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American Association of Oral and Maxillofacial Surgeons

White Paper



Office-Based Anesthesia Provided by the Oral and Maxillofacial Surgeon

Since December 1844, when Dr. Horace Wells, a dentist, first demonstrated that volatile gases could be inhaled and used for medical and dental anesthesia, oral and maxillofacial surgeons have been the recognized leaders among the nation's dental and medical professions for the delivery of safe and effective outpatient anesthesia. In addition, the American Association of Oral and Maxillofacial Surgeons continues to be consulted by other medical and dental specialties, accrediting agencies and regulatory bodies regarding standards and anesthetic safety.

The history of oral and maxillofacial surgery office-based anesthesia parallels the emergence of the medical hospital model when, in the early 1930's, Dr. John Lundy, who first developed and used the IV pentothal technique at the Mayo clinic, taught the new IV procedure to Mayo's Chief of Oral Surgery, Dr. Ed Staffney. Dr. Staffney, in turn, ensured that all oral surgery residents at the Mayo Clinic were taught IV pentothal anesthesia as part of their clinical training. The Mayo Clinic's senior oral surgery resident at that time was Adrian Hubble, who went on to teach this technique to oral surgeons across United States.

Clearly, dental office-based anesthesia is not new; in fact, it actually predates the development of certified registered nurse anesthetists. Dentistry, specifically oral and maxillofacial surgery, has remained in the forefront of the field of anesthesia. Fearful patients, who are often in pain, are effectively, economically and safely managed in the oral and maxillofacial surgery office with the use of deep sedation/general anesthesia that frequently incorporate agents such as propofol and/or ketamine. Prospective and retrospective morbidity and mortality studies of deep sedation/general anesthesia in the oral and maxillofacial surgery office reveal an enviable safety record. The OMS National Insurance Company (OMSNIC) Anesthesia Morbidity and Mortality Data (2000-2010) examined a total number of 29,975,459 in-office anesthetics (conscious sedation, deep sedation and general anesthesia) administered by oral

and maxillofacial surgeons and found the ratio of office fatalities /brain damage per anesthetics administered to be 1:365,534. In April 1985, the National Institute of Dental Research of the National Institutes of Health (NIH), the Food and Drug Administration, and the NIH Office of Medical Applications of Research sponsored a National Institutes of Health Consensus Development Conference on "Anesthesia and Sedation in the Dental Office." Its consensus statement concluded:

Pain is a major factor that brings patients to the dental office, while fear and anxiety about pain are common reasons patients fail to seek dental care. The magnitude of the public-health problem is indicated by the fact that 35 million Americans avoid dental treatment until forced into the office with a toothache. The control of pain and anxiety is therefore an essential part of dental practice...

The use of sedative and anesthetic techniques in the dental office represents a unique situation when compared with their use in the hospital environment. These differences often are not clearly understood, and as a result, the use of sedation and anesthesia in the dental office has sometimes been unduly criticized . . .

After listening to a series of presentations by experts in the relevant basic and clinical science areas, a consensus panel composed of individuals knowledgeable in medical and dental anesthesiology, oral and maxillofacial surgery, pediatric dentistry, pharmacology, behavioral science, biostatistics, epidemiology, general dental practice, dental education, and public interest considered all the material presented and agreed[on the following conclusion:] The use of all effective drