

**SOUTH PLAINS
EMERGENCY MEDICAL
SERVICES**

**PRE-HOSPITAL
TREATMENT
PROTOCOL
EXAM**

**EMT
PARAMEDIC
FEBRUARY 2011**

****Minimum Passing Grade is 80%****

**2011
EMT-PARAMEDIC
Protocol Exam**

1. Your patient is a 67-year-old female that presents with altered mental status and is responding only to painful stimuli. She is breathing at 16 breaths per minute. Pulse is 84 strong and regular. BP is 144/94. She has no history of diabetes and her blood glucose level is 132mg/dL. She has a history of hypertension, unknown "heart condition" and chronic back pain resulting from an MVC 2 years ago. Her medications include: Inderol, potassium, and MS Contin. Which drug should be given?
 - A. Narcan 2mg IV push repeated if not improvement in mental status
 - B. D50W, 25g IV push
 - C. Activated Charcoal 1g/kg up to 50g
 - D. Narcan 0.1mg every 2-3 minutes until clinical effect noted

2. You are called to a private residence for a 68-year-old male complaining of severe chest pain. Patient is having some SOB and is rating the pain in his chest at a 10. You attach the heart monitor and see a sinus bradycardia at a rate of 42 beats per minute. Pt has a TDSHS Out of Hospital DNR and there is no reason to dispute the DNR. You feel that this is NOT the moment of death for this patient. What should be your initial treatment for this patient?
 - A. Administer oxygen, establish an IV, and administer 0.5mg of Atropine
 - B. Administer oxygen, establish an IV, attempt transcutaneous pacing
 - C. Do nothing since the patient has a valid DNR
 - D. Administer oxygen only due to the DNR

3. What is the correct adult and pediatric dosage of Fentanyl for pain management?
 - A. 5mcg/kg to a max of 50mcg per dose
 - B. 5mcg/kg to a max of 100mcg per dose
 - C. 1mcg/kg to a max of 25mcg
 - D. 1mcg/kg to a max of 50mcg

4. Your patient is a 75-year-old male who is complaining of dizziness and weakness. His EKG is below. He is restless and not oriented to place or time. His skin is pale, cool, and moist. Capillary refill is greater than 2 seconds. Vital signs: BP 82/40, R 30, shallow, regular, pulse is 48. He has a history of chronic essential hypertension and angina pectoris. He should be treated initially with:
 - A. Nitroglycerin, 0.4 mg SL
 - B. Lidocaine, 1.5 mg/kg IV
 - C. External Pacemaker
 - D. Atropine, 0.5 mg IV



5. Which of the following statements about giving 150mg of Amiodarone over 10 minutes is/are correct?
 - A. It may be mixed in a 100cc bag of D5W for adult patients
 - B. It may be mixed in a 1 liter bag of NS for all patients
 - C. It should not be mixed in a 100cc bag of D5W for pediatric patients
 - D. Both A and C are correct

6. The correct dosage and route for Epinephrine 1:1,000 for an adult person with an anaphylactic reaction is:
 - A. 0.3mg IM
 - B. 0.3mg SC
 - C. 0.3mg via Auto-injector
 - D. Either A or C

7. You respond for a 76-year-old female having chest pain. She shows all signs of a right ventricular infarct (RVI). Her vital signs are P-76 weak, irregular; R-20 and normal; and BP is 82/48. You have this patient on oxygen and have administered aspirin. You perform a 12 lead and confirm a possible RVI. What is the next course of action on this patient?
 - A. Establish a 2nd large bore IV and run wide open titrated to maintain systolic BP>90mmHg
 - B. Administer 0.4mg of Nitroglycerin SL
 - C. Administer Dopamine at 5mcg/kg/min
 - D. Administer 40mg of Lasix IV push

8. After successfully establishing an IO on a conscious adult patient, what is the next procedure that should be done?
- Flush IO with 10cc NS to verify proper placement
 - Administer 0.5mg/kg Lidocaine SIVP to a max of 1000mg to alleviate the pain in the IO space created by intramedullary pressure due to fluid infusion
 - Administer 2-6mg of Morphine SIVP to alleviate the pain in the IO space created by intramedullary pressure due to fluid infusion
 - Administer 1mg/kg Lidocaine SIVP to a max of 50mg to alleviate the pain in the IO space created by intramedullary pressure due to fluid infusion
9. To obtain a Lead V4R EKG, following a standard 12 Lead EKG, what must you do?
- Obtain a right sided 12 lead EKG
 - Swap the left and right leg leads
 - Swap only the V1 and V2 leads
 - Swap the left and right arm leads
10. Your patient is a 65 year old male complaining of chest pain and heart palpitations. You apply the heart monitor and see the EKG below. His vital signs are: BP 86/50, R-18 and normal, Pulse corresponds with the EKG. His skin is cool and moist. He has no medical history and no drug allergies. Which protocol should you follow in treating this patient?
- Cardiac Chest Pain
 - Ventricular Tachycardia (Conscious Patient)
 - Supraventricular Tachycardia
 - Cardiogenic Shock



11. A patient presents with trouble walking, sudden confusion, and sudden trouble speaking. He denies falling or any traumatic injury. Which algorithm should be followed?
- Decreased Level of Consciousness
 - Stroke/TIA
 - Respiratory distress
 - Seizure
12. Proper ET tube placement should be verified by a member of the receiving facility prior to turning over patient care and be properly documented in the patient care report.
- True
 - False
13. Which of the following statements about Rocuronium is correct?
- Rocuronium is utilized for pediatric PAI only
 - All MICU capable services are required to carry Rocuronium
 - All services that carry Rocuronium must also carry either Succinylcholine or Norcuron to facilitate intubation in pediatric patients
 - The dosage for Rocuronium is 5mg/kg
14. The 3 components of the Cincinnati Stroke Scale are:
- Facial droop, one-sided weakness, and speech
 - One sided weakness, arm drift, and speech
 - Facial droop, arm drift, and speech
 - Facial droop, arm drift, and one-sided weakness
15. Your patient is a 64-year-old female that has been in cardiac arrest for several minutes. You have been ventilating with a BVM and ET tube with attached ResQPOD for the duration of the incident. After the second defibrillation, the patient converts to a perfusing rhythm with a strong carotid pulse. However, the patient has no spontaneous respirations and still requires ventilatory support with a BVM. For this patient, the ResQPOD should be left in place because the patient still requires artificial ventilations.
- True
 - False
16. Your patient is a 6-month-old male that is unconscious. His blood glucose level is 40mg/dL. What is the correct drug to administer?
- D50W, 12.5g IV push
 - D25W, 2cc/kg to a max of 100cc
 - D12.5W, 5cc/kg
 - D10W, 3cc/kg

17. Which of the following are considered anginal equivalents and should alert EMS personnel to consider following the Cardiac Chest Pain or Suspected MI Protocol?
- Respiratory distress/dyspnea
 - Weakness/fatigue without history of GI bleed or recent fever
 - Palpitations, syncope, or near syncope
 - Any/all of the above
18. For adult patients in cardiogenic shock, what is the initial fluid challenge procedure?
- 250cc of NS X 1
 - 500-1000cc of NS
 - 20cc/kg of NS X 1
 - 250cc of NS repeated as needed to achieve clinical results
19. You respond for a 28-year-old female having an allergic reaction to a bee sting. She is having some dyspnea and her BP is 136/88 with good capillary refill. She is conscious and alert. What drugs should be given?
- 50mg Benadryl IV, 2.5mg Albuterol HHN, and 20mg Decadron IV
 - 0.5mg Epinephrine 1:1,000 SC and 50mg Benadryl IV
 - 0.5mg Epinephrine 1:10,000 IV and 20mg Decadron IV
 - 0.3mg Epinephrine 1:1,000 SC and 50mg Benadryl IV
20. Your patient is a 36-year-old female complaining of severe shortness of breath. She has a long standing history of asthma. She tells you that she has not taken any bronchodilators because she has not had her prescriptions refilled. BP is 124/78. Respirations are 32 and labored. Pulse is 112, strong, and regular. Bilateral wheezing is noted. Pulse ox shows 88% on oxygen at 10lpm via a non-rebreather. You have established an IV and the EKG shows the rhythm below. Which drugs should be given initially?
- Albuterol and Decadron
 - Xopenex and Decadron
 - Epinephrine 1:1,000
 - Either A or B



21. You respond for a seizing patient. Upon arrival, you find a 38-year-old female having a full, generalized seizure that lasts about 1 minute. She is 31 weeks gestation in her 2nd pregnancy. After the seizure, she does appear postictal with vitals of: BP-148/110; P-104 strong, regular; R-28 slightly labored. Her ECG shows sinus tachycardia at 104. After establishing an IV of NS TKO, the patient begins to seize again. You should first:
- Administer Valium, 5mg IV push
 - Administer 10% Calcium Gluconate, 1g SIVP
 - Administer 50% Magnesium Sulfate 4g, diluted 1:1 with NS, IV push over 15 minutes
 - Administer 50% Magnesium Sulfate drip at 1g/hr
22. You are called to CMC to transfer a patient to a local nursing home. The patient has terminal cancer and is being sent to the nursing home for pain management and palliative care. The patient does NOT have a TDSHS Out of Hospital DNR form but the transferring physician writes "Do Not Resuscitate" on the transfer orders and signs the document. En route, the patient goes into cardiac arrest. You should:
- Perform chest compressions only and return to CMC
 - Begin full resuscitative efforts since EMS cannot honor such physician DNR's
 - Honor the hand written DNR since the physician is responsible for patient care during transport
 - Contact the nursing home for orders
23. To reverse the effects of Magnesium Toxicity, you should:
- Administer 10% Calcium Gluconate, 1g, slow IVP
 - Administer 10% Calcium Gluconate, 1g, rapid IVP
 - Administer Atropine, 2mg every 5 minutes until symptoms resolved
 - Administer Valium, 5mg until seizures are suppressed
24. The blood glucose level, for a conscious, non-critical patient, should be below _____ before an EZ-IO is established.
- 40mg/dL
 - 50mg/dL
 - 60mg/dL
 - 70mg/dL

25. You respond to a residence to find a 61-year-old female complaining of abdominal pain and generalized weakness and with some nausea and vomiting over the last day. She has a history of CAD, hypertension, arthritis and smokes 2 packs of cigarettes per day. She is awake, alert, and well oriented. She denies any chest pain. Her blood sugar is 124mg/dL. Her vitals are: BP-102/78, P-118 strong and regular, R-18 and uncomplicated. Tilt test reveals dizziness when patient sits up. She has no known drug allergies. 3-lead ECG shows a sinus tachycardia at 118bpm. Which protocol should be followed?
- A. Decreased Level of Consciousness
 - B. Supraventricular Tachycardia
 - C. Non-Traumatic Hypovolemia and consider following the Cardiac Chest Pain or Suspected Myocardial Infarction
 - D. Cardiogenic Shock

26. Per protocol, Fentanyl is contraindicated in what patients?
- A. BP>90mmHg systolic
 - B. Burn Victims
 - C. Orthopedic injuries
 - D. Children <2 years of age

27. Which algorithm(s) require drawing blood in blood tubes for labs?
- A. Cardiac Chest Pain, Respiratory Distress, and Stoke/TIA
 - B. Poisoning, Seizures, and Decreased Level of Consciousness
 - C. Respiratory Distress, Decreased Level of Consciousness, and Poisoning
 - D. Cardiac Chest Pain, Decreased Level of Consciousness, and Stroke/TIA

28. You respond to a residence to find a 62-year-old female who is unconscious and not breathing. The patient does have a weak carotid pulse. BP is 70 by palpation. Pupils are dilated and slow to react. The heart monitor shows the rhythm below. Of the following, which is the FIRST action you should take?
- A. Perform synchronized cardioversion at 100J
 - B. Defibrillate at 200J
 - C. Precordial thump
 - D. Begin CPR for 2 minutes



29. You are transporting a 62-year-old patient in full cardiac arrest and you are unable to gain IV access through a peripheral vein. The patient has had previous bilateral leg amputations just above the knees. What is the best procedure to gain IV access?
- A. Place the EZ-IO at the proximal humerus
 - B. Request orders for a central line
 - C. Begin rapid transport without IV access
 - D. Administer all drugs via the ET tube
30. Which of the following drugs is used to maintain sedation after successful endotracheal intubation using pharmacologic agents?
- A. Valium, 5mg IV. May be repeated as needed to maintain sedation
 - B. Etomidate, 0.3mg/kg to a max of 40mg. May repeat once in 10 minutes if needed.
 - C. Versed, 0.05mg/kg to a max of 5mg per single dose. May be repeated once if systolic BP>90
 - D. Versed, 3mg. May be repeated once if systolic BP>90

31. You respond to a 28-year-old male who is having severe lower abdominal pain. The patient states that his abdomen feels like he has “been kicked by a mule”. He states that the pain awakened him out of a deep sleep about two hours ago and began around his naval. He states that the pain is now located in the lower right quadrant of the abdomen and rates his pain at an 7 on the 1-10 scale. He denies any trauma. He is conscious, alert, and well oriented. His skin is warm, dry, and normal in color. His vital signs are: BP 132/84, respirations are 24 and uncomplicated, and his pulse rate is 92 strong and regular. EKG shows a normal sinus rhythm without ectopy. The abdomen is soft but tender; especially in the lower right quadrant. To manage the abdominal pain, you should:
- A. Administer Morphine without online medical direction
 - B. Administer Fentanyl without online medical direction
 - C. Contact medical control as administration of pain medication for this patient must be authorized by online medical direction
 - D. Either A or B

32. Which hemostatic agent is allowed to be carried?
- A. Quickclot (heat free formula)
 - B. Celox
 - C. Bloodstop
 - D. Either A or B
33. You are treating an 18 month old child for respiratory distress. The patient has bilateral wheezing noted along with retractions. There is no stridor or seal bark cough. Which of the following drugs would be contraindicated for this patient?
- A. Albuterol
 - B. Decadron
 - C. Xopenex
 - D. Both A and C
34. You respond to find a 71-year-old female who is complaining of feeling “funny”. She is conscious and alert. She denies any chest pain, dyspnea, or other symptoms. Vitals are: BP: 134/78, Respirations 24 and normal, Pulse is 176 and regular. Lung sounds are clear and equal. The ECG shows the rhythm below. You have the patient on oxygen and an IV established. Your next treatment should be to:
- A. Give Amiodarone, 150mg over 10 minutes
 - B. Give Amiodarone, 150mg rapid IV push
 - C. Give Lidocaine, 1.5mg/kg IV push
 - D. Give Lidocaine, 1mg/kg IV push



