Northwest Community EMS System 2011-2012 SOP Self-Assessment

Name (Print):	Evaluator signature:
Agency/hospital: Date:	Score: [ ] Acceptable [ ] Not acceptable

COMPLETE AND BRING WITH YOU
on your 1st day of System Entry written testing

This document is designed to highlight important aspects of the NWC EMSS SOPs implemented May 1, 2011 and System procedures referenced in the SOPs. Information on skills is contained in the procedure manual or reference pages at the back of the SOPs. Entry applicants are encouraged to use the Changes and Rationale document that was released with the SOP as a reference for this self-assessment.

INTRODUCTION; GENERAL PATIENT ASSESSMENT

1. Which of these must be done at the point of contact in a time-sensitive patient who is hemodynamically stable, has no seizure activity, glucose is normal and DAI is not indicated?

   A. 12 L ECG in an adult c/o chest pain
   B. IV access in pt with suspected stroke
   C. IV access following penetrating chest trauma
   D. 2nd dose of albuterol for a severe asthma attack

2. List an indication for applying a pulse ox monitor:

   _____

   List an indication for applying a capnography monitor:

   _____

3. Which of these may be transported using lights and sirens without on-line medical control contact?

   A. BLS patient with abdominal pain that might deteriorate
   B. Stable adult with chest pain with ST elevation in Leads II, III, and aVF
   C. Patient with a mild allergic reaction who has received diphenhydramine and an IV
   D. Scheduled transfer of a stable nursing home patient who requires diagnostic testing

4. What does the notation *time sensitive* mean in the SOPs?

   A. Load and go with no scene interventions
   B. Abort ALS care in favor of rapid transport
   C. Minimize scene time as much as possible
   D. Drive as quickly as possible to the hospital

5. How must the 1st BP be obtained?

   A. Manually
   B. Mechanically using the automated cuff on the cardiac monitor

6. At a minimum, how many sets of vital signs are required on all stable transported ALS pts with a patient contact time of 15 minutes or less?

   _____

INITIAL MEDICAL CARE

7. SpO_2 should be < _____ **%** before O_2 is necessary in most patients.

8. Which of these is a candidate for an intraosseous line?

   A. Elderly pt w/ fragile veins who fell and is c/o severe pain
   B. Child whose only peripheral vascular site is an antecubital vein
   C. Pt in extremis w/ circulatory collapse needing immediate administration of IV meds
   D. Awake and responsive pt where two attempts at venous access have been unsuccessful

9. An IO line has been started on a patient with 95% TBSA partial and full thickness burns who is awake and in extreme pain. The patient weighs 200 pounds. What should be infused first through the IO line?

   A. NS 200 mL
   B. Lidocaine 50 mg
   C. Fentanyl 90 mcg
   D. Sodium bicarbonate 50 mEq

10. A 70 y/o F with renal failure fell while walking into her dialysis center. She is alert, on the floor & c/o significant right hip pain (10/10). Rt. leg is shortened and externally rotated. IV is unsuccessful on the arm without the shunt. VS: BP 132/82; P 84; R 20; SpO2 98%; glucose 276; weight 120 lbs. PMH: Diabetes, renal failure, CVD. Meds: Insulin, lisinopril, Prevacid. *How much Fentanyl should she get?*

   mcg

   Is she a good candidate for repeat doses? ☐ Yes ☐ No

11. A 30 y/o female presents following a scald burn at work. She has 4.5% partial thickness burns to the left hand and forearm and is in severe pain. VS: BP 140/90; P 120; R 20. Weight 120 pounds. No PMH. What dose of Fentanyl should she get first?

   A. 25 mcg
   B. 50 mcg
   C. 100 mcg
   D. 150 mcg

12. A 40 y/o adult presents with a fractured humerus in extreme pain. No PMH. VS: BP 130/84; P 116; R 24; Wt 180 lbs. PMs have maxed out the amount of Fentanyl they can give by SOP. What is the next single dose that can be ordered by OLMC?

   A. 40 mcg
   B. 50 mcg
   C. 100 mcg
   D. 150 mcg

13. A 40 y/o male is c/o severe lower back pain (10/10). The pt has a known herniated disc. Meds: None. VS: BP 122/71; P 88; R 20; ECG NSR; SpO_2 98%; wt 250 lbs. The patient remains in severe pain after the first dose of Fentanyl. What is max 2nd dose that he can receive by SOP without OLMC?

   A. 50 mcg
   B. 100 mcg
   C. 150 mcg
   D. 200 mcg

14. PMs have maxed the amount of fentanyl they can give by SOP to the above patient. What is the max total dose that he can receive by SOP + OLMC order?

   A. 100 mcg
   B. 135 mcg
   C. 150 mcg
   D. 300 mcg

15. Which of these is an anticipated side effect of fentanyl?

    A. Pain at injection site
    B. Respiratory depression
    C. Tachycardia & palpitations
    D. Transient blurred vision after infusion

16. What is the indication for ondansetron?

    A. Nausea & vomiting
    B. Procedural sedation
    C. Dizziness and vertigo
    D. Suppress hives and itching

17. What initial dose and route of ondansetron that can be given by EMT-Bs?

    A. 8 mg IM
    B. 4 mg slow IVP
    C. 8 mg per MAD device
    D. 4 mg per oral dissolve tablet

    What is the max total dose of ondansetron that can be given by paramedics? _____

18. How should IVP ondansetron be administered?

    A. Slow (over no less than 30 sec)
    B. As rapidly as possible in a proximal vein

19. If a conscious adult with decisional capacity expresses a desire to be transported to a hospital other than the one that is nearest by travel time, what must be done?

20. When are paramedics in the NWC EMSS to attempt on-line medical control contact?

    A. Before they transport
    B. As soon as they make contact with a patient
    C. As soon as practical under the circumstances
    D. Before any ALS interventions may be performed

RADIO REPORT/COMMUNICATIONS POLICY

21. Which **DOES NOT** qualify for an abbreviated report?

    A. Multiple patient incidents (MCIs)
    B. BLS patients with normal assessment findings
    C. Critical patients where priorities rest with patient care and manpower is limited
    D. Stable ALS patients with complicated histories and multiple prehospital interventions

22. Is it ever acceptable to call in a "trauma alert" on the MERCI (UHF) Radio for patients who require transport to a Level I or Level II trauma center?

    [ ] Yes [ ] No

EXTREMELY OBESE PATIENTS

23. Which of these should be done first to optimize airway and breathing in an extremely obese patient who is c/o dyspnea and has an SpO_2 reading of 86%?

    A. Lower the head of the stretcher & attempt DAI
    B. Apply CPAP w/ PEEP 5 – 10 cm H_2O; assist w/ BVM
    C. Assist ventilations with V_T 2 – 4 mL/kg to prevent air trapping in the lungs
    D. Start an albuterol treatment as abnormal breath sounds will be impossible to hear

24. Which of these should be done if an extremely obese pt experiences a respiratory arrest?

A. Insert an alternate airway rather than attempting a difficult intubation
B. Go directly to a cricothyrotomy as this will be the easiest route to secure
C. Lay the patient flat, hyperextend the neck & insert 2 nasopharyngeal & an oral airway
D. Use an oral rather than a nasal intubation approach as the nasal passages will be occluded

25. Which of these should be considered when assessing an extremely obese patient?

A. Expect SpO_2 readings of 88% – 92% on 6L oxygen/min by mask
B. They frequently hyperventilate, so a capnography reading of 30 is normal
C. Breath sounds are easier to assess as their lungs hold much more capacity
D. Peripheral pulse ox sensors are more reliable than central sensors due to fat distribution

26. An unconscious adult presents who weighs 400 lbs. The pt passed out following a new vigorous exercise regimen to lose weight. VS: BP 100/66; P 110; ECG ST; R 20; SpO_2 94%; Glucose 30; skin extremely diaphoretic. No peripheral veins are palpable. Which of these is the best option?

A. Adult IO needle to distal femur
B. Bariatric IO needle to humeral head
C. Abort IV attempts and transport immediately
D. Longest 20 g peripheral IV catheter to antecubital site

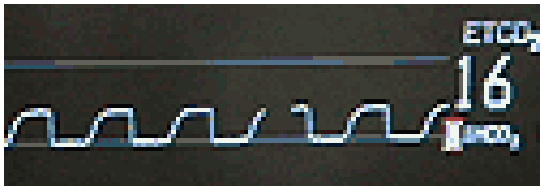
27. Which is true regarding the assessment or management of an extremely obese patient?

A. Supine patients will have decreased range of motion
B. Motor strength is greater due to enlarged muscle mass
C. Pain perception is the most sensitive symptom of pathology
D. Symmetry is impossible to assess due to body surface distortion from uneven fat distribution

28. Which is true regarding the assessment or management of an extremely obese patient?

A. Clinical abdominal exams are highly accurate for intraperitoneal irritation
B. OLMC should be contacted for weight-adjusted drug doses to avoid sub-therapeutic levels
C. To maintain privacy, defer inspection of the skin under the pannus until pt is admitted to the ED
D. All stretchers support bariatric pts if 2 long back boards are used side by side to extend the width

29. An obese, sedentary, adult w/ NO hx of asthma, presents with a sudden onset of severe sharp pleuritic chest pain; severe dyspnea, tachypnea, restlessness, SpO_2 doesn't register, tachycardia and clear lung sounds. Capnography below. Which of these is likely?



A. Severe atelectasis
B. Pulmonary embolus
C. Acute pulmonary edema
D. Spontaneous pneumothorax

WITHHOLDING OR WITHDRAWING OF RESUSCITATIVE EFFORTS (Also see Policy)

30. What action is indicated if PMs are presented with a State DNR form that contains the pt's name, date implemented, physician's signature, the DNR box checked, the pt's signature and 1 witness signature?

