

**SOUTH PLAINS
EMERGENCY MEDICAL
SERVICES**

**PRE-HOSPITAL
TREATMENT
PROTOCOL
EXAM**

**EMT
INTERMEDIATE
FEBRUARY 2012**

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

2012
EMT-INTERMEDIATE
Protocol Exam

1. You respond to find a 27-year-old male with 2nd and 3rd degree burns over 36% of his body. After assuring airway and breathing, which of the following IV therapy would be appropriate?
 - A. Two IVs of NS running according to the Parkland Burn Formula
 - B. Two IVs of LR running according to the Parkland Burn Formula
 - C. Two IVs of EITHER NS or LR running according to the Parkland Burn Formula
 - D. Two IVs of EITHER NS or LR running to maintain systolic BP <90mmHg

2. You are transporting a patient from a nursing home to a hospital. The patient is hypovolemic due to nausea, vomiting, and diarrhea. The skin is cool and moist and the patient is hypotensive. The tilt test was positive. You are unable to establish an IV. The patient has a Subclavian central line that was established at the hospital last week. You feel that the patient would benefit from fluid replacement and you are 30 minutes away from the hospital. What should you do?
 - A. Contact online medical control for permission to access the subclavian
 - B. Administer fluid through the subclavian without orders
 - C. Keep attempting to establish a peripheral IV
 - D. Do not administer fluids through the subclavian because it is not allowed by protocols

3. What is the correct fluid and dosage for a pediatric fluid challenge of a suspected poisoning?
 - A. 10cc/kg of LR over 10 minutes, repeated until signs of adequate perfusion are present
 - B. 20cc/kg of LR over 10 minutes, repeated until signs of adequate perfusion are present
 - C. 10cc/kg of NS over 10 minutes, repeated until signs of adequate perfusion are present
 - D. 20cc/kg of NS over 10 minutes, repeated until signs of adequate perfusion are present

4. An adult in non-traumatic cardiac arrest should have an IV:
 - A. Of LR running wide open up to 3,000cc
 - B. Of LR running TKO to limit fluids
 - C. Of NS running wide open up to 3,000cc
 - D. Of NS running TKO to limit fluids

5. Electronic signatures are acceptable on the new OOH DNR forms.
 - A. True
 - B. False

6. Which of the following statements regarding intubation attempts is/are correct?
 - A. ET attempts should be limited to 2 attempts by the primary Intermediate and 1 attempt by the secondary Intermediate/Paramedic. If all attempts fail, the airway should be secured with the King Airway
 - B. ET attempts should be limited to 2 attempts by the primary Intermediate and 1 attempt by the secondary Intermediate/Paramedic. If all attempts fail, the airway should be secured with the King Airway or a surgical cricothyrotomy
 - C. ET attempts should be limited to 1 attempt by the primary Intermediate and 1 attempt by the secondary Intermediate/Paramedic. If all attempts fail, the airway should be secured with the King Airway or a surgical cricothyrotomy
 - D. ET attempts should be limited to 1 attempt by the primary Intermediate and 1 attempt by the secondary Intermediate/Paramedic. If all attempts fail, the patient should be intubated with the King Airway

7. If you are utilizing an end tidal CO₂ monitor with readout capabilities, while ventilating a perfusing patient that has been intubated, you should maintain CO₂ levels between what readings?
 - A. 35 and 40mmHg
 - B. 30 and 34mmHg
 - C. 24 and 30mmHg
 - D. 15 and 20mmHg

8. When can an Intermediate administer Benadryl to a patient having an allergic reaction?
 - A. When the systolic BP is > 90mmHg with adequate perfusion
 - B. When the systolic BP is < 90mmHg with inadequate perfusion
 - C. When a patient is unconscious
 - D. When a rash is present

9. You are treating a 35-year-old male who was ejected from a car during a MVC. The patient is conscious and is showing signs of hypovolemia due to abdominal bleeding. Patient has a pulse rate of 118. You are unable to establish a typical IV so you insert an EZ-IO. After establishing and securing the catheter, you should:
 - A. Rapidly infuse LR immediately
 - B. Request paramedic backup to administer Morphine for pain management
 - C. Infuse the LR slowly at first then begin rapid infusion
 - D. Administer Lidocaine at 1mg/kg SIVP up to 50mg for pain control then rapidly infuse the fluid

