February 27, 2017

Steven Morrow DDS, MS
President, Dental Board of California
Chair, Anesthesia Committee
2005 Evergreen Street, Suite 1550
Sacramento, CA 95815

Dear Dr. Morrow,

With the increasing amount of children seen for dental treatment under deep sedation and general anesthesia outside of the hospital setting, I was asked to develop and continually revise practice guidelines for pediatric dentists by the American Academy of Pediatric Dentists. Along with Steven Wilson DMD, MA, PhD., a pediatric dentist, we authored the Guidelines for Monitoring and Management of Pediatric Patients Before, During, and After Sedation for Diagnostic and Therapeutic Procedures: Update 2016.

Our primary thrust in creating the Guidelines was to ensure the highest safety standards in which to treat children undergoing dental procedures with various forms of sedation or general anesthesia. Of particular concern to both the anesthesiology and the pediatric dental community was the issue of appropriate training and staffing during procedures where deep sedation and/or general anesthesia was intended to be the therapeutic goal. Consequently, we developed guidelines addressing the need for a specific person “whose only responsibility is to constantly observe the patient’s vital signs, airway patency, and adequacy of ventilation and to either administer drugs or direct their administration.” To fulfill these requirements, this individual must be able to recognize the impending physiologic signs of anesthetic complications, formulate a differential diagnosis, and independently administer or direct the administration of resuscitative drugs or actions. It is our understanding that dental assistants cannot and should not serve in this capacity. Please consider the following scenario: A single “operator-anesthesia/sedation provider” is caring for a deeply sedated 5 year-old with a dental assistant. In your state, my understanding is that dental assistants are not allowed to start IV’s or independently administer intravenous medications. The child then develops either laryngospasm or airway obstruction requiring bag-mask-ventilation and needs possible intravenous medications. The single provider must focus his or her attention to the child’s airway, but the dental assistant is unable and not qualified to insert an intravenous catheter and cannot administer intravenous rescue medications. The single operator-anesthesia/sedation provider is now trapped because he or she must make a decision to stop providing bag-mask-ventilation and now hopes that he or she can rapidly establish venous access and administer appropriate rescue medications. This is exactly the horrifying situation we are attempting to avoid with our Guidelines.

I published two articles in Pediatrics published in April and October of 2000 that examined critical incidents and analyzed root causes of adverse events in
pediatric sedation; it should be noted that 29 deaths or neurologic injury occurred in children undergoing dental procedures.\textsuperscript{i, ii} It should be further noted that this dental cohort was significantly older and healthier but had worse outcomes. We concluded that medications used outside of the safety net of anesthesia-trained supervision, inadequate monitoring, lack of an independent observer not involved in the conduct of the procedure, and inadequate resuscitative measures were the major contributing factors in out-of-hospital adverse events. Based on these findings, we only recommend that trained and dedicated anesthesia providers competent in the management of children be present to administer deep sedation or general anesthesia while a separate dentist practitioner performs the procedure. These providers include dentist anesthesiologists, physician anesthesiologists, and certified registered nurse anesthetists with significant pediatric training in a dental setting. It is our contention that the "operator-anesthetist" model of anesthesia care, or delegation of critical duties to a non-medically trained auxiliary (dental assistant), does not strictly adhere to the American Academy of Pediatrics – American Academy of Pediatric Dentistry Guidelines.

Please feel free to contact me regarding any questions or further elucidation of the issue.

Sincerely,

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