A. Accept the valid order and withhold CPR
B. Ask family members for an additional witness signature
C. Call the physician who signed the DNR to verify the pt's diagnosis
D. Contact OLMC and seek a physician's authorization to accept the incomplete order

31. What component of a DNR order can a "Living will" be used to fulfill?

A. Stand-alone instructions to withhold resuscitation
B. Consent to a physician-originated DNR order

32. Does the NWC EMSS accept photocopies of a valid DNR order?

A. Yes B. No

33. Under what circumstances can a person with Power of Attorney for healthcare rescind a DNR order?

A. If they disagree with the physician's order
B. If they or another surrogate provided consent
C. If the pt who provided original consent is now non-decisional
D. If family members need more time to agree on end of life decisions requested by the pt

34. An adult presents with end stage cancer. The pt is enrolled in hospice and has a valid DNR. Currently, she responds to verbal stimuli but is very restless and is moaning in pain. VS: BP 100/70, P 112, R 20, SpO_2 96%. A saline lock is placed in the left hand. What interventions are indicated?

_____

35. What is the minimum amount of time in minutes that monitored asystole must persist before seeking a physician's order to discontinue resuscitation in a normothermic adult who presents with unwitnessed cardiac arrest?

A. 10
B. 15
C. 20
D. 30

AIRWAY OBSTRUCTION

36. A foreign body is totally obstructing the upper airway of an unconscious adult. After repositioning of the head, ventilation is still unsuccessful. According to the SOPs, what intervention is indicated next?

A. Begin CPR
B. 5 abdominal thrusts
C. Surgical cricothyrotomy
D. Visualize the airway with laryngoscope and attempt to clear using forceps and/or suction

37. If a conscious infant less than one year presents with an upper airway obstruction, which intervention is indicated first after repositioning the head and attempting to ventilate?

A. Five abdominal thrusts
B. Five back slaps followed by 5 chest thrusts
C. Direct laryngoscopy and removal with the Magill forceps
D. Intubate and push the obstruction into the right mainstem bronchus

38. Under what circumstances may PMs attempt a surgical cricothyrotomy on a child age 8 to 12 years?

Drug assisted Intubation

39. List two examples of patients where drug assisted intubation (DAI) may be indicated.

_____

_____

40. If a patient is breathing spontaneously at a rate of ≥ 8, what preoxygenation is indicated prior to DAI?

A. 12-15 L/NRM for 3 minutes
B. 15 L/BVM for 6 large breaths

41.

Benzocaine	
Action/classification	
Contraindications	
Dose	
Side effects	

42. Which of these requires premedication with lidocaine 1.5 mg/kg prior to DAI?

A. Pulmonary edema with PVCs
B. Hypertensive crisis
C. Trismus
D. Stroke

43. What is the initial adult dose of midazolam prior to DAI? _____

44.

Etomidate	
Action/classification	
Contraindications	
Dose by weight	
Max dose	
Side effects	

45. Which drug sequence is appropriate if a patient requires DAI, but their teeth are clenched?

A. Benzocaine spray, midazolam, etomidate
B. Etomidate, benzocaine, midazolam
C. Midazolam, etomidate, benzocaine
D. Fentanyl, etomidate, benzocaine

46. Which airway confirmation method carries an AHA Class I LOE A recommendation and is the new NWC EMSS standard after January 1, 2011?

A. Waveform capnography
B. Colorimetric CO_2 detectors
C. Esophageal detector device
D. Listening to gastric and bilateral breath sounds

47. Is use of a commercial tracheal tube holder device optional or required in the NWC EMSS?

A. Optional
B. Required

48. Is the use of head immobilization after all intubations optional or required in the NWC EMSS?

A. Optional
B. Required

49. What can be given to prolong post-intubation sedation if an intubated patient starts fighting the tube or assisted ventilations?

A. Fentanyl
B. Lidocaine
C. Etomidate
D. Midazolam

50. What is the maximum number of intubation attempts allowed prior to inserting a rescue airway?

_____

Refer to King Airway procedure to answer questions 51-58

51. If a patient is taller than 6 feet, what size King airway should be inserted?

A. 3 (yellow)
B. 4 (red)
C. 5 (purple)
D. 6 (green)

52. List two contraindications for King airway insertion

_____

_____

53. Where should lubricant be applied to the King airway prior to insertion?

A. Entire surface of both balloons
B. Entire surface distal to the large balloon
C. Anterior aspect of the tube to facilitate entry through cords
D. Distal tip and posterior surface, avoiding ventilatory openings

54. When first inserting the King airway, where should the blue orientation line be touching?

A. Middle of the top lip
B. Middle of the lower lip
C. Corner of the patient's mouth

55. The King airway should be advanced until the

A. proximal cuff passes beyond the teeth.
B. 22 cm mark is at the patient's front teeth.
C. tube adaptor is entirely in the patient's mouth.
D. color adaptor is aligned w/ front teeth or gums.

56. What is the next step after advancing the tube as above?

A. Aspirate an EDD
B. Listen to breath sounds
C. Attach the capnography monitor
D. Inflate the cuffs with minimum volume

57. What does “bounce back” indicate when placing the King airway and what should be done next?

_____

58. What action is required after inflating the King airway cuffs?

A. Note the cm markings at the teeth
B. Secure the tube and monitor pulse oximetry readings
C. While ventilating and auscultating chest, withdraw King until breath sounds heard & ventilations easy/free flowing

59. Which action is indicated if an unconscious patient with a pulse cannot be intubated or ventilated/oxygenated after insertion of a rescue airway or by using a BVM?

A. Start CPR
B. Cricothyrotomy
C. Apply a C-PAP mask
D. Load and go and alert the receiving hospital of an incoming patient in critical condition

Allergic Reactions/Anaphylactic shock

60. An adult presents with dyspnea, anxiety, facial swelling, watery eyes, and sneezing following exposure to a cat. VS: BP 110/70; P 100; R 24; SpO_2 94%; lung sounds: diffuse wheezing. Which of these is indicated first?

A. Diphenhydramine 1 mg/kg IM
B. Epinephrine 1:1,000 0.3 mg IM
C. Epinephrine 1:10,000 1 mg IVP
D. Albuterol & ipratropium via HHN

61. An adult presents with peripheral tingling, scratchiness in the back of the mouth and throat, nasal congestion, eye tearing, and persistent sneezing following yard work. VS: BP 130/80; P 84; R 16; SpO_2 98% on room air; and lung sounds are clear. Which of these is indicated?

A. Epinephrine 1:1,000IM
B. Epinephrine 1:10,000 IVP
C. Albuterol & ipratropium/HHN
D. Diphenhydramine IM or slow IVP

62. An adult presents with altered mental status and is experiencing angioedema, significant voice changes, chest tightness, bilaterally diminished breath sounds, and a BP 84/60 after starting a new prescription of an antibiotic. Which of these is indicated first?

A. Diphenhydramine 50 mg IM
B. Epinephrine 1:1,000 0.3 mg IM
C. Epinephrine 1:10,000 0.1 mg IVP
D. Albuterol & ipratropium via nebulizer

63. A conscious and oriented adult has been stung by a bee 15 minutes ago and presents with a red, very painful swollen area at the injection site. There is no rash, tearing, angioedema, wheezing, or dyspnea. VS are within normal limits (WNL). Which of these is indicated per SOP?

A. Epinephrine 1:1,000 IM
B. Diphenhydramine IM or slow IVP
C. Apply a cold pack and observe for progression
D. Apply a hot pack to vasodilate the area and disperse the venom

64. What anticholinergic drug and dose is indicated for adults who are wheezing with moderate to severe allergic reactions?

_____

65. Why are consecutive IV fluid challenges indicated for a patient in anaphylactic shock?

_____

66. Which of these is a precaution to giving epinephrine to a patient with a moderate allergic reaction?

A. Peanut allergy
B. Hypertensive BP
C. Pt is taking ACE inhibitors
D. HR that is borderline bradycardic

67. If a patient in anaphylaxis does not respond to IV fluid challenges and epinephrine and the BP remains less than 90, what drug is indicated next?

A. Albuterol 2.5 mg/HHN
B. Glucagon 1-2 mg IVP slowly
C. Dopamine; 10 mcg/kg/min IVPB
D. Diphenhydramine 50 mg slow IVP

68. What adjustment to normal resuscitation should be made for an adult in anaphylactic shock who experiences a cardiac arrest due to V-fib witnessed by EMS personnel?

A. Defer CPR until an advanced airway is placed and ventilations are supported
B. Delay defibrillation until epinephrine and diphenhydramine have been given
C. Defibrillate at the highest joule setting for the monitor-defibrillator used
D. Start 2 IVs; infuse NS as rapidly as possible (up to 8 L)

69. What concentration, dose, route, and timing of epinephrine is indicated for an adult in anaphylactic shock who goes into cardiac arrest?

A. 1:000 0.3 mg IM every 2 minutes
B. 1:000 1 mg IVP every 3 to 5 minutes
C. 1:10,000 1 mg IVP/IO every 2 minutes
D. 1:10,000 1 mg IVP/IO every 3 to 5 minutes

Asthma/COPD

70. If an adult with a severe asthma attack requires assisted ventilations, at what rate per minute should the patient be ventilated?