10. Which of the following sizes and types of the King Airway are required to be carried by all EMS units utilizing EMTs, EMT-Is, and Paramedics?
 - A. Pediatric and Adult LT-D sizes 2, 2.5, 3, 4, and 5
 - B. One adult and one pediatric size of the LT-D airways
 - C. Pediatric LT-D airways sizes 2 and 2.5 AND adult LTS-D sizes 3, 4, and 5
 - D. One adult and one pediatric size of the LTS-D airways

11. You arrived to find a 49-year-old female that has been pulled from a frozen lake. She is unconscious, pulseless, and apneic. Her core temperature is 81° F. Which of the following should be performed?
 - A. CPR, Intubation, attach AED, shock every 2 minutes if advised by AED
 - B. CPR, Intubation, do not attach AED since patient is hypothermic
 - C. CPR, Intubation, attach AED, shock once only, if advised by AED, withhold any additional shocks
 - D. CPR, Intubation, attach AED, perform 6 minutes of CPR prior to shock as the patient is hypothermic

12. 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 Stadol. Which drug should be given?
 - A. D50W, 25g IV push
 - B. Narcan, IV, 0.1mg every 2-3 minutes until clinical effect noted
 - C. Narcan 2mg IV push repeated if not improvement in mental status
 - D. Activated Charcoal 1g/kg up to 50g

13. You are dispatched to a report of “difficulty breathing” at an apartment complex. The patient is a 40-year-old male who is in obvious respiratory distress. He is moving some air with shallow respirations at a rate of 32/minute. He tells you that he was stung by a bee about 10 minutes ago and that he has had a previous allergic reaction to a bee sting 4 years ago. He tells you that the reaction usually has been a red rash with itching, but nothing else. Patient has no other medical history. The BP is 140/90. The pulse is 120. Initial oxygen and IV therapy has been established. Your next step should be to:
 - A. Administer 50mg Benadryl, IV
 - B. Administer 0.3 mg Epinephrine IM or by Auto-injector
 - C. Administer Albuterol by nebulizer
 - D. Contact medical control

14. The correct dosage and route for Epinephrine 1:1,000 for an adult person with an anaphylactic reaction is:

A. 0.3mg IM	C. 0.3mg SC
B. 0.3mg via Auto-injector	D. Either A or B

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.
 - A. True
 - B. False

16. 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. Begin rapid transport without IV access	C. Place the EZ-IO at the proximal Humerus
B. Administer all drugs via the ET tube	D. Request orders for a central line

