SEDATION GUIDELINES

AMERICAN ACADEMY OF PEDIATRIC DENTISTRY

Represents more than 10,000 members

United States and International Membership

Focused on care of children from Birth to age 19

Care for children and adults with special health care needs
AMERICAN ACADEMY OF PEDIATRIC DENTISTRY

Vision
Optimal oral health for all children

Mission
To advance optimal oral health for all children by delivering outstanding service that meets and exceeds the needs and expectations of our members, partners and stakeholders

AAPD Culture
- Our members put children first in everything they do, and at the highest standards of ethics and patient safety. As such, the American Academy of Pediatric Dentistry is THE leading national advocate dedicated exclusively to children’s oral health. We are the embodiment of our member’s expertise as the big authority on little teeth.
AGENDA

Pediatric Sedation and Training → Revisions in the 2016 AAPD/AAP Document → Future efforts

PEDIATRIC DENTAL SEDATION

- Based on
  - Age
  - Extent of decay
  - Behavior
  - Medical Status

- Never a decision taken lightly

- Must have frank discussion parents/guardian on ALL treatment options and settings (Informed Consent)
PEDIATRIC DENTAL SEDATION

- Minimal

- Moderate

- Deep/General Anesthesia
  - Hospital or Surgery Center
  - In-office with Medical or Dental Anesthesiologist

- Dependent on State Regulations

PEDIATRIC DENTAL SEDATION TRAINING

Driven by CODA requirements

Minimum Requirements for moderate sedation

- 25 cases as primary operator
- 25 cases assisting in sedation or simulation

Residencies vary in length from 2 to 3 years
Guideline for Monitoring and Management of Pediatric Patients Before, During, and After Sedation for Diagnostic and Therapeutic Procedures: Update 2016

Developed and Endorsed by
American Academy of Pediatric Dentistry and American Academy of Pediatrics

Latest Revision*
2016

Abstract
The safe sedation of children for procedures requires a systematic approach that includes the following: no administration of sedating medication without the safety net of medical/dental supervision, careful premedication evaluation for underlying medical or surgical conditions that would place the child at increased risk from sedating medications, appropriate preoperative procedures and a balance between the need for medication and the need for patient cooperation.

AAPD SEDATION GUIDELINES
(2016)

• Joint Document of the AAPD and American Academy of Pediatrics (AAP)
• Revisions must be approved by each organization’s content experts, committees/councils and membership
• Most 2016 revisions editorial in nature
• www.aapd.org/policies
AAPD SEDATION GUIDELINES (2016)

Intended for pediatric sedation conducted in:
- Hospitals
- Surgical Centers
- Freestanding Imaging Centers
- Dental Facilities
- Private Offices

Goals of Sedation

- Guard patient’s safety and welfare
- Minimize physical discomfort and pain
- Control anxiety, minimize psychological trauma, maximize potential for amnesia
- Modify behavior for the safe completion of the procedure
- Return patient to a state safe for discharge
AAPD SEDATION GUIDELINES (2016)

- Sedation is a continuum

Minimal ➔ Moderate ➔ Deep / General

- Must be prepared to rescue from the next level

Candidates
- ASA I/II
- Adequate airway

Minimal / Moderate / Deep Caution / Contraindications
- ASA III/IV
- Children with special needs
- Anatomic airway anomalies
- Moderate to severe tonsillar hypertrophy
MINIMAL SEDATION

- Patient responds normally to verbal commands
- Ventilatory and Cardiovascular Functions unaffected
- Observation and Assessment of Sedation Level
- May progress into Moderate Sedation

MODERATE SEDATION

- Responds purposefully to verbal commands or light tactile stimulation
- Able to maintain airway (spontaneous ventilation)
- Cardiovascular function usually maintained
- Loss of Consciousness unlikely
- May progress to Deep Sedation
MODERATE SEDATION – PERSONNEL

• Practitioner
  • Responsible for treatment and/or administration of drugs
  • Monitoring of patient
  • Management of complications
  • Skilled in rescue
  • PALS required
  • Skilled in vascular access (practitioner or support personnel)