A. 6 -12
B. 12 -14
C. 16 - 20
D. 20 – 24

71. Is ipratropium to be added to 2nd and subsequent albuterol treatments? Yes / No

72. What is the time frame over which 2 grams of magnesium sulfate should be administered to an adult?

A. Rapid IV push
B. Over 2 minutes
C. Over 5 minutes
D. Over 10 minutes

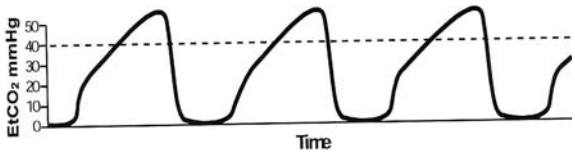
73. What should be the first intervention for a patient with COPD in profound respiratory distress with bilaterally diminished breath sounds, altered mental status, fatigue, exhaustion, severe hypoxia (SpO_2 84%) and capnography 66 with a shark fin waveform?

A. CPAP at 10 cm PEEP
B. Epinephrine 1:1,000 0.3 mg IM
C. 15 L O_2/NRM and prepare for DAI
D. Albuterol 2.5 mg & ipratropium 0.5 mg /HHN

74. Which of these should be given first to a patient with COPD in mild to moderate ventilatory distress with wheezing?

A. Atropine 0.5 mg IVP
B. Epinephrine 1:1,000 0.3 mg IM
C. Magnesium 2 mg in 16 mL NS slow IVP
D. Albuterol 2.5 mg & ipratroipium 0.5 mg /HHN

75. Which of these is indicated first if a hemodynamically stable pt with a hx of asthma presents with orthopnea, good ventilatory effort but use of accessory muscles, capnography 55 & waveform below, bilaterally diminished breath sounds, strong radial pulse and an SpO_2 of 92%?



A. CPAP + Epi 1,1000 0.3 mg IM
B. Intubation and inline albuterol per BVM
C. Intubation and epi 1:10,000 0.1 mg IVP
D. CPAP and magnesium sulfate 2 gm slow IVP

76. What is the indication for giving magnesium sulfate to a patient with an asthma attack?

A. Severe respiratory distress unresponsive to epinephrine
B. Moderate respiratory distress with a history of beta blocker use
C. Moderate distress with increasingly peaked T waves on the ECG
D. Mild to moderate distress unresponsive to albuterol and ipratropium

Acute coronary syndromes (ACS)

77. List 3 anginal equivalents that should cause EMS and ED personnel to suspect a possible ACS event:

_____

_____

_____

78. How should oxygen be delivered to a patient with chest pain and mild dyspnea who presents with adequate ventilatory rate/depth, minimal distress and an SpO_2 of 93%?

A. No oxygen is indicated
B. NC at 1-6 L/min to achieve $SpO_2 \geq 94\%$
C. NRM at 12-15 L/min to achieve SpO2 ≥ 98%
D. CPAP at 5 cm PEEP to achieve SpO2 ≥ 95%

79. When should a 12-lead ECG be obtained when caring for a patient with possible ACS?

80. A C&A 16 y/o M presents with L pleuritic chest pain (7/10) after a strenuous soccer game where he collided with another player. He is dyspneic, dizzy, and can feel his heart pounding in his chest. No PHM, Meds, or allergies. VS: BP 130/80; P 110; R 24; SpO_2 98%; lung sounds possibly diminished on L; skin warm, dry, color normal. Which of these is indicated?

A. ASA
B. NTG
C. O_2/NRM
D. 12 L ECG

81. If a prehospital 12-lead ECG indicates an acute myocardial infarction (AMI), what is a priority action for a paramedic to take in the NWC EMSS?

A. Communicate ECG findings to OLMC ASAP
B. Prep the patient for administration of fibrinolytics (tPA)
C. Hang a NTG drip and administer a rapidly acting beta blocker
D. Wait 5 minutes and repeat the 12 lead to confirm the abnormal changes

82. What is the action of aspirin (ASA) when given to a patient with ACS?

_____

_____

83. List two contraindications to giving chewable ASA to a patient with possible ACS.

_____

_____

84. What is the dose of chewable ASA for ACS?

_____

85. An adult presents with chest tightness (7/10) for the past 30 minutes and you suspect ACS. VS: 170/90; P 124, ECG ST; 12-lead reads "Acute MI suspected, Anterior-lateral"; R 24; SpO_2 98%; lungs are clear. Besides chewable ASA, which of these is indicated?

A. NTG X 3
B. O_2 2 L/NC
C. Fentanyl for pain
D. Midazolam for anxiety

86. Which of these should be anticipated if NTG is given to a patient with ST elevation in leads II, III, and AVF?

A. Oxygen demand will increase in the ischemic zone expanding the area that is damaged
B. The coronary artery will dilate, perfusion will be restored, and ischemia will be prevented
C. Dilation of the L circumflex overcomes the perfusion deficits caused by the blockage in the RCA
D. Venous return is reduced in a preload dependent patient and cardiac output can drop remarkably

87. Is NTG indicated for a patient with ACS who took Levitra (vardenafil) 36 hours ago?

A. Yes B. No

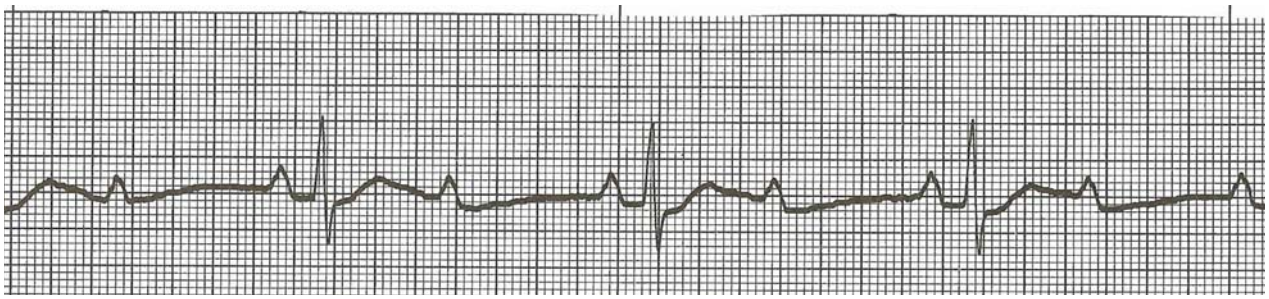
88. How often may NTG be given to an adult experiencing ACS?_____

89. What is the major cardiovascular side effect of NTG?

_____

Bradycardia w/ a pulse

90. A 70 y/o male began to experience chest pain rated 9/10 while getting dressed. He is awake and answers questions appropriately. VS: BP: 96/60; P: 36; ECG: as below; R 18; SpO_2 93%; lungs: clear; glucose: 120. Skin is warm and dry. He denies allergies, meds or a past medical history. Weight: 190 lbs.

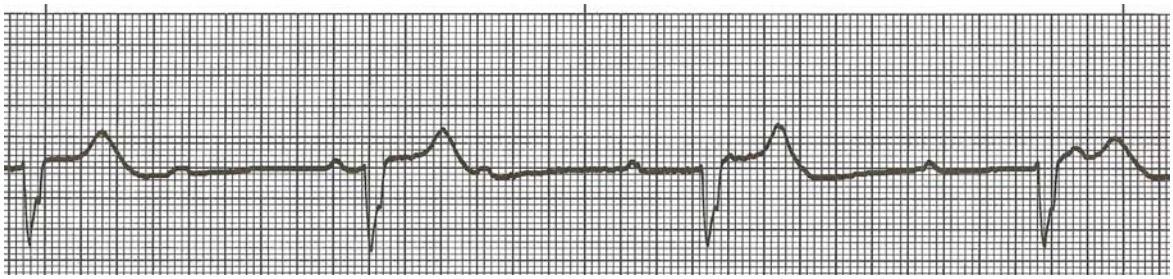


Is this patient a candidate for ASA?	[ ] Yes	[ ] No
Oxygen?	[ ] Yes	[ ] No
NTG?	[ ] Yes	[ ] No
Fentanyl?	[ ] Yes	[ ] No

91. What intervention is indicated next for the above patient?

A. Atropine 0.5 mg rapid IVP
B. Hang a dopamine drip starting at 17 mcgtts/min.
C. Begin external transcutaneous pacing at 60 BPM
D. Place TCP pads in anticipation of clinical deterioration

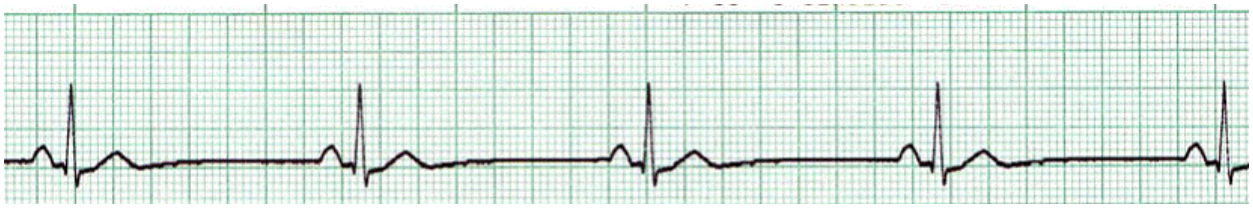
92. An elderly adult presents with altered mental status and weakness following a syncopal episode. The patient does not respond to commands. VS: BP 60/30; P 30 (weak at carotids), ECG: see below; 12 shows ST elevation in V1-V4; R 20, SpO_2 90%; lungs clear; glucose 110. Skin is pale, cold, and moist. Weight 190 lbs.



Which of these is indicated first for the above patient?

A. Place TCP pads in anticipation of clinical deterioration
B. Begin external transcutaneous pacing at 60 BPM
C. Hang a dopamine drip starting at 34 mcgtts/min
D. Atropine 0.5 mg rapid IVP

93. A 55 y/o experienced a syncopal episode at work. He is currently awake, lightheaded, weak, and denies chest pain. VS: BP: 86/44; P: 36; ECG below; 12 L shows no acute changes; R 18; SpO_2 94%; lungs: clear; glucose 110; Skin is warm and moist.



Which of these is indicated first?

A. NTG
B. Pacing
C. Atropine
D. Fentanyl

94. How should mechanical capture be confirmed when providing transcutaneous pacing?

_____

95. What is the maximum mA at which pacing should be attempted? _____

96. Is a hypotensive patient with sinus bradycardia who takes beta blockers a candidate for atropine and/or pacing prior to the administration of glucagon?

A. Yes B. No

97. What is the maximum dose of glucagon when used for severe bradycardia in the above patients?

_____

98. If a conscious patient experiences agitation from pacing, what intervention is indicated?

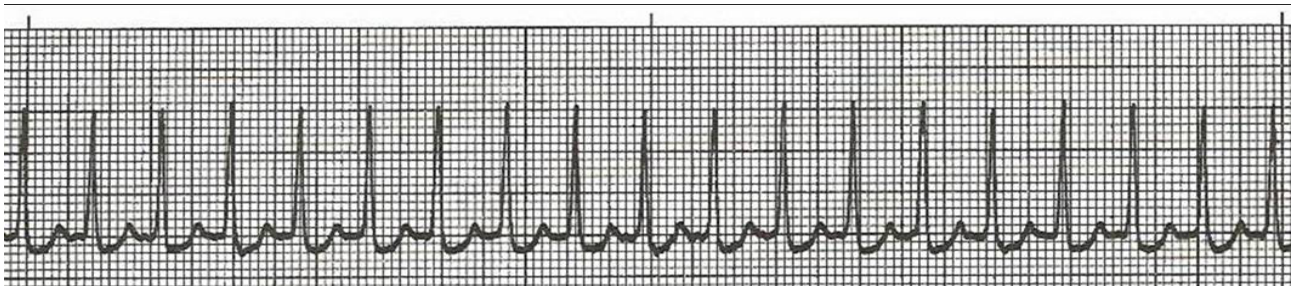
99. If a pt with bradycardia and a pulse remains unstable (BP < 90) despite pacing and/or atropine, what drug (dose, route) is indicated?

Narrow QRS Complex Tachycardia

100. Which of these should be treated according to the narrow QRS complex tachycardia SOP?

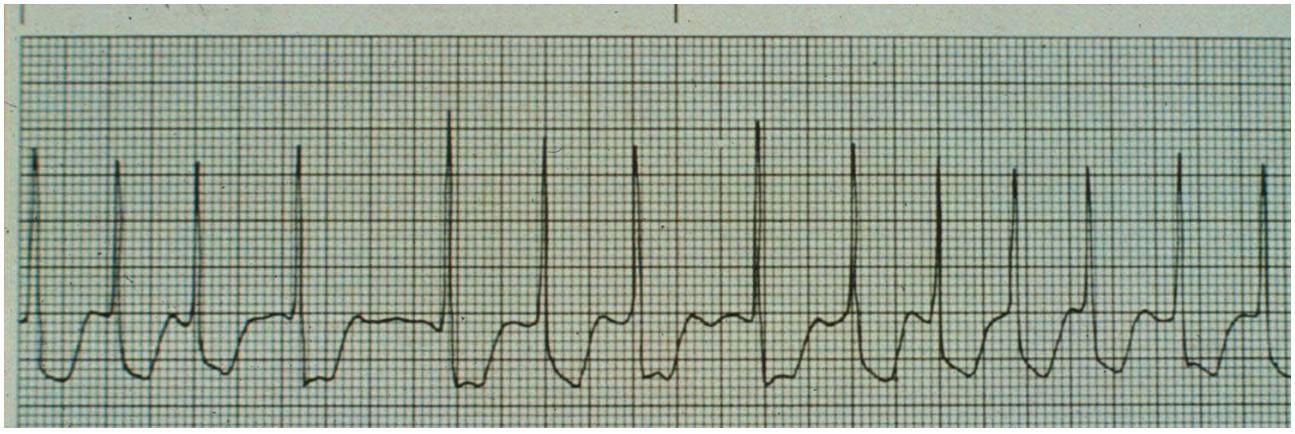
A. HR > 100 & left ventricular failure
B. Heart beating so fast cardiac output is reduced
C. HR > 150 in a patient who has overdosed on cocaine
D. HR > 130 in a trauma patient with possible intraperitoneal bleeding

101. A conscious and alert adult is complaining of chest pressure and shortness of breath. VS: BP 110/74; R 16; SpO_2 95%. ECG as below. After Vagal maneuvers are unsuccessful in slowing the rate, what intervention is indicated?



A. Synchronized cardioversion at 100 J
B. Verapamil 5 mg slow IVP over 2 minutes
C. Adenosine 6 mgt rapid IVP + 20 mL NS flush
D. On-going assessment, no medications, transport

102. A conscious and alert adult is complaining of chest pain and palpitations. VS: BP 110/74; P 140; R 16; SpO_2 95%. ECG as below.

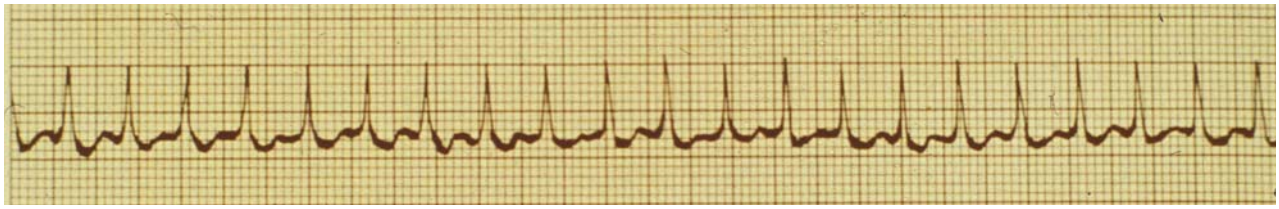


After Vagal maneuvers are unsuccessful in slowing the rhythm, what intervention is indicated?

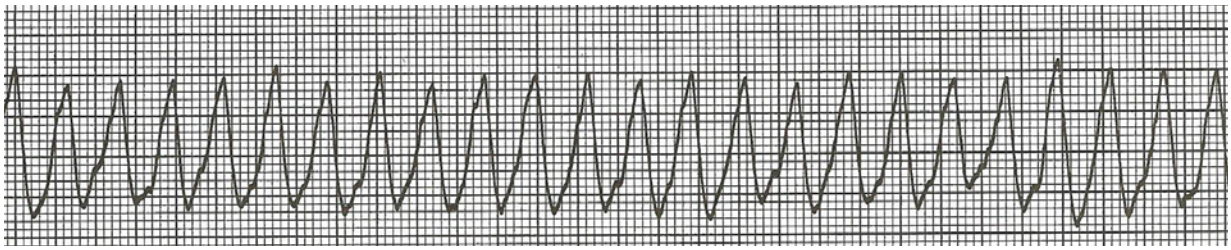
A. Verapamil 5 mg slow IVP
B. Adenocard 6 mg rapid IVP
C. Magnesium 2 Gm slow IVP
D. Amiodarone 150 mg slow IVP

103. While administered the above drug, the patient loses consciousness and the BP falls to 60/palp. At what joule setting should they be cardioverted initially?

104. An adult presents with grossly altered mental status and is slow to respond to questions. He is complaining of chest pain and has the following rhythm. A weak and rapid carotid pulse is palpable. Which intervention is indicated (assume no IV/IO yet)? (*Hint:* Look at regularity of R-R)



Ventricular tachycardia w/ a pulse



105. Which intervention is indicated for a conscious & alert adult with a radial pulse and BP 100/70 who presents in the above rhythm?

A. Lidocaine 1.5 mg/kg IVP
B. Synchronized cardioversion at 100 J
C. Magnesium 2 Gm in 16 mL NS slow IVP
D. Amiodarone 150 mg mixed w/ 7 mL NS slow IVP

106. What intervention is indicated ASAP if the above pt develops altered mental status or drops their SBP < 90?

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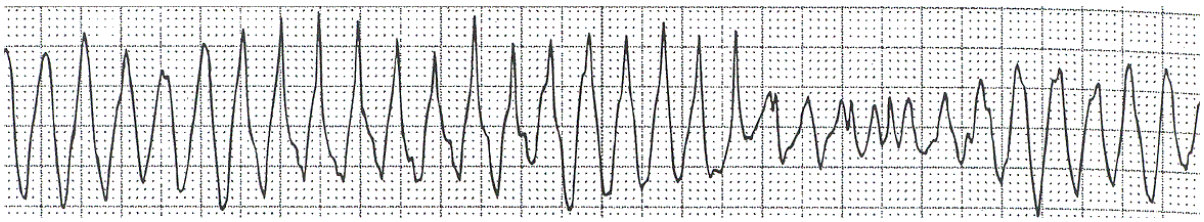
107. What intervention is indicated for a conscious adult with a radial pulse & BP 100/70 in the rhythm below?



A. Synchronized cardioversion at 100 J
B. Magnesium 2 Gm in 16 mL NS slow IVP
C. Amiodarone 150 mg mixed w/ 7 mL NS slow IVP
D. Defibrillation at 360 J or device-specific biphasic setting per VF SOP

108. What intervention is indicated if the above patient develops an altered mental status or drops their SBP < 90?

Ventricular fibrillation/pulseless VT

109. Why were look, listen, and feel deleted from the AHA ECC algorithms?

A. If patients are gasping they don't need CPR
B. Performance is inconsistent and time consuming
C. Steps were too complicated and needed simplification
D. We don't need to know if the patient is unresponsive as long as they are pulseless

110. What is the current recommendation with respect to pulse checks in unresponsive patients?

A. If not definitely felt in < 10 sec start CPR
B. If not definitely felt in < 5 sec – defibrillate the patient
C. Pulses cannot be felt during cardiac arrest – so the step was omitted
D. Accurate assessment was emphasized and the time expanded to check for 15 sec

111. Which patient requires CPR to be initiated using the traditional A-B-C priority steps?

A. Young adults with cardiomyopathy
B. Presumed asphyxial arrest (drowning)
C. Children with congenital heart disorders
D. Those whose arrest was caused by an AMI

112. Which of these is indicated FIRST if an adult is found unresponsive, apneic and pulseless after c/o chest pain to coworkers?

