Anesthesia Office Evaluation Workgroup #3
Minutes
July 31, 2018

MEMBERS PRESENT:	Julie Ann Smith, D.D.S., M.D., M.C.R., Co-Chair Hai T. Pham, D.M.D., Co-Chair Douglas C. Boyd, D.M.D. Quinn Martin, D.M.D. Brandon Schwindt, D.M.D. David Swiderski, D.D.S. Brett Ueeck, D.M.D.
STAFF PRESENT:	Stephen Prisby, Executive Director Paul Kleinstub, D.D.S., M.S., Dental Director/Chief Investigator Daniel Blickenstaff, D.D.S., M.S.c., Investigator Teresa Haynes, Office Manager Samantha VandeBerg, Office Specialist
VISTORS PRESENT:	Cassie Leone, ODA; Jeff Kobernik, D.M.D.

The meeting was called to order by Dr. Smith at 6:43 p.m. Dr. Smith welcomed everyone and had those present introduce themselves.

Dr. Pham moved and Dr. Schwindt seconded to approve the minutes from the May 10, 2018 meeting as presented. The motion passed unanimously.

CORRESPONDENCE FROM DR. QUINN MARTIN, D.M.D.

Dr. Martin shared an article about emergency drugs, and proposed the idea of adding the following question to the anesthesia quiz:

Succinylcholine must be available in offices that provide which of the following?

1) Moderate sedation
2) Deep sedation
3) General anesthesia

a) 1 & 2
b) 1 & 3
c) 2 & 3
d) 1, 2 & 3

DR. SMITH – ANESTHESIA QUIZ AND CHECKLIST

Workgroup members reviewed and discussed the attached anesthesia quiz and checklist provided by Dr. Smith. The checklist detailed potential recommended equipment and medications for providers with a General Anesthesia or Deep Sedation Permit. Members discussed making a different checklist for recommended equipment and medications for providers with a Moderate Sedation Permit as well. Members discussed the anesthesia quiz and potentially requiring licensees with a Moderate Sedation Permit and higher to complete the quiz every renewal cycle as a requirement for renewing their permit.

Those that have an ACLS/PALS Certificate should be aware and able to utilize the drugs on hand in their offices that they were trained to utilize.

The Workgroup spoke to increasing and building a "culture of safety" for those providers that sedate patients or bring in providers that provide sedation in their offices.

Dr. Smith referenced a proposed rule (OAR 818-026-0020) change that is currently being considered: "A licensee must ensure a written emergency response protocol is in place for all patients undergoing nitrous oxide, minimal sedation, moderate sedation, deep sedation or general anesthesia."

Audience members were encouraged to address the Workgroup.

Dr. Kobernik addressed the Workgroup and made the following points:

- Sedation is a slippery slope:
  - Dentists should be trained to recognize next level of sedation/anesthesia and prepared for emergency
- Different emergency list requirements for Enteral or Parenteral
  - Sedation is a continuum despite route of delivery: Moderate sedation is moderate sedation IV or PO
  - 1st pass metabolism of enteral medications may lead to over-sedation depending on the patient's metabolism.
- Rescue medications and devices discussed should be required:
  - Succinylcholine
    - The point was made that in moderate sedation laryngospasm are rare. This is true when done correctly, but sometimes we can be surprised especially with oral sedation techniques and the inability to titrate these medications to effect or when patient become more relaxed after an injection is given. These examples may cause the patient to become over-sedated.
    - Laryngospasm may occur if loss or impairment of protective reflexes in these rare surprises.
    - Succinylcholine is the gold standard recue medication for laryngospasm and I recommend it is in the emergency kit.
    - The hope is never "have" to use the emergency medications.
  - ACLS medications
    - If ACLS is requirement for moderate sedation permit then all ACLS should be mandatory.
    - Procainamide and adenosine are no exception
  - Endotracheal Tubes
    - Despite comfort level these advance airway devices should be readily available along with LMA. Never know who can come to your aid.
    - Depending on training and how comfortable the care provider is with its use. Some care providers may be more comfortable with Intubation with endotracheal tube over LMA. Boils down to what works best in their hands.
  - Pressors
    - It was said that "pressors" should be present in kit but no real specification to which one.
    - Different pressors do different things…. Phenylephrine causes rebound bradycardia… vasopressors work different pathways and is useful for refractory hypotension for patients on ACE inhibitors.
    - The practicing dentist must know and understand the proper use of any pressor in their kit and should carry epinephrine, phenylephrine, and ephedrine at minimum.