17. A pediatric patient in non-traumatic cardiac arrest should have an IV:
- Of LR run at 20cc/kg over 10 minutes repeated once if needed
 - Of LR run at 20cc/kg over 10 minutes repeated twice if needed
 - Of NS run at 20cc/kg over 10 minutes repeated once if needed
 - Of NS run at 20cc/kg over 10 minutes repeated twice if needed
18. 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 EMS provider should:
- Consider the patient's history and risk factors
 - Compile and interpret all collected information
 - Consider findings from the physical exam
 - All of the above
19. Which best describes the proper procedure for administering IN Narcan? (New Question)
- Draw up Narcan in a syringe, attach MAD, lay the pt supine, press the MAD to patient's nostril, administer whole dose in one nostril.
 - Draw up Narcan in a syringe, attach MAD, lay the pt supine, press the MAD to patient's nostril, administer ½ dose in each nostril.
 - Draw up Narcan in a syringe, attach MAD, sit the patient upright, press the MAD to patient's nostril, and administer whole dose in one nostril.
 - Draw up Narcan in a syringe, sit the patient upright, and administer double the dose in one nostril.
20. The blood glucose level, for a conscious, non-critical patient, should be below _____ before an EZ-IO is established.
- 70mg/dL
 - 60mg/dL
 - 50mg/dL
 - 40mg/dL
21. If you have EKG transmission capabilities and proper documented training, EMT-Intermediates are allowed to transmit a 12 lead EKG to the receiving hospital.
- True
 - False
22. Which of the following statements regarding an EMT-I applying ECG/12 lead electrodes on a patient is/are CORRECT?
- An EMT-I cannot use monitor placement for interpretation/treatment
 - An EMT-I can apply ECG/12 lead electrodes to a patient having chest pain after Paramedic backup has been requested
 - An EMT-I must have appropriate training and testing prior to the placement of the cardiac monitor/12 lead
 - All the above are correct
23. What is the correct IV and IN dosage of pediatric Narcan for a suspected heroin overdose? (New Question)
- 0.1mg/kg to a max of 2mg
 - 0.05mg/kg to a max of 2mg
 - 0.1mg/kg to a max of 1mg
 - 0.05mg/kg to a max of 1mg
24. You are treating a patient in mild respiratory distress. You have this pt on oxygen and start the pt on a breathing treatment of Albuterol. The pt is stable and the receiving hospital is less than a ½ mile away. Which of the following statements is/are FALSE about treating this patient?
- You must establish IV on scene
 - If patient becomes unstable during assessment you should establish IV prior to transport
 - You may transport this patient without establishing an IV due to proximity to hospital
 - None of the above
25. Your patient is a 19-year-old female who presents with abdominal pain with severe nausea and vomiting X 8 hours. History leads you to suspect food poisoning. Patient's vitals are: BP: 92/64, R- 24 uncomplicated, P- 116. Skin is pale, cool and diaphoretic. Tilt test is positive. You have the patient on oxygen and an IV established when she vomits again. Which treatment(s) is/are indicated?
- Consider administering Zofran 4mg IV push
 - Transporting the patient with head elevated
 - Running the IV wide open up to 1 liter of fluids
 - Both A and C

26. _____ is defined as a presentation of an unexplained seizure or convulsion in the setting of the signs and symptoms of Pre-Eclampsia. It typically occurs during or after the 20th week of gestation or in the postpartum period.
- A. Sepsis
 - B. Eclampsia
 - C. Magnesium Sulfate toxicity
 - D. Toxemia
27. The ResQPOD device is used for which type of patient?
- A. Adult patients with severe dyspnea
 - B. Pediatric patients in cardiac arrest
 - C. Adult patients in cardiac arrest
 - D. Both B and C
28. A pediatric and adult ET introducer, such as a Bougie, must be carried on ALL ALS units.
- A. True
 - B. False
29. 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. Closest level I trauma facility
 - B. Nearest acute care facility
 - C. Closest highest designated stroke facility
 - D. Closest office or clinic with a physician
30. Which of the following are considered anginal equivalents and should alert EMS personnel to consider following the Cardiac Chest Pain or Suspected MI Protocol?
- A. Palpitations, syncope, or near syncope
 - B. Respiratory distress/dyspnea
 - C. Weakness/fatigue without history of GI bleed or recent fever
 - D. Any/all of the above
31. A patient presents with trouble walking, sudden confusion, and sudden trouble speaking. He denies falling or any traumatic injury. Which algorithm should be followed?
- A. Decreased Level of Consciousness
 - B. Respiratory distress
 - C. Stroke/TIA
 - D. Trauma
32. Your service wants to hire a new employee who only has a National Registry card. What else must this person obtain before he can function under the SPEMS protocols? (New Question)
- A. A copy of his course completion certificate
 - B. A current TDSHS state certification
 - C. Nothing, A National registry card is enough for a person to work on an ambulance in Texas.
 - D. A signed "authorization to practice" letter from the Medical Director
33. Racemic Epinephrine is indicated for which condition?
- A. Pediatric epiglottitis
 - B. Pediatric allergic reaction
 - C. Pediatric respiratory distress with pulmonary edema
 - D. Pediatric croup
34. Which algorithm(s) require drawing blood in blood tubes for labs?
- A. Cardiac Chest Pain, Decreased Level of Consciousness, and Stroke/TIA
 - B. Cardiac Chest Pain, Respiratory Distress, and Stroke/TIA
 - C. Respiratory Distress, Decreased Level of Consciousness, and Poisoning/Overdose
 - D. Poisoning/Overdose, Seizures, and Decreased Level of Consciousness
35. The 3 components of the Cincinnati Stroke Scale are:
- A. Facial droop, one-sided weakness, and speech
 - B. One sided weakness, arm drift, and speech
 - C. Facial droop, arm drift, and speech
 - D. Facial droop, arm drift, and one-sided weakness
36. In order for a BLS or ALS service to carry intramuscular Epinephrine, instead of the Epi Auto-Injectors, each service must show:
- A. That all active ECA's, EMT's, and Intermediates are appropriately trained on IM injections and the Allergic Reaction Protocol
 - B. That carrying the Epi Auto-Injectors would put a financial hardship on the service
 - C. That each unit has ALS capabilities
 - D. Both A and C are correct

