## The Pediatric Sedation Test for Credentialing

- 1. Which of the following is required **PRIOR** to sedation?
  - Documentation of consent a.
  - History and physical appropriate to the planned procedure b.
  - Documentation showing that the patient is an appropriate candidate for the c. planned sedation Physician attestation statement and signature
  - d.
  - e. All of the above
  - a and d f.
- Which of the following medical conditions would not place a child at a significantly 2. greater risk to receive sedation?
  - a. History of obstructive sleep apnea
  - b. Age younger than 2 years
  - c. AŠA level III
  - d. Well-controlled seizure disorder
- Which patient is at lowest risk of experiencing an adverse sedation event? 3.
  - A 6-week-old infant with a seizure disorder undergoing a head MRI scan a.
  - A 6-year-old child with ALL in remission, requiring a lumbar puncture b.
  - A 4-year-old child with congenital hydrocephalus requiring a head CT scan to C. evaluate shunt function
  - d. A febrile 3-year-old with a temperature of 104° F. requiring a lumbar puncture
  - e. A 10-year-old boy with pneumococcal pneumonia requiring a pleurocentesis
- Ideally in elective moderate sedation cases, pediatric patients should fast from solids 4. and nonclear liquids for:
  - Four hours for milk/solids ( $\leq 6$  months of age)
  - Six hours for milk/solids (>6 months of age)
  - Four hours for breast milk (all ages)
  - Two hours for clear liquids (all ages)
  - True a.
  - False b.
  - Which of the following statements is FALSE when considering pulse oximetry? 5. Required during sedation a.
    - b. Not needed during patient transfer between sites when sedated
    - Level below 90% is indicative of clinically relevant hypoxemia c.
    - Time lag exists between oxygen desaturation detected by pulse oximetry and d. arterial oxygen desaturation
    - e. Can give false readings in the presence of vasoconstriction
- The following are characteristics of midazolam EXCEPT: 6.
  - Poor hypnotic agent (sleeper) a.
  - Can be administered oral, rectal, IV b.
  - Has rapid onset with short duration of action intravenously C.
  - Approximately 2–3 times more potent than diazepam d.
  - Has effective analgesic properties when used in high doses e.
  - To achieve both an analgesic and an amnesic effect, administer a benzodiazepine. 7.
    - True a.
    - b. False

- \_\_\_\_8. The primary difference among opioid agonists at equipotent doses is:
  - a. Degree of respiratory depression
  - b. Analgesic effects
  - c. Pharmacokinetic profile
  - d. Amnestic effects
  - e. Reversibility of clinical effects with naloxone
- 9. Naloxone reverses which of the following opioid effects?
  - a. Analgesia
  - b. Respiratory depression
  - c. Sedation
  - d. Miosis
  - e. All of the above
- 10. Ketamine is relatively contraindicated in the patient populations described below except:
  - a. Child with increased intracranial pressure
  - b. Adolescent with schizophrenia
  - c. Patient with asthma
  - d. Patient with severe systemic hypertension
  - e. Child with visual disturbances
- 11. Considerations for the administration of naloxone (Narcan) include all of the following **EXCEPT**:
  - a. Appropriate as a reversal agent for midazolam (Versed)
  - b. Onset of action is 1-2 minutes
  - c. Duration of action is shorter than most opioid agonists
  - d. High doses may cause pulmonary edema, arrhythmias, hypertension, or tachycardia
  - 12. Reversal agents (flumazenil and naloxone) have a shorter half-life than opioids and benzodiazepines, necessitating close monitoring for the potential of resedation for two hours or until the child returns to baseline status, whichever is later.
    - a. True
    - b. False
  - 13. The most appropriate graded sequence of actions that should occur in a child who experiences complete airway obstruction and progressive decline in oxygen saturation during sedation is:
    - a. Oxygen administration, airway positioning, application of an anesthesia mask and bag, and bag mask ventilation
    - b. Application of anesthesia mask and bag, airway positioning, and bag mask ventilation
    - c. Bag mask ventilation, airway positioning and application of anesthesia mask to airway
    - d. Airway positioning with oxygen administration, application of mask anesthetic bag, positive pressure ventilation
- 14. Which statement best describes moderate sedation?
  - a. Controlled state of unconsciousness with loss of pain response
  - b. Complete loss of airway reflexes
  - c. Has blunted response to "light" tactile physical and/or verbal stimulation
  - d. Pediatric sedation score of 5