A. Give two quick breaths before starting compressions
B. Apply pads and defibrillate immediately
C. Do a quick look and check the rhythm
D. Begin CPR with compressions

113. What is the maximum length of time in seconds that chest compressions should be interrupted to check the rhythm and/or defibrillate the patient?

A. < 5
B. 10 to 15
C. 15 to 20
D. 20 to 30

114. What is the optimal CPR compression rate per minute for an adult?

A. 60
B. 80-100
C. At least 100
D. Approximately 100

115. What is the current chest compression depth for adults during CPR?

A. ½ to 1 inches
B. 1½ to 2 inches
C. At least 2 inches
D. ½ the anterior posterior chest diameter

116. What can be implied if capnography readings remain at 25 during CPR?

A. Compression quality is good
B. Resuscitation (ROSC) is unlikely
C. The patient is profoundly hypoxic
D. Need to switch person doing the compressions

117. What is the initial J setting to defibrillate a patient in VF if using a Zoll M series rectilinear biphasic defibrillator?

A. 50
B. 120
C. 200
D. 360

118. What is the initial J setting to defibrillate VF using a Medtronic LifePak 15 biphasic defibrillator?

A. 50
B. 120
C. 200
D. 360

119. Which of these is indicated immediately after defibrillating a patient in pulseless arrest?

A. Check for a pulse
B. Assess the rhythm
C. Resume chest compressions
D. Give 2 quick breaths and then resume compressions

120. Which of these should be administered in VF as soon as vascular access is established to improve the effectiveness of CPR by vasoconstricting the arteries?

A. Dopamine in high doses
B. Lidocaine or amiodarone
C. Vasopressin or epinephrine

121. What is the initial dose of amiodarone for patients in VF?

A. 50 mg
B. 100 mg
C. 150 mg
D. 300 mg

122. What is the repeat dose of amiodarone for patients in VF and how long after the 1st dose should it be given?

123. How often should patients in refractory/persistent VF be defibrillated?

A. Every 2 minutes
B. After each minute of CPR
C. Each time CPR is paused to do an ALS intervention
D. Whenever the patient is moved and it is safe to discharge the paddles

124. What is the first clue of return of spontaneous circulation (ROSC)?

A. Pulses and BP return
B. The patient opens their eyes
C. Patient bites the ET tube or King airway
D. Abrupt and sustained rise in capnography reading w/ normal waveform

125. An adult experienced ROSC from VF. The pt is unconscious, remains intubated; and $EtCO_2$ has a square waveform and digital reading of 62 mmHg. The pt is breathing spontaneously. VS: BP 80/50; P 76; R 12; SpO_2 93%. Which of these is indicated?

A. O_2 to achieve an SpO_2 of 100%
B. Hyperventilate to an $EtCO_2$ of 30
C. O_2 just to achieve an SpO_2 of 94%
D. Secure ResQPod to ensure good ventilations

126. An adult experienced ROSC from VF. The pt is unconscious, remains intubated and $EtCO_2$ confirms a good waveform and a digital reading of 62 mmHg. The pt is breathing on his own. VS: BP 80/50; P 76; R 12; SpO2 93%. How should the BP be supported?

A. IVF challenges of warm NS
B. Dopamine 2-20 mcg/kg/min IVPB
C. If BP < 90 after 10 min give 1 mg of epinephrine IVP
D. Do two more minutes of CPR to support cardiac output

127. Why is it important to obtain a 12 L ECG ASAP after ROSC?

A. To get the best possible rhythm analysis
B. To look for evidence of benign early repolarization
C. To see if the heart was damaged during the resuscitation
D. To determine the need for an urgent cardiac catheterization (STEMI)

Asystole/PEA

128. An adult presents with IVR & PEA. CPR has been in progress for 12 min, the pt has been given epi 1 mg IVP X 3 & vasopressin 40 u; a King LT is placed and $EtCO_2$ ranges 30-34 mmHg. An empty bottle of amitriptyline is next to the pt. Which of these is indicated?

A. Atropine
B. Glucagon
C. Sodium bicarbonate
D. Terminate resuscitation; further attempts are futile

129. Why has the routine use of atropine been removed from the asystole/PEA SOP?

A. Atropine is harmful for these rhythms
B. Pacing works better for these patients
C. Evidence suggests that atropine is unlikely to have a therapeutic benefit
D. These pts usually die so it's better to minimize the time and expense in trying to resuscitate them

Heart Failure (HF)/Pulmonary Edema/Cardiogenic Shock

130. What intervention is indicated first if a patient in pulmonary edema presents with severe respiratory distress and/or altered mental status?

A. O_2 10-15 L/NRM
B. DAI and O_2 15 L/BVM
C. O_2 15 L (FiO_2 60%)/C-PAP mask w/ 5 cm PEEP
D. O_2 flush (FiO_2 95%)/C-PAP mask w/ 10 cm PEEP

131. An adult is being treated for pulmonary edema with C-PAP at the initial settings. They are very anxious and not tolerating the mask well. VS: BP 190/94, P 122, R 28, SpO_2 84%. Lungs have bilateral crackles in both bases. What action is indicated first?

A. Increase PEEP to 10 cm and FiO_2 to 95%
B. Perform DAI and assist ventilations with a BVM
C. Stop C-PAP and switch to a nonrebreather mask
D. Have a paramedic coach the pt, consider giving midazolam in 2 mg increments

132. An adult presents with dyspnea that has gradually gotten worse over the past 3 days. The patient denies chest pain, cough, fever, or recent illness. PMH: Hypertension (HTN) and high cholesterol. They are supposed to be taking Hydralazine and Vytorin, but have not been taking them recently. VS: BP 186/100, P 90; ECG SR w/ no evidence of AMI; R 24, SpO_2 92%; capnography 32 with square waveform; lungs have wheezing bilaterally. Which of these is indicated for this patient?

A. C-PAP & NTG
B. Epinephrine 0.3 mg IM
A. O_2 15 L/NRM and transport
B. Albuterol & ipratropium/HHN

133. If total patient contact and transport time are listed as 25 minutes on the patient care report, what is the minimum number of nitroglycerin tabs that should have been given to a patient in acute pulmonary edema who has a SBP > 90? (*Hint* - think of the time of patient contact as the 0 minute mark up to the 25 minute mark when pulling up to the hospital. Use the longest interval dosing in the SOP.)

134. An adult had an onset of chest pain (rated 10/10) 30 minutes ago while watching TV. Wt: 200 lbs. PMH: HTN; Meds: Cozaar; denies any allergies. Skin: cold and diaphoretic with dusky lips and nailbeds and no ankle edema; lungs have crackles bilaterally. VS: BP 70/50; P 86; R 28; ECG: SR; SpO_2 70%; capnography 34 with square waveform. After IMC, which intervention is indicated?

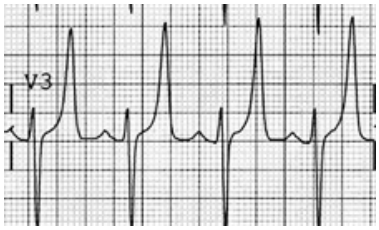
A. C-PAP w/ 10 cm PEEP
B. Nitroglycerin 0.4 mg SL
C. Fluid challenges in 200 mL increments
D. Dopamine drip, starting at 18 mcgtts/min

MEDICAL EMERGENCIES

135. A patient with a pulsating midline abdominal mass above the umbilicus is c/o severe abdominal pain radiating to the back and severe flank pain with diminished femoral pulses. VS: BP 98/66; P of 100. Should this patient be treated with IV fluid challenges?

A. Yes B. No

136. An adult presents with severe weakness prior to renal dialysis. ECG as below. Which drugs are indicated?



137. A 75 y/o adult with a Hx of HTN presents following a syncopal episode. The patient is currently awake and answering questions appropriately. VS and pulse oximetry are within normal limits; pupils are midpoint, equal, and reactive to light. There is no history of a seizure disorder and the patient is not incontinent. Besides a glucose reading, what other diagnostic assessment should be performed?

138. Why has the initial naloxone dose been reduced from 2 mg to 0.4 mg?

A. Higher doses can lead to sedation and hypotension
B. Low doses reverse opiates as effectively as high doses
C. Higher doses can cause fulminate withdrawal in opioid-dependent pts
D. Low doses prevent the need for an advanced airway without waking them up

139. A 40 y/o male has the odor of alcohol on his breath. He is unable to tell you his address or phone number, is unable to perform rapid alternating movements, and cannot touch his finger to his nose. He is agitated, uncooperative with your attempts to place him on the stretcher, and is refusing transportation to the hospital. Which of these is indicated first?

A. Obtain a blood glucose reading to assess for hypoglycemia
B. Leave him in the custody of police to sleep it off, as he is apparently intoxicated
C. Provide him with full disclosure of risk and have him sign the Release of Service form
D. Administer midazolam in 2 mg increments to decrease his agitation and facilitate transport

140. An adult patient is awake and jittery with a history of type 1 diabetes. VS: BP 150/80; P 116; and R 16. Glucose level is 68. What intervention is indicated?

141. What drug should be given to hypoglycemic patients with altered mental status (AMS) when vascular access cannot be established?

142. An unconscious adult received dextrose 50% IVP for hypoglycemia. After regaining consciousness, the patient is refusing transport to the hospital. What must the patient be advised before EMS leaves the scene?

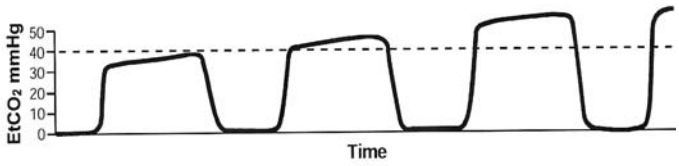
A. They need to eat to prevent recurring hypoglycemia.
B. They should check their blood sugar ever 5 minutes for the next hour.
C. They should skip their next dose of insulin to avoid another dip in blood sugar.
D. They should take their next insulin dose early to offset the effects of the IV dextrose.

143. What 3 clinical signs or symptoms must be present for a patient to be treated for diabetic ketoacidosis (DKA)?

144. What intervention is indicated for DKA or Hyperosmolar Hyperglycemic Non-ketotic Syndrome (HHNS)?

A. 50% dextrose, 50 mL IV or IO
B. NS wide open up to 1 L unless contraindicated
C. O_2 at 2 L per simple face mask so the patient rebreathes CO_2 and stops hyperventilating
D. Assist the patient in administering an additional dose of insulin to bring the blood sugar down

145. An adult presents w GCS 9 (2, 2, 5) with snoring ventilations. VS: T 98.7º F, BP 100/70, P 84, R 8; RA SpO_2 90%. Skin: diffuse flushing w/o lesions or bruising; lungs clear bilaterally; Pupils small & reactive; abdomen: normal bowel sounds; no distension or tenderness. PMH unknown. Capnography below. Which of these is indicated?



A. CPAP 5 cm PEEP; glucagon 1 mg IVP
B. O_2 15 L/BVM; blood glucose level; naloxone
C. O_2 NC to SpO_2 94%; sodium bicarb 1 mEq/kg IVP
D. Intubation w/ 100% O_2/BVM; inline albuterol & ipratropium

146. What drug and dose is indicated if a patient has severe HTN or seizures following ingestion of cocaine?

147. A patient with a GHB OD is in respiratory arrest with tightly locked jaws. Should this patient be intubated?

A. Yes B. No

148. What drug and dose should be given to a patient who presents with tearing, drooling, nausea, and tiny pupils following exposure to organophosphates?

149. What is an important consideration when using the RAD-57 pulse co-oximeter device?

A. The device eliminates the need to assessSpO_2
B. The device will only detect CO poisoning about 50% of the time
C. It is highly accurate and an essential tool to diagnose CO poisoning
D. The device is better able to detect cyanide poisoning than a clinical assessment

150. A patient presents with possible CO poisoning with a GCS of 9; BP 150/90; P 120; R 26; SpO_2 98% and clear lung sounds. Where should NWC EMS paramedics transport this patient?

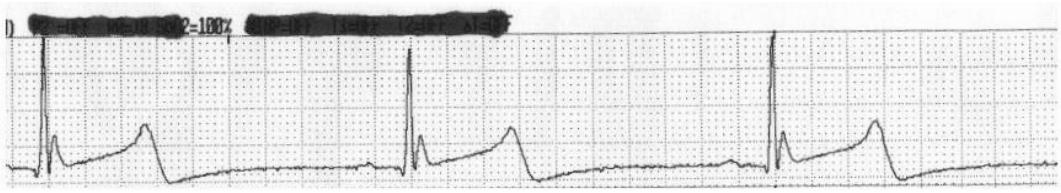
151. What antidote to cyanide poisoning is an alternative to amyl nitrite inhalents?

A. Cyanokit – Hydroxocobalamin
B. Sodium thiosulfate
C. Amyl nitrate IVP
D. Methylene blue

152. What interventions are indicated to rapidly rewarm frostbite and to protect the skin?

153. Should apneic pts with severe hypothermia (T < 86° F) in an agonal rhythm be intubated? Yes / No
Should they be hyperventilated? Yes / No
Be defibrillated? Yes / No
Receive vasopressors? Yes / No

154. An adult slept in his car in subfreezing temperatures. The pt responds slowly to voice but is confused. There is no shivering. Skin is pale and cold; extremities are stiff. A carotid pulse is palpable at 30; ECG: below; R 6; T 84° F; lungs are clear; pupils are dilated. What type of rewarming does this patient require?



A. Active external with blankets and hot packs all over the body
B. Rewarm trunk only, avoid rewarming extremities

155. An adult was rescued from a lake after being submerged for about 5 min after falling off of an inflatable raft. After 2 min of CPR the pt has ROSC, wakes up, has good respiratory effort, and is refusing transport. VS: BP 110/70; P 60; R 16; SpO_2 92%; lungs sound congested. Which of these is indicated?

A. Apply CPAP
B. Trendelenburg position to drain the lungs and spine motion restriction
C. Perform abdominal thrusts to help clear the lungs of fluid before reassessing his status
D. Apply O_2 15 L/NRM while giving patient full disclosure of risk prior to executing the refusal form

156. What fluid resuscitation is indicated for a patient with heat exhaustion?

157. Name three clinical signs that suggest heat stroke.

158. A conscious adult is c/o double vision and a severe headache of non-traumatic origin. VS: BP 250/140; P 80; R 16; lungs clear. What interventions are indicated as part of IMC?

159. During transport of the above patient, hypertension persists and the patient begins to complain of chest pain. What intervention is now indicated?

160. List three factors that need to be assessed and documented to determine if a patient has decision-making capacity when a psychological emergency is suspected:

161. Who must confirm the order for using restraints on a combative patient? _____

162. A young adult presents with agitation, paranoia, violent behavior and has two police officers trying to subdue him. Once in restraints, his VS are: BP 160/100; P 116; RR 24; T 102° F. Pupils are dilated; glucose 120. Wt: 200 lbs. Which of these is indicated?

A. Midazolam 10 mg IN or IM
B. Etomidate to rapidly induce unconsciousness
C. Fentanyl to abate pain and reduce CNS irritability
D. Tighten the stretcher straps to prevent patient injury

163. Under what circumstances should paramedics complete a Petition form?

164. List three things that should be observed and documented during the secondary assessment of a patient who presents with seizure activity.

_____

_____

_____

165. What is the only type of seizure that should be treated with midazolam?

166. What is the maximum scene time goal in minutes for patients with suspected stroke?_____

167. What assessment findings should be obtained as part of the Cincinnati Stroke Scale (CSS)?

_____

_____

_____

168. List three possible presentations of stroke other than those S&S included in the CSS.

_____

_____

_____

169. Why is the time of symptom onset so important for EMS to obtain and report in patients with suspected stroke?

170. An adult presents with a possible stroke. GCS: 15 (4-5-6). VS: BP 180/96; P 72; ECG: AF; R 18; SpO_2 93%; lungs are clear; glucose 120. The pt was last seen normal about 30 min ago. Which is indicated while on-scene?

A. IV NS TKO
B. Oxygen to SpO_2 of 94%
C. Sit in semi-Fowler's position
D. Elevate patient's head on a pillow

171. An unconscious elderly adult is responsive to pain. The pt had slurred speech and a left sided motor deficit before losing consciousness. GCS 10 (2-3-5); lash reflex intact; BP 170/96; P 72; R 18. Lungs are clear. Glucose reading: 20. ETA to the nearest hospital is two minutes. What treatment is indicated?

_____

172. Which of these is contraindicated for patients in septic shock?

A. Etomidate
B. Pulse pressure of 30-50
C. Dopamine in alpha doses
D. IV NS to achieve MAP > 65

173. How should IV fluid be given to a patient in septic shock?

A. 2 L wide open on large bore catheters
B. 1 L TKO to prevent overloading of the lungs
C. 1 L NS with 1 amp of sodium bicarb; 500 mL/hour
D. Consecutive 200 mL increments to achieve MAP > 65

TRAUMA SOPS

174. At what point in the call are IVs to be started on trauma patients if scene time would be delayed due to attempts at vascular access?

_____

175. What is the maximum SBP target in mmHg when providing IV fluid challenges to a pt with blunt torso trauma?

A. 70
B. 80
C. 90
D. 100

176. What is the maximum SBP target in mmHg when providing IV fluid challenges to a pt with penetrating torso trauma?

A. 60
B. 70
C. 80
D. Above 90

177. What is the *first* step in hemorrhage control for brisk venous bleeding from a deep laceration to the leg?

A. Apply a tourniquet
B. Apply a cold pack over the site
C. Firm pressure over pressure points
D. Direct pressure over QuikClot dressing

178 Which is appropriate regarding tourniquet use to stop hemorrhage in a mangled limb?

A. Apply a CAT tourniquet 2”-3” proximal to the wound
B. Apply just enough pressure to maintain weak distal pulses
C. Release tourniquet every 5 min to prolong ischemic time in the limb
D. Apply a tourniquet only as a last resort after pressure points & elevation fail to stop bleeding

179. An adult presents with a fractured pelvis after being struck by a car. Skin is pale, cool, and diaphoretic. VS: BP 86/64; P 112; R 24; lungs are clear. The pt is anxious and in severe pain. Which of these is indicated?

A. Fentanyl 200 mcg IN
B. Dopamine drip at 5 mcg/kg/min
C. IV of NS run wide open up to 2 L
D. Wrap pelvis w/ sheet or pelvic binder

180. In order to take a patient with hemodynamic instability from trauma to a Level I Trauma Center, the total transport time may not exceed _____ minutes.

181. An adult has a GSW to the head from a small caliber weapon. Bleeding is controlled from the wound. The patient is awake and talking to EMS but does not remember what happened. They stick out their tongue when asked to do so. Pulse is a normal rate at the radials. Does this patient meet the criteria for transport to a Level I trauma center?

A. Yes
B. No

182. A conscious & alert restrained driver presents following a high speed frontal impact crash with over 2 ft of metal deformity. The airbag deployed and the pt has superficial abrasions to the hand and wrists and is c/o some neck stiffness but no pain. Lung sounds are clear bilaterally, radial pulses are full with a generally normal rate, and the pt moves all four extremities. Where should this patient be transported?

A. Nearest Level I trauma center
B. Nearest trauma center; level I or II
C. Nearest hospital; pt does not require a trauma center

183. A conscious adult presents with partial and full thickness burns over 60% of their body from a house fire. There is no other mechanism of trauma. The airway is presently intact with no apparent burns or dyspnea; RR rapid; SpO_2 96%. Pain is rated 10/10; radial pulse is weak and rapid. Where should this patient be transported?

A. Nearest Level I trauma center
B. Nearest trauma center; level I or II
C. Consider triage to nearest burn center
D. Nearest hospital for initial stabilization

184. An adult presents in traumatic arrest following blunt trauma sustained in an MVC. The patient has obvious chest and head injuries but does not meet the criteria for triple zero. After initiating CPR, there is resistance to ventilating with a BVM and breath sounds are absent on the left and present on the right. The nearest hospital can be reached within 10 minutes. Which of these is indicated?

A. Transport immediately for care at the hospital
B. Pt is nonsalvageable; terminate all resuscitation
C. Perform bilateral needle pleural decompressions
D. Perform needle pleural decompression on L chest

185. If taser probes are embedded in the in the pt's face, neck, groin, or over the spinal column, what EMS action is indicated?

A. DO NOT remove
B. Seek OLMC order to remove the probes
C. Ask the pt to remove them and give directly to police
D. Ask police to remove them and place directly into a sharps container

BURNS

186. How should the airway be secured for a patient with an inhalation burn in severe respiratory distress and with progressive compromise of the airway?

_____

187. An adult has partial and full thickness burns of the abdomen, perineum and the entire anterior surface of both legs. Using the Rule of nines, what percentage of the total body surface area has been burned?

A. 55%
B. 37%
C. 28%
D. 19%

188. A conscious and agitated adult presents with partial thickness thermal burns over 60% of TBSA. VS: BP 110/84; P 130; R 32; SpO_2 96%. Airway is currently patent. In addition to 15 L O_2/NRM and pain management, which of these is indicated?

A. IV NS 20 mL/kg, debride blisters; moist sterile dressings
B. IV NS WO up to 1 L, apply burn cream, cover with a dry sterile sheet
C. IV NS WO up to 2 L, cover with cold packs and moist sterile dressings
D. IV NS WO up to 1 L, cover burns with plastic wrap or dry sterile dressings

189. Which is appropriate prehospital treatment for wet chemical burns?

A. Cool with iced saline soaks
B. Absorb the chemicals using a towel and cover with wet dressings
C. Apply an antidote to neutralize the chemical, then apply dry, sterile dressings
D. Remove all clothing and jewelry; flush the area with copious amounts of saline/water

190. Which of these is true relative to electrical burns?

A. The patient's ECG should be monitored for dysrhythmias
B. Entry and exit wounds predict the full severity of internal damage
C. The patient will most likely be found hyperventilating due to current exposure
D. Entry and exit wounds are generally superficial partial thickness and will be very painful

CHEST TRAUMA

191. What size needle should be used to perform a needle pleural decompression?_____

192. What should be used to convert an open to a closed pneumothorax?

193. A driver was injured in a lateral impact crash. The patient answers questions appropriately and is c/o dyspnea. Lung sounds are diminished on the left and an unstable rib segment moves paradoxically to the rest of the chest. Pulse is rapid at the radials; respirations are rapid and labored. RA SpO_2: 85%. Which of these is indicated?

A. Fentanyl IVP and IVF challenges
B. C-PAP at 5 cm PEEP and 60% FiO_2
C. Splint ribs with an ACE wrap around the chest
D. Position pt on uninjured side to facilitate ventilation

194. Which of these is indicated for a patient who presents with muffled heart tones, JVD, and a BP of 60/30 following a small penetrating chest wound to the left of the sternum?

A. Pericardiocentesis
B. Dopamine drip at 10 mcg/kg/min
C. IV WO while enroute to achieve a SBP of 80
D. Withhold all IV fluids to prevent rapid exsanguination

EYE EMERGENCIES

195. What topical anesthetic agent should be instilled into the eye to reduce local eye pain from a corneal abrasion or prior to chemical burn irrigation?

_____

196. If a patient has a penetrating globe injury, with what should it be covered?

_____

HEAD TRAUMA

197. What is the minimum systolic BP that should be maintained to preserve cerebral perfusion pressure in patients with head trauma?

198. When establishing patient reliability for a neuro exam, what factors must be **present**?

What factors must **NOT** be present?

199. If a patient with head trauma is extremely combative and nonresponsive to verbal attempts to calm them and is uncooperative in remaining immobilized, what interventions are indicated?

200. An adult has a closed head injury and presents with a GCS of 5 (1, 1, 3). Airway is patent. VS: BP 210/110; P 48; R 12 and irregular; SpO_2 96%; capnography 45. Pupils are unequal (L>R); L is nonreactive. Which of these is indicated?

A. Intubate using DAI
B. Elevate head of stretcher 45°
C. Midazolam IVP to prevent seizures
D. Seek OLMC order to hyperventilate to capnography of 30-35

201. Is atropine indicated for the bradycardia that accompanies a spike in ICP? YES / NO

SPINE TRAUMA

202. A young adult unrestrained male driver presents after a 25 mph frontal impact collision. The windshield is cracked. On initial exam, the patient has no motor, sensory or proprioception (position sense) deficit. He is awake and alert, complaining of neck stiffness, headache and pins and needles sensation over his shoulders. Breath sounds are clear bilaterally. ECG NSR. VS: BP 120/74; P 72; R 16 and regular. Does this patient require full spine motion restriction according to the SOPs?

A. Yes B. No

203. An adult presents with paralysis of all four extremities following a fall from a roof. His head is slightly cocked to the left and he cannot move it back to midline. Airway is patent. Skin is warm, flushed, and dry from the shoulders down. VS: BP 80/54; P 48; R 12; SpO2 97%; capnography 38 w/ square waveform; GCS 15; wt: 180 lbs. Which of these is indicated first?

A. IV NS to achieve SBP >90
B. Intubate to take over ventilations
C. Apply slight traction to neck to realign head
D. Place on scoop stretcher w/o securing head and neck to prevent further injury

204. If the patient's hemodynamic status remains unchanged after the above intervention, what is indicated next?

205. If the above intervention does not achieve a SBP $\geq$ 90, what should be given next?

206. If a patient is wearing a form-fitting helmet and the airway can be obtained by removing the faceguard, should the helmet be left in place or removed prior to transport?

A. Left in place B. Removed

MUSCULO-SKELETAL Trauma

207. An adult with an angulated closed left humerus fracture is writhing in pain rated as 10/10. The pt is hemodynamically stable, is on no meds and denies allergies. What is indicated **first** for pain management?

208. The above patient continues to resist efforts to place him on a backboard. What can be given to help reduce the muscle spasm?

209. Name the 2 replantation centers in Region 9 where patients with amputations above the wrist or ankle should be transported:

210. How should the 1st IV be run on a patient who has had compression of a muscle mass for 4 hours or more prior to compression release?

After compression release?

What should be added to the 2nd IV bag in the above patient to prevent the complications of crush injury?

211. How should a limb be positioned if compartment syndrome is suspected? Elevated **/** Below the heart

MULTIPLE PATIENT INCIDENTS

212. When does a multiple patient incident exist?

213. What triage category should be assigned to a patient who is awake and can follow commands with a radial pulse, RR < 30, but cannot walk?

A. Red
B. Yellow
C. Green
D. Deceased

214. How many patients of any triage color category may be taken to each surrounding hospital from a multiple patient incident without activating the disaster plan?

215. Who should on-scene personnel contact to coordinate the remaining patient distribution when the # of ill or injured patients exceeds the transport of the initial patients to the nearest hospitals?

A. Closest System Resource or Associate Hospital
B. Resource hospital only
C. Closest hospital (could be in another EMS System

216. Are EMS personnel required to contact the receiving hospital with a radio report when transporting patients from a multiple patient incident? A. Yes B. No

Is a complete electronic patient care report required for each pt transported? A. Yes B. No

Mass Casualty Incidents/Disasters

217. When does a mass casualty incident exist?

218. Which of these patients should be transported **first** from a mass casualty scene based on START triage?

A. Can't walk; RR 20; radial pulse present
B. No respirations after opening the airway
C. Can walk; multiple lacerations with controlled bleeding
D. Can't walk; cannot follow commands; radial pulse absent; carotid pulse present

219. Who should on-scene personnel contact to coordinate patient distribution in a mass casualty incident?

A. Closest System Resource or Associate Hospital
B. Resource hospital only
C. Closest hospital (could be in another EMS System

220. Which of these should be considered when determining the hospital destination for victims of a mass casualty?

A. Trauma triage criteria: Level I or II
B. Pt acuity based on secondary triage
C. Family relationships – send relatives to same hospital
D. Hospital distance; do not use hospitals > 30 min away

221. Is a radio report to the receiving hospital required when transporting patients from a mass casualty incident?

A. Yes B. No

Is it necessary to complete an electronic patient care report for each pt transported?

A. Yes B. No

WEAPONS OF MASS DESTRUCTION

222. What 2 medications are contained in a Mark I kit or DuoDote autoinjector?

_____

223. If a patient is coughing after exposure to a possible biological agent, what type of mask should be worn by rescuers? _____

ABUSE

224. By State law, what is a paramedic mandated to give suspected adult victims of abuse?

_____

225. What number should EMS personnel call if they suspect a resident of a nursing home has been abused?

_____

What number should be called if EMS personnel suspect that a child has been abused?

_____

TRAUMA IN PREGNANCY

226. In what position should a pregnant patient with a gestational age > 20 weeks be transported?

OBSTETRICAL EMERGENCIES

227. In what position should a laboring woman be placed for a prehospital delivery in the NWC EMSS?

A. In a squatting position over a toilet
B. Sitting straight up on a chair with full back support
C. Flat on her back with her knees bent and buttocks elevated
D. Semi-sitting (head up 30°) with knees bent or side lying on a firm surface

228. How should a paramedic facilitate delivery of the head in a normal vertex presentation?

A. Use MacGill forceps to apply traction and facilitate delivery.
B. Perform a small perineal nick with the sterile scalpel to open the vaginal inlet.
C. Accelerate the rate of descent by having the mother push hard with each contraction.
D. Place one palm over the occiput and apply pressure to the perineum with the other hand.

229. What intervention is indicated first after the head delivers if there is no evidence of meconium in the amniotic fluid during in a normal vertex delivery?

A. Feel around the infant's neck for a nuchal cord
B. Suction the nose and mouth with a bulb syringe
C. Rotate the head so the infant is facing downwards
D. Gently pull the head upwards to deliver the posterior shoulder

230. What maneuver should be performed to deliver the anterior shoulder?

A. Rotate the infant so it faces downward.
B. Have the mother pant while pulling on the head.
C. After it passively turns to one side, gently guide the head downwards
D. Twist the infant in a spiral to ease passage through the pelvic inlet.

231 Which of these is appropriate to facilitate delivery if shoulder dystocia occurs?

A. Grasp head and pull gently
B. Instruct mom to pant during contractions
C. Flex mom’s knees alongside her abdomen
D. Insert gloved fingers and attempt to disimpact the shoulders

232. A newborn is assessed at 1 minute and is found to have a pink torso with dusky fingers and toes, HR > 100; strong cry with RR 40; vigorous movement of the arms and legs and she sneezes when a bulb syringe is placed in her nostrils. What is the APGAR score?

_____

233. If the baby’s head does not deliver within 30 sec after the shoulders in a breach presentation, what action is indicated?

234. What interventions are indicated for a prolapsed cord?

235. What intervention is indicated if a woman experiences a uterine inversion immediately after delivery?

236. If a newborn is not spontaneously breathing within 30 sec following delivery, what interventions are indicated?

237. What is the pulse ox target following delivery of a newborn at 1 minute?

A. 60%-65%
B. 65%-70%
C. 75%-80%
D. 85%-95%

238. If ventilations have been assisted in a distressed newborn for 30 sec and the HR remains ≤ 60, what intervention is indicated next?

239. What is the epinephrine dose for a 3 kg newborn with severe bradycardia?_____

240. Which of these is indicated by SOP for a patient experiencing a miscarriage?

A. Vaginal packing to control bleeding
B. Dopamine drip titrated to maintain BP
C. Magnesium sulfate 2 Gm IV over 5 min.
D. If tissue is passed, transport with the patient

241. Which of these is a clinical presentation of abruptio placenta?

A. Painless, bright red vaginal bleeding
B. Sustained uterine contractions & pain
C. Placenta protruding through the cervix
D. First trimester bleeding w/ midline uterine cramping

242. List three signs or symptoms of pre-eclampsia.

_____

_____

_____

243. What drug treatment is indicated per SOPs for pre-eclampsia?

PEDIATRIC SOPs

244. The pediatric protocols should be used for all children _____ years or younger.

245. Which of these are components of the Pediatric Assessment Triangle?

A. Heart rate, respiratory rate, blood pressure
B. Appearance, work of breathing, circulation to skin
C. Heart rate, respiratory rate, Glasgow Coma Score
D. Vital signs, Glasgow Coma Score, Revised Trauma Score

246. If providing rescue breathing without chest compressions, how often should a breath be given to a child?

_____

247. What is the compression to ventilation ratio when doing CPR on an 8-year-old child? _____

248. A 20 ml/kg IV NS fluid volume bolus in children may be given up to _____ times.

249. Which of these is the standard guideline for when the pediatric EZ-IO needle should be used?

A. If the child fits on the Broselow tape (4-40 kg)
B. Up to 100 pounds
C. Up to 5 feet tall
D. If the child's leg is less than 10 inches in circumference

250. What formula is used to calculate the lower acceptable limits of systolic BP in children?

_____

251. Which is appropriate when caring for children in pain?

A. Assume that all crying children would rate their pain as 10
B. Transport rapidly for pain medication titration at the hospital
C. Use the Wong-Baker faces or FLACC scale to assess pain severity
D. Ask the parent to guess the degree of pain based on the child's appearance

252. A, 8 y/o has an obvious deformity of right forearm following a fall Wt: 75 lbs. VS: BP 106/74; P 96; R 20; skin color normal, warm & dry. GCS 15. Pain rated 10/10. Denies PMH or allergies. He strongly objects to any needles. Parents consent to care. Which of these should be given?

A. Fentanyl 30 mcg IN
B. Fentanyl 15 mcg IM
C. IV NS TKO; Fentanyl 15 mcg IVP
D. IV NS 20 mL/kg; Fentanyl 30 mcg IVP

253. A six year old who weighs 40 lbs requires DAI for a severe asthma attack? What premed and specific dose do they require before sedation?

_____

254. What is the dose of midazolam that should be given to a child when used for DAI sedation in children?

Are children sedated with etomidate prior to DAI? [ ] Yes [ ] No

255. What actions are recommended if EMS personnel are presented with a baby in cardiac arrest from a suspected SIDS death?

256. What is the pediatric dose of diphenhydramine when given to a child with an allergic reaction?

_____

257. Are paramedics authorized to give ipratropium to pediatric patients by SOP?

A. Yes B. No

258. What is the pediatric dose and route of epinephrine to give to a child with a severe asthma attack who weighs 35 lbs?

259. What is the pediatric dose of magnesium for a child who weights 48 pounds?

260. What is the first treatment to be given to a stable pediatric patient with croup?

261. What is the first intervention indicated per SOP for a child with epiglottitis and moderate to severe cardiorespiratory compromise?

A. Perform a cricothyrotomy
B. Intubate and ventilate with O_2 15 L
C. Epinephrine (1:1000) 3 mL per neb
D. Epinephrine (1:1000) 0.01 mg/kg IM

262. What is the first drug, concentration and dose to give to a pediatric patient with unstable bradycardia with a pulse who is in moderate to severe distress and weighs 66 pounds?

263. What is a recommended method to apply a vagal maneuver to a child?

264. What is the pediatric dose of adenosine?

265. What is the pediatric dose of amiodarone for monomorphic VT and VF?

266. What is the age range for using a peds attenuator system when applying an AED?

267. What is the dose for epinephrine when treating a pediatric patient in V-fib or asystole?

_____ (concentration) _____ mg/kg IV/IO ____mg.

268. Dextrose 50% is diluted for pediatric patients based on the following age categories:

1-8 years: Dextrose 50% is diluted with NS to make a _____ concentration.

< 1 year: Dextrose 50% is diluted with NS to make a _____ concentration.

Dosing for peds Dextrose is _____ mL/kg. Dosing for infant Dextrose is _____ mL/kg.

269. What concentration and volume of dextrose should be given to a hypoglycemic 3 y/o child who weighs 30 pounds?

A. D50% - 30 mL
B. D25% - 27 mL
C. D25% - 65 mL
D. D12.5% - 40 mL

270. What is the peds dose for naloxone?

271. How should a child with febrile seizures be cooled?

272. What dose of midazolam should be given intra-nasally (IN) to a 5 y/o (20 kg) child who is experiencing a generalized tonic-clonic seizure?

A. 0.01 mg/kg (0.2 mg)
B. 0.2 mg/kg (4 mg)
C. 1 mg/kg (20 mg)
D. 2 mg/kg (40 mg)

GERIATRIC PATIENTS

273. Which of these is indicated if an elderly patient with a chronic hypercarbic state (COPD) presents with acute respiratory failure?

A. Give 1 amp of bicarb to reverse the acidosis
B. Slowly reduce the $EtC0_2$ (not more than 5 mmHg/hr)
C. If intubated, hyperventilate to an $EtCO_2$ of 30-35 mmHg
D. Correct the acute resp. acidosis back to a normal $EtCO_2$ as quickly as possible

274. A 78 y/o presents with a sudden onset of profound weakness, fatigue, and dyspnea following a syncopal episode. The pt is currently awake and oriented X 3, denies chest pain, & has no facial droop, motor drift, or changes in speech. VS: BP 130/88; P 60; R 16; SpO_2 97% with no orthostatic changes; glucose 120. Skin is pale and moist; lung sounds are clear bilaterally. Which of these is indicated next?

A. NTG & ASA
B. 12 lead ECG
C. IVF challenge 2 L NS
D. BLS transport to the hospital

275. What is the preferred way to transfer an elderly pt with a possible hip fracture from the floor to the stretcher?

A. Log roll onto a sheet and lift onto the stretcher
B. Gently log roll and use a 3 man carry to transfer to stretcher
C. Use a scoop stretcher if available to move to a long spine board or stretcher
D. Have patient lift their buttocks so the spine board can be gently slid underneath them