37. Which hemostatic agent(s) is/are allowed to be carried?
- | | |
|----------------------------------|------------------|
| A. Quickclot (heat free formula) | C. Bloodstop |
| B. Celox | D. Either A or B |
38. Paramedic backup should be contacted for a patient in respiratory distress if serious respiratory distress, wheezing, and pulse ox (on oxygen) is less than:
- | | |
|--------|--------|
| A. 96% | C. 92% |
| B. 94% | D. 90% |
39. Which of the following drugs are “Optional” for the SPEMS EMT-I Protocols?
- | | |
|-----------------------|-----------------------------|
| A. Activated Charcoal | C. Xopenex |
| B. Zofran | D. Liquid Children’s Motrin |
40. The correct procedure to create D25W is to:
- | |
|---|
| A. Dilute D50W 1 to 1 with normal saline |
| B. Dilute D50W 2 to 1 with normal saline |
| C. Dilute D50W 1 to 1 with sterile water |
| D. Give ½ of the D50W followed by a fluid bolus |
41. When should the positive findings of the Cincinnati Stroke Scale *first* be reported?
- | | |
|---------------------------|------------------------------|
| A. Upon arrival at the ER | C. At the scene, if possible |
| B. En route to the ER | D. On the run report |
42. For adult patients in cardiogenic shock or resuscitated patients after cardiac arrest, what is the fluid challenge procedure?
- | |
|---|
| A. 20cc/kg of NS repeated as needed to achieve clinical results |
| B. 250cc of NS repeated as needed to achieve clinical effect |
| C. 20cc/kg of LR repeated as needed to achieve clinical effect |
| D. 250cc of LR repeated as needed to achieve clinical effect |
43. If carried, the adult dosage and route of Glucagon is:
- | | |
|-----------|-----------|
| A. 1mg IM | C. 1mg SC |
| B. 2mg IM | D. 2mg SC |
44. All pediatric intraosseous IVs should be started with:
- | | |
|----------------------|------------------|
| A. Sternal IO device | C. Jamshidi |
| B. EZ IO device | D. Either B or C |
45. Which of the following conditions MUST be present before you can administer Epinephrine for an allergic reaction before contacting medical control?
- | | |
|--------------------------------|------------------|
| A. Dyspnea | C. Cyanosis |
| B. Systolic BP<90mmHg systolic | D. Hives or rash |
46. 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?
- | | |
|------------------------|-----------------------------------|
| A. D50W, 12.5g IV push | C. D25W, 2cc/kg to a max of 100cc |
| B. D10W, 3cc/kg | D. D12.5W, 5cc/kg |
47. How should the EZ-IO catheter be secured on an adult patient?
- | | |
|----------------------------|---------------------------|
| A. Use of an EZ-STABILIZER | C. Use of bulky dressings |
| B. Plastic cup | D. Either A or C |
48. If carried, the pediatric dosage and route of Glucagon is:
- | | |
|-------------|-----------------|
| A. 1mg IM | C. 0.5mg SC |
| B. 0.5mg IM | D. 0.5mg orally |
49. Proper ET tube placement should be verified by a member of the receiving facility prior to turning over patient care.
- | |
|----------|
| A. True |
| B. False |

50. What must happen before an EMT-Intermediate has medical control authorization to administer IN Narcan?
- A. The EMT-I must be trained with documentation on file
 - B. The EMT-I must be a TDSHS certified EMT for at least 2 years
 - C. The EMT-I must be enrolled or have completed the EMT-I course
 - D. All of the above

****END OF EXAMINATION****