- 15. The patient undergoing moderate sedation should retain the ability to maintain his or her airway yet may have a blunted response to verbal commands and physical stimulation.
  - a. True
  - b. False
- \_\_\_\_ 16. Pediatric moderate sedation privileges apply for which one of the following situations?
  - a. Insertion of a chest tube following intravenous administration of fentanyl and midazolam
  - b. Postoperative morphine administration
  - c. Intravenous ketorolac administration following cardiac surgery
  - d. Isoflurane administration in OR for tonsillectomy
- 17. Sedation is considered a *Category 1-Signed Consent* procedure according to the hospital informed consent policy, which requires a consent form or statement signed by the patient or representative prior to sedation.
  - a. True
  - b. False
- 18. Which of the following monitoring tools is absolutely required during moderate sedation?
  - a. EKG
  - b. Pulse oximetry
  - c. Blood pressure monitor
  - d. End tidal  $CO_2$  monitor
- 19. Because significant interpatient variability exists for a given dose of medication, administration of sedative drugs should be titrated until the desired effect is reached.
  - a. True
  - b. False
- 20. Which portion of the pediatric airway decreases in anterior-posterior diameter to the greatest degree in a deeply sedated child with airway obstruction?
  - a. Soft palate to posterior pharynx
  - b. Base of tongue to posterior pharynx
  - c. Nasopharynx
  - d. Subglottic area
- 21. The most common serious adverse event associated with intravenous ketamine administration in an otherwise healthy child is:
  - a. Laryngospasm
  - b. Hypoventilation
  - c. Increased intracranial pressure
  - d. Hypotension
  - e. Bradycardia
- 22. Which ABG best describes an otherwise healthy child who is deeply sedated with an SPO<sub>2</sub> of 90% on room air?
  - a. 7.40/40/60
  - b. 7.25/55/65
  - c. 7.25/45/47
  - d. 7.45/50/70
  - 23. In pediatric procedural sedation, benzodiazepines are typically used to:
    - a. Promote amnesia
    - b. Provide anxiolysis

- c. Induce sleep
- d. Enhance muscle relaxation
- e. a, b, and c
- f. a, b, and d
- 24. The therapeutic window describes the relationship between the drug concentration and its therapeutic and adverse effects:
  - a. True
  - b. False
  - 25. Factors determining the most effective loading dose for a sedative drug include all of the following except:
    - a. Desired clinical effect
    - b. Volume of distribution
    - c. Desired plasma concentration
    - d. Drug clearance
- 26. Which of the following answers is not correct for chloral hydrate?
  - a. Active metabolite is trichloroethanol
  - b. Elimination half-life is 7 to 11 hours
  - c. Has no respiratory depressant effects
  - d. Requires first-pass hepatic metabolism to be effective
  - e. Tastes bad
- 27. Which of the following monitoring and resuscitative equipment is NOT required for moderate sedation?
  - a. Pulse oximeter
  - b. Suction apparatus and tubing
  - c. Pediatric intubation tray
  - d. Emergency drugs
  - e. ECG
  - 28. Parental (patient) education prior to the sedation and procedure includes discussion of all of the following except:
    - a. Potential adverse events
    - b. Anticipated sedative effects
    - c. Specific procedure options
    - d. Sedative or other options for the procedure
- 29. Phase 1 discharge criteria include assessment of all of the following except:
  - a. Oxygen saturation
  - b. Activity level
  - c. Ability to resume oral intake
  - d. Level of consciousness
  - \_ 30. Which pharmacologic property is the most important factor determining a sedative drug's onset and duration of action?
    - a. Lipid solubility
    - b. Degree of ionization
    - c. Receptor affinity
    - d. Degree of protein binding