Quarterly drills whether with their own office team or yearly drills with separate qualified anesthesia providers are great advancements for increasing the culture of safety within the dental office. Additionally, having the operating dentist knowing what equipment, drugs and personnel the anesthesiologist (physician, CRNA or dentist) is bringing is also a good start.

- From my experience, I am noticing a change in the culture of separate anesthesia providers to create the team approach utilized by oral surgeons. Separate anesthesia providers with their own assistant and/or recovery nurse spending time training and preparing for airway management and medical emergencies within dental office.
  - State requires 3 people in a room, but ACLS requires minimum of 5 people to run a code.
- Additionally, organizations such as American Dental Society of Anesthesiologist (ADSA) are developing parameters of care specifically addressing emergencies and patient recovery.

Additional information regarding the ADSA parameters of care.

- These parameters of care are being combed through & finalized and voted soon.
  - **Recovery and Discharge**
    - The dentist anesthesiologist working in the office setting may utilize appropriately trained support staff, as defined above for use during the intraoperative period, for recovery. Once the patient has reached a state of moderate sedation, other trained staff may be used to monitor recovery. The dentist anesthesiologist must be continuously present in the office during the postoperative period until the patient is safe for discharge.
    - The dentist anesthesiologist is responsible for determining and documenting when the criteria for discharge have been met and to which responsible adult the patient is discharged.
  - **Emergency Management**
    - The dentist anesthesiologist is responsible for the diagnosis and treatment of emergencies related to the administration of anesthesia and ensuring the immediate availability of all necessary emergency equipment, drugs and supplies for patient rescue. In addition, the dentist anesthesiologist is responsible for stabilizing, if possible, the vital signs and other physiological parameters of the patient during surgical urgencies and emergencies that impact the patient's vital functions.
  - The most updated verbiage of these parameters of care may be available from an ADSA representative and would be worth contacting this organizations.

Additional information seen in other states addressing anesthesia safety

- California has separate anesthesia rules and permits for patients 7 years old and younger.

The Workgroup focused on these 6 recommendations:

1. Add an Attestation Form to renewal forms for those that have any level of anesthesia permit, with the form also indicating that the drugs kept for emergency management have not expired.
2. A reminder at the time of renewal that every office should hold quarterly emergency drills and the Board would give a brief outline of what should be covered in those drills.
3. A quiz be added to renewal forms for those that have a moderate, deep and general anesthesia permit.
4. That those that utilize a qualified provider per OAR 818-026-0080, attest that they hold emergency drills annually with that provider.
5. A recommendation that OAR 818-026-0080 be reviewed closer to highlight that no two patients can be sedated at any time, and that there be proper protocol and hand off to a qualified anesthesia monitor, if the qualified provider will no longer be required to monitor the patient until criteria for discharge met.
6. Review and update lists of drugs an office should have relevant to the anesthesia permit they hold and also of those the qualified provider has.

Dr. Schwindt moved and Dr. Pham seconded to approve the six recommendations go to the Board and that the Board refer them to the Anesthesia Committee for discussion and refinement. The motion passed unanimously.

Dr. Smith thanked all of the Workgroup members for their participation and contributions.

The meeting adjourned at 8:14 p.m.

Sample Quiz: Moderate, deep, general anesthesia

DPA rules

1) You provide moderate sedation or deeper to a population of patients aged 8 to 65. Which of the following certifications is required?
    a. ACLS only
    b. PALS and ACLS
    c. BLS only
    d. ACLS, PALS, and BLS
2) You have 4 operatories. How many patients can you have under either nitrous, minimal sedation, or moderate sedation at one time?
    a. 1
    b. 2
    c. 3
    d. 4
3) During the administration of moderate or deeper levels of sedation, the minimum number of people who must be in the operatory besides the dentist permit holder performing the procedure include:
    a. One dental assistant
    b. One BLS provider
    c. One anesthesia monitor and one BLS provider
    d. One BLS certified anesthesia monitor

Pre-anesthesia evaluation

1) All of the following findings on airway exam suggest a possible increased risk for a difficult airway EXCEPT:
    a. Mallampati class 3 or 4
    b. BMI > 35 kg/m^2
    c. Thyromental distance of 6.5 cm
    d. Maximal interincisal opening < 30 mm
2) Which of the following disease states is most likely to be a contraindication to in-office moderate or deeper levels of sedation, even assuming adequate treatment is in place?
    a. Obstructive sleep apnea
    b. Asthma
    c. Diabetes Mellitus
    d. Seizure disorder
3) All of the following patients are healthy 15 year olds who present for moderate sedation. Which patient is appropriately prepared for moderate sedation?
    a. Sally—last meal was chicken fingers 4 hours ago
    b. Jonathan—last meal was a skim latte 2 hours ago
    c. Katie—last meal was a cup of apple juice 4 hours ago
    d. Mark—last meal was a donut 30 minutes ago

Monitoring

1) During what levels of sedation is ETCO2 monitoring required?
    a. Moderate sedation
    b. Deep sedation or General anesthesia only
    c. Moderate, deep, and general anesthesia
    d. General anesthesia only
2) Who can monitor a patient during recovery who has undergone moderate sedation?
    a. The patient's parents
    b. The front desk receptionist
    c. The patient may be left alone once the procedure is complete
    d. An individual trained to perform monitoring
3) Which of the following medications, if administered after sedation, will alter how long you plan to monitor the patient?
    a. Romazicon
    b. Ketorolac
    c. Acetaminophen
    d. Dexamethasone

Management of emergencies

1) Your patient is a healthy 15 year old with no personal or family history of anesthesia complications. During the course of sedation, your patient coughs and begins to desaturate. A crowing sound is heard from the throat. You identify laryngospasm and attempt positive pressure ventilation, which is unsuccessful. The oxygen saturation is 84%. Of the following, what drug would you select as your next step in treatment?
    a. Albuterol
    b. Hydrocortisone
    c. Succinylcholine
    d. Epinephrine
2) Your 59 year old patient under sedation begins obstructing his airway and he begins to desaturate. You attempt bag valve mask ventilation with both an oral airway and a nasal airway, but are still unable to ventilate. His preop saturation was 99% and now it is 83%. He is unconscious and has a pulse, but is not breathing. The next airway adjunct you might try is:
    a. Needle cricothyroidotomy
    b. Wait until he wakes up
    c. Supraglottic airway
    d. Tracheostomy
3) In the current ACLS algorithm for adult cardiac arrest, the drug that may be administered in addition to Epinephrine is:
    a. Lidocaine
    b. Vasopressin
    c. Adenosine
    d. Amiodarone

Possible checklist of emergency equipment and medications for /Moderate/Deep Sedation/GA Permit holders OR for those who provide these levels of sedation in an office:

EQUIPMENT

Oral and nasal airways

Bag valve mask

Oxygen

Endotracheal tubes and stylets

Laryngoscopes and blades

McGill or similar instrument

Laryngeal mask airway

AED

Monitors as required per DPA

MEDICATIONS

Epinephrine 1:1,000

Albuterol

Corticosteroid

Diphenhydramine

Epinephrine 1:10,000

Amiodarone

Atropine

Ephedrine (or just list pressor?)

Phenylephrine (or just list pressor?)

Beta-blocker (or just list anti-hypertensive?)

Nitroglycerin

Aspirin

Insta-glucose

50% Dextrose

Succinylcholine

Flumazenil

Narcan