35. Which of the following is NOT a sign/symptom of Magnesium Toxicity?
- A. Muscle weakness
 - B. Hyporeflexia (decreased tendon reflexes)
 - C. Hypertension
 - D. Decreased LOC
36. Which of the following statement about taser probe removal is correct?
- A. Taser probes should never be removed by EMS personnel
 - B. If the taser probe is embedded in the bone, use hemastats or pliers to remove it
 - C. Taser probe removal is up to each individual service; according to their policy
 - D. Taser probes must be immediately removed at the scene
37. To determine if a patient could possibly be suffering from acute coronary syndrome (ACS), and be in need of treatment in the Cardiac Chest Pain or Suspected Myocardial Infarction protocol, the Paramedic should:
- A. Consider findings from the physical exam
 - B. Consider the patient’s history and risk factors
 - C. Compile and interpret all collected information
 - D. All of the above
38. You have a patient with obvious signs/symptoms of a stroke, with initial onset 30 minutes ago, and you are unable to adequately manage his/her airway, where should that patient be transported to?
- A. Nearest acute care facility
 - B. Closest highest designated stroke facility
 - C. Closest level I trauma facility
 - D. Closest office or clinic with a physician
39. You respond to find a 44-year-old female that is unconscious and unresponsive. The family tells you that she is a long standing diabetic. Blood sugar shows 24mg/dL. You are unable to establish a typical peripheral IV with an angiocath despite 3 attempts. The patient has all 4 extremities and trauma is not a concern. Your service does carry Glucagon. What is your next course of action?
- A. Administer D50W slow IM
 - B. Establish an EZ IO and administer D50W IO
 - C. Perform BLS only and transport
 - D. Administer Glucagon 1mg IM
40. You respond to a patient in full cardiac arrest. The patient was found outside in 38° F. weather. The patient has a core temperature of 83°. The heart monitor shows fine V-Fib. All of the following should be performed EXCEPT:
- A. Defibrillation at 360J or biphasic equivalent
 - B. 1mg Epinephrine 1:10,000 every 3-5 minutes for duration of arrest
 - C. CPR
 - D. IV of NS running wide open to a max of 3,000cc

41. Which of the following drugs are now “Optional” for the SPEMS Protocols?
- A. Xopenex
 - B. Labetolol
 - C. Liquid Children’s Motrin
 - D. Activated Charcoal
42. You arrive on scene to find a 71-year-old female that is complaining of severe chest pain with dyspnea. She is sitting in her recliner. Her skin is cool and moist. Lung sounds are clear and equal, but diminished. BP is 100/62, P- 44 and irregular, R-24 and labored. You place her on oxygen and establish an IV. EKG shows the rhythm below. What is your next treatment?
- A. Administer Versed, 2.5mg and attempt external pacing
 - B. Atropine 1mg IVP
 - C. Atropine 0.5mg IVP and a fluid challenge of 500-1000cc
 - D. Atropine 0.5mg IVP and a Dopamine drip at 5mcg/kg/min



43. Which blood tubes must be carried on each unit?
- A. Red top, blue top, green top
 - B. Blue top, “tiger” top, green top
 - C. Purple top, green top, blue top
 - D. Green top, purple top, “tiger” top
44. Which of the following is NOT a sign of right ventricular infarct (RVI)?
- A. JVD with clear lung sounds
 - B. ST elevation in leads II, III, and aVF
 - C. Hypotension
 - D. ST depression in lead V4R
45. Which of the following is the correct way to mix and administer a 50% Magnesium Sulfate Drip at 1g/hr?
- A. 5g/250cc of NS running at 50gtt/min
 - B. 5g/500cc of NS running at 50gtt/min
 - C. 5g/500cc of NS running at 100gtt/min
 - D. Either A or C
46. The pediatric dose of Versed IM for seizures is:
- A. 0.1mg/kg to a max of 5mg per dose
 - B. 0.2mg/kg to a max of 5mg per dose
 - C. 0.5mg/kg to a max of 5mg per dose
 - D. 1mg/kg to a max of 5mg per dose
47. How should the EZ-IO catheter be secured on an adult patient?
- A. Use of an EZ-STABILIZER
 - B. Use of bulky dressings
 - C. Plastic cup
 - D. Either A or B
48. When should the positive findings of the Cincinnati Stroke Scale *first* be reported?
- A. On the run report
 - B. At the scene, if possible
 - C. En route to the ER
 - D. Upon arrival at the ER
49. The aid of an ET introducer, such as a Bougie is allowed by protocols.
- A. True
 - B. False
50. Electronic signatures are acceptable on the new OOH DNR forms.
- A. True
 - B. False

****END OF EXAMINATION****