• Support Personnel
  • Monitor appropriate physiologic parameters
  • Able to assist in supportive or resuscitation measures
  • May perform interruptible tasks of short duration
  • Trained in and capable of advanced airway skills
  • Will have specific assignments in emergency
  • Current knowledge of emergency cart inventory
  • Skilled in vascular access (practitioner or support personnel)
MODERATE SEDATION – MONITORING

• Baseline
  • Vitals (HR, BP, RR, O2 Sat, Temp)
    • Heart Rate
    • Blood Pressure
    • Respiratory Rate
    • O2 Saturation (room air)
    • Temperature

  • Uncooperative – May not be possible and must be documented

• During Sedation
  • Documentation of name, route, site, and time of administration and dosage
    • Verbal confirmation prior to dose if not personally administering drugs

  • Continuous Monitoring of O2 Saturation, HR, BP, RR (Minimum every 10 minutes)

  • Ventilation – Capnography recommended (Major Revision)
MODERATE SEDATION – MONITORING

VENTILATION

If bidirectional verbal communication is appropriate and possible, monitor ventilation by:

• Capnography (preferred)
• Amplified, audible pretracheal stethoscope or precordial stethoscope (strongly recommended)

If bidirectional verbal communication is NOT appropriate or NOT possible, monitor ventilation by:

• Capnography (required)
• Amplified, audible pretracheal stethoscope or precordial stethoscope (required)

MODERATE SEDATION – MONITORING

• Exact value of expired CO2 less important than a simple assessment of respiratory gas exchange

• If uncooperative or agitated, capnography is not possible and should be documented

• If stimulation from BP measurement is agitating, can be measured at less frequent intervals (every 10-15 minutes).
MODERATE SEDATION – POST PROCEDURE

- Should be monitored in an appropriate recovery area
- Vitals recorded at specific intervals (e.g., every 10-15 minutes)
- If not fully alert, Oxygen saturation and HR monitoring shall be used continuously until discharge criteria is met
- Some patients may benefit from longer, less intense observation

DEEP SEDATION

- Drug-induced depression of consciousness during which patients cannot respond purposefully after repeated verbal or painful stimulation
  - Reflex withdrawal from a painful stimulus is not considered a purposeful response (General Anesthesia)
- Ability to maintain independent ventilation is impaired
- Cardiovascular function is usually maintained
- May have partial or complete loss of protective airway reflexes
GENERAL ANESTHESIA

• Drug-induced state during which patients are not arousable, even by painful stimulation
• Independent ventilatory function is often impaired
• Cardiovascular function may be impaired

DEEP SEDATION / GENERAL ANESTHESIA – PERSONNEL

• Must be one person whose only responsibility is to observe the patient’s
  • vital signs
  • airway patency
  • adequacy of ventilation
  • Administer drugs or direct their administration
• At a minimum, be trained in PALS and capable of assisting with any emergency event
DEEP SEDATION / GENERAL ANESTHESIA – PERSONNEL

- Anesthesia Provider
  - Managing Patient
- Dentist / Physician
  - Performing procedure
- Support Personnel

DEEP SEDATION / GENERAL ANESTHESIA

- Equipment
  - Equipment for moderate sedation
  - ECG and Defibrillator for pediatric patients

- Vascular Access
  - IV line placed at start or have someone skilled in establishing vascular access in pediatric patients readily available
DEEP SEDATION / GENERAL ANESTHESIA – MONITORING

- A competent individual should monitor continuously
- Vitals (HR, RR, BP, Oxygen Sat, expired CO2) must be recorded every 5 minutes on time based record.
- Capnography required for all deeply sedated pediatric patients
  - If not feasible, document why
- Documentation of name, route, site, and time of administration and dosage
  - Verbal confirmation prior dose to if not personally administering drugs

DEEP SEDATION / GENERAL ANESTHESIA – POST PROCEDURE

- Should be monitored in an appropriate recovery area
- Initial recording of vital signs every 5 minutes
- Once awake, vitals recorded at specific intervals (e.g., every 10-15 minutes)
- If not fully alert, Oxygen saturation and HR monitoring shall be used continuously until discharge criteria is met
AAPD SEDATION FUTURE EFFORTS

- Sedation Task Force
  - Sedation data base (similar to Pediatric Sedation Research Consortium)

- Safety Task Force
  - Accreditation effort
Thank You