



## **Advanced Cardiac Life Support**

### **Workbook**

#### **RULES FOR ACLS**

- 1. ALL LIVE (CARDIAC) PTS GET 12 LEAD EKG FIRST**
- 2. THEN FIX OXYGEN IF LESS THAN 90% TO 92-98 %**
- 3. STABLE PT HAS BP >90 AND OR IS RESPONSIVE**
- 4. UNSTABLE PT HAS BP<90 AND/OR IS UNRESPONSIVE**
- 5. IF UNCONSCIOUS CHECK PULSE NO PULSE =CPR**
- 6. VFIB-SHOCK,DRUG,SHOCK,DRUG,SHOCK DRUG**
- 7. H&T -HYPOXIA, HYPOVOLEMIA, HYPOTHERMIA, HYPOGLYCEMIA, TOXIN, TENSION PNEUMO, PERICARDIAL TAMPONADE, TRAUMA, THROMBOSIS START WITH MOST PROBABLE**

# ACS ALGORITHM/CHEST PAIN

Assess and care for the patient using the primary and secondary surveys.

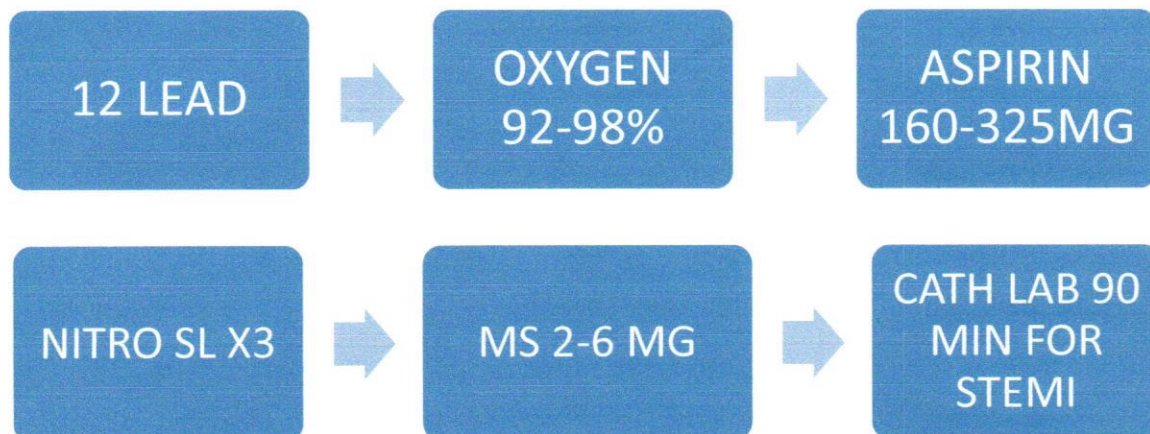
**\*\*\*OBTAIN A 12 LEAD EKG\*\*\***

If the patient is infarcting it is imperative that they be transported to a facility capable of percutaneous transluminal coronary intervention if within **90 minutes**.

1. Monitor and support ABCs (airway, breathing, and circulation).
2. If the patient's pulse oximetry is less than **92** administer oxygen at a level that increases the saturation to between **92-98%**. If the patient has a history of COPD administer oxygen if their pulse ox falls below 90% on room air
3. Establish IV access.
4. If the patient did not receive aspirin from the EMS provider, give **aspirin (160 to 325 mg)**.
5. Administer **nitroglycerin 0.4mg q 5 minutes**, either sublingual, spray. Withhold Nitroglycerin on the patient who is experiencing Right Ventricular Infarction/ED meds/BP <90.
6. Give the patient a narcotic pain reliever such as Fentanyl, Morphine or Dilaudid if pain is not relieved by nitroglycerin. Morphine (2-6) is the drug of choice for infarction, but should be used with caution in the unstable angina patient.

## **STEMI GOES TO CATH LAB (PCI)**

### **MONA/OANM**



# STROKE ALGORITHM

Identify signs of a possible stroke.

- Facial Droop (have patient show teeth or smile)
- Arm Drift (patient closes eyes and extends both arms straight out, with palms up for 10 seconds)
- Abnormal Speech (have the patient say "you can't teach an old dog new tricks")

If any 1 of these 3 signs is abnormal, the probability of a stroke is 72%

Check blood glucose level

Prior to any treatment a Head CT must be performed. 20% of strokes are bleeds and fibrinolytics are contraindicated

EMS must transport to a facility capable of doing a CT and treating a stroke (stroke center)

## STROKE



**FAST-FACE -ARM- SPEECH -TIME**

# Stable/Unstable Tachycardia Algorithm

**Does the patient have a pulse? Is the patient stable?**

Look for altered mental status, ongoing chest pain, hypotension, or other signs of shock.

**Remember:** Rate-related symptoms are uncommon if heart rate is < 150 bpm.

**Yes, the patient is stable.** Take the following actions:

1. **Obtain a 12-lead ECG or rhythm strip.**
2. Start an IV.
3. Vagal maneuvers

**Is the QRS complex wide or narrow?**

**Patient**

**Treatment**

The patient's QRS is narrow and rhythm is regular. Try vagal maneuvers. Give **adenosine 6 mg rapid IV push**. If patient does not convert, give **adenosine 12 mg rapid IV push**.

The patient's rhythm is irregular. Control patient's rate with diltiazem (Cardizem ) or beta-blockers. Use beta-blockers with caution for patients with pulmonary disease or congestive heart failure.

If the rhythm pattern is irregular narrow-complex tachycardia, it is probably atrial fibrillation, possible atrial flutter, or multi-focal atrial tachycardia.

Patient is in ventricular tachycardia *or uncertain rhythm*.

Adenosine 6 mg rapid IV push If no conversion, give adenosine 12 mg rapid IV push;. Amiodarone 150 mg IV over 10 min Prepare for elective synchronized cardioversion.

## **UNSTABLE TACHYCARDIA**

- 1.Immediate cardioversion (synchronized ) 100/200/300/
- 2.Atrial fib- 120-200
- 3.Sedate when pt. condition permits