

PHSW Procedural Sedation Post-Test Answer Key

1. Define Procedural (Conscious) Sedation:

"A medically controlled state of depressed consciousness where the patient retains the ability to continuously and independently maintain a patent airway and respond appropriately to physical stimulation and verbal commands."

For the following questions, circle the letter of the correct answer(s) or the word "true" or "false."

2. Evaluation/assessment of airway includes (circle all that apply):

- a. mouth opening
- b. neck extension
- c. Mallampati score
- d. thyromental distance
- e. none of the above
- f. all of the above

3. The pulse oximeter relies on principle that oxygenated and reduced Hb have different light absorbences at 2 wavelengths.

True

False

4. Peak onset of action after an IV dose of midazolam (Versed®) is 2 – 3 minutes.

True

False

5. During *basic* procedural sedation, patient's vital signs, including level of consciousness, should be documented every 15 minutes.

True

False (10 minutes)

6. Patients who have been given benzodiazepines should be instructed to avoid operating a car, consuming alcohol, or signing legal papers for 24 hours after receiving the medication.

True

False

7. By itself, Versed® is a potent respiratory inhibitor.

True

False

8. Many adults have chronic PVCs due to underlying cardiac and respiratory disease and caffeine intake.

True

False

9. 2.5 mg of Versed[®] has been administered over a period of five minutes. To titrate to effect, administer no more than 1 mg per minute to a maximum total dosage of 5 mg.

True

False (Peak action of Versed is 2-3 minutes)

10. Emergency treatment of over sedation with a benzodiazepine consists of the following (circle all that apply):

- a. notify the physician (MD should already be present) assess respiratory and cardiovascular status
- b. intubate immediately
- c. have resuscitative equipment and Flumazenil immediately available
- d. all of the above

11. Which of the following is NOT characteristic of *basic* procedural sedation?

- a. minimally depressed level of consciousness
- b. airway protective reflexes are maintained
- c. patient easily aroused
- d. patient unable to respond appropriately to verbal/physical stimuli

12. The possible adverse effect of most concern with using Versed[®] is:

- a. cardiac arrhythmias
- b. seizures
- c. respiratory depression
- d. flaccid paralysis

13. Reversal of midazolam is produced by IV administration of:

- a. 0.2 mg Flumazenil (Romazicon[®]) per 60 seconds
- b. 2.0 mg Flumazenil (Romazicon[®]) per 60 seconds
- c. 0.1 mg Naloxone (Narcan[®]) initial, titrating to increase respirations
- d. 1.0 Naloxone (Narcan[®]) initial, titrating to increase respirations

14. Which of the following is NOT a narcotic?

- a. Sublimaze (Fentanyl[®])
- b. Ketorolac (Toradol[®])
- c. Meperidine (Demerol[®])
- d. Morphine

15. Adequate sedation has been achieved when the patient:

- a. begins to relax
- b. no longer has a gag reflex
- c. can no longer initiate respirations
- d. no longer responds to painful stimuli

16. When benzodiazepines are combined with narcotics, the risk of respiratory depression is decreased.
- True
- False
17. Which condition does not decrease the amount of midazolam needed to achieve sedation?
- concurrent medication with narcotics
 - age of patient, especially over 60
 - acute alcohol intoxication
 - obesity
18. Relative contraindications to procedural sedation include:
- pregnancy
 - history of obstructive sleep apnea
 - hypertension
 - full stomach
 - morbid obesity
19. The three *main* reasons for complications during IV procedural sedation are: (*circle the 3 that apply*)
- inappropriate patient selection
 - history of anxiety disorder
 - unanticipated effect or responses from patient or equipment
 - not using continual monitoring
 - overmedication
20. The number to call for respiratory arrest or cardiac arrest is:
- 2199 Medical Center
- 5199 Memorial
21. When the plan for sedation includes deep sedation, there must be a minimum of one support person dedicated to the continuous observation of the patient.
- True
- False
22. A stable 61-year-old patient with type 2 diabetes, peripheral vascular disease, and mild nephropathy would have an ASA classification of:
- ASA I
 - ASA II
 - ASA III
 - ASA IV
23. *Deep sedation* is a medically controlled state of depressed consciousness or unconsciousness in which:
- the patient is not easily aroused to physical/verbal stimuli
 - the patient is easily aroused to physical/verbal stimuli
 - the patient may partially or completely lose protective reflexes
 - the patient may completely lose the ability to independently maintain their airway

24. When a patient is deeply sedated, it is appropriate to ask the monitoring personnel to leave the room to answer the phone.

True

False

25. Equipment needed for basic procedural sedation

- a. continuous oxygen saturation monitor
- b. intravenous access supplies
- c. capnograph
- d. supplemental oxygen and equipment to perform positive pressure ventilation (i.e. ambu bag) (Anesthesia Procedural Sedation must have intubation equipment available at bedside)
- e. blood pressure monitoring equipment
- f. thermometer
- g. Code 199 cart immediately accessible
- h. cardiac monitoring at physician discretion (Anesthesia Procedural Sedation must have continuous ECG monitoring)
- i. reversal agents shall be immediately available
- j. suction equipment/supplies (all equipment and supplies must be suitable for the age and size of the patient being treated)

26. Adults who are to receive basic procedural sedation should be NPO for a period of 4 hours.

True

False (6 hours)

27. Signs of respiratory depression include: *(circle all that apply)*

- a. O₂ sat <90% or ≥ 5% below baseline
- b. respiratory rate <10-12
- c. dyspnea
- d. snoring

28. Patient given reversal agent can be discharged as soon as VS are similar to baseline.

True

False (at least 2 hour wait after reversal agent given)

29. Prior to discharge after the procedure, the patient will be assessed according to the Aldrete Scoring System. A rating of 0, 1, or 2 is given in the following areas (circle all that apply):

- a. head lift (chin up)
- b. extremity movement
- c. respiration
- d. oxygen saturation
- e. blood pressure
- f. pulse rate
- g. LOC
- h. skin color

30. If a reversal agent is administered, recommended minimum time of observation from time of administration is how many hours?
- a. 1
 - b. 2
 - c. 3
 - d. 4

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