STEMI
TRANSPORT ASAP PER DESTINATION PROTOCOL

*ACUTE INFERIOR INFARCT?
- YES → OBTAIN/ANALYZE RIGHT-SIDED 12-LEAD ECG ENROUTE → **ACUTE RIGHT VENTRICULAR INFARCT?
  - YES → IF SYS BP < 120 mmHg, IV NS 250 mL BOLUS IF NO SIGNS OF PULMONARY EDEMA → SYS BP > 100 mmHg?
  - NO → SYS BP > 100 mmHg?
- NO → SYS BP > 100 mmHg?

SYS BP > 100 mmHg?
- YES → *** NTG 0.4 mg SL. MAY REPEAT EVERY 5 MIN IF SYS BP > 100 mmHg
- NO → SIGNS OF PULMONARY EDEMA?
  - YES → NOREPINEPHRINE 2-4 mcg/min IVPB TITRATE TO SYS BP ≥ 100 mmHg **OR** DOPAMINE 5-20 mcg/kg/min IVPB TITRATE TO SYS BP ≥ 100 mmHg
  - NO → IV NS 250 mL BOLUS REPEAT UNTIL SYS BP > 100 mmHg IF NO SIGNS OF PULMONARY EDEMA → *** NTG 0.4 mg SL.

IF PT STILL HAVING ACS SYMPTOMS AFTER 3 NTG ADMINISTRATIONS
WITH PERSISTENT CHEST PAIN & IF SYS BP > 100 mmHg:
ADDITIONAL NITROGLYCERIN PER PROTOCOL 16HH
AND
MORPHINE SULFATE 2 mg SLOW IVP, MAY REPEAT EVERY 5 MIN TO A TOTAL OF 10 mg.
OR
FENTANYL 0.5 mcg/kg SLOW IVP/IM/IN, MAXIMUM DOSE 50 mcg. MAY REPEAT EVERY 10 MINUTES TO MAXIMUM CUMULATIVE DOSE OF 1.5 mcg/kg or 125 mcg WHICHEVER IS LESSER.
OR
HYDROMORPHONE 0.25 mg SLOW IVP .
MAY REPEAT EVERY 10 MINUTES TO MAXIMUM CUMULATIVE DOSE OF 1 mg.

* ACUTE INFERIOR INFARCT INDICATED BY ST SEGMENT ELEVATION IN AT LEAST 2 OF THESE 3 LEADS: II, III, aVF.

**ACUTE RIGHT VENTRICULAR INFARCT INDICATED BY ST SEGMENT ELEVATION IN AT LEAST 2 OF THESE 4 LEADS: V3R, V4R, V5R, V6R.

***DO NOT GIVE NTG TO PATIENTS TAKING VIAGRA® OR LEVITRA® WITHIN 24 HOURS OR CIALIS® WITHIN 48 HOURS WITHOUT OLMC CONSULT.

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5C – ACS TEAM ROLES
ADULT & PEDIATRIC

Position 4 (P4) Scene Coordination
Always outside ACS "triangle"

- Monitors time intervals of interventions and time from first medical contact
- Avoids direct patient care to maintain supervisory duties if greater than four rescuers throughout.
- Directs "staging" of personnel beyond six rescuers away from immediate treatment area to prevent crowding.
- Assumes duties of P5/P6 if limited to four rescuers throughout (if paramedic) and positions self in P5 or P6 position.

Position 3 (P3) Manage Airway

- Applies capnography
- Applies O2 **ONLY** if indicated
- Airway management as indicated by clinical presentation of patient

P4

P3

Anterior-Posterior
Pad Placement

P1

P2

Position 1 (P1) Interventional Paramedic
Always on patient's right

- IV access
- ASA
- NTG
- Morphine/Fentanyl only if indicated
- Fluid and vasopressor management

Position 2 (P2) Efficient Data Acquisition
Always on patients's left

- Vital signs
- Applies 4 lead cables
- Enters patient demographics into monitor/defibrillator
- Obtains 12-Lead ECG
- Applies defibrillation pads ANT-POST

Scene Coordination
Transport Logistics
Efficient Data Acquisition
Manage Airway
Interventional

P5

P6

Position 6 (P6) Treatment Implementation Paramedic
Always outside ACS"triangle" at lower 1/2 of patient

- Physical and verbal assessment of patient
- Gathers concise history from patient/family/bystanders
- Maintains overall awareness of ACS dynamics, implements treatment plan based on clinical presentation
- Reviews 12-Lead ECG, determines presence of diagnostic quality and confirms STEMI criteria
- Transmission of diagnostic 12-Lead ECG to receiving facility
- Determines appropriate destination of ACS patient
    - STEMI alert via telephone contact via recorded line to receiving facility

Position 5 (P5) Transport Logistics
Always outside ACS "triangle"

- Ingress/Egress formulation
- Assists in equipment management