The Pediatric Sedation Test for Credentialing

1. Which of the following is required PRIOR to sedation?
   a. Documentation of consent
   b. History and physical appropriate to the planned procedure
   c. Documentation showing that the patient is an appropriate candidate for the planned sedation
   d. Physician attestation statement and signature
   e. All of the above
   f. a and d

2. Which of the following medical conditions would not place a child at a significantly greater risk to receive sedation?
   a. History of obstructive sleep apnea
   b. Age younger than 2 years
   c. ASA level III
   d. Well-controlled seizure disorder

3. Which patient is at lowest risk of experiencing an adverse sedation event?
   a. A 6-week-old infant with a seizure disorder undergoing a head MRI scan
   b. A 6-year-old child with ALL in remission, requiring a lumbar puncture
   c. A 4-year-old child with congenital hydrocephalus requiring a head CT scan to 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

4. Ideally in elective moderate sedation cases, pediatric patients should fast from solids and nonclear liquids for:
   - Four hours for milk/solids (≤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)
   a. True
   b. False

5. Which of the following statements is FALSE when considering pulse oximetry?
   a. Required during sedation
   b. Not needed during patient transfer between sites when sedated
   c. Level below 90% is indicative of clinically relevant hypoxemia
   d. Time lag exists between oxygen desaturation detected by pulse oximetry and arterial oxygen desaturation
   e. Can give false readings in the presence of vasoconstriction

6. The following are characteristics of midazolam EXCEPT:
   a. Poor hypnotic agent (sleeper)
   b. Can be administered oral, rectal, IV
   c. Has rapid onset with short duration of action intravenously
   d. Approximately 2–3 times more potent than diazepam
   e. Has effective analgesic properties when used in high doses

7. To achieve both an analgesic and an amnesic effect, administer a benzodiazepine.
   a. True
   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 reedation 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$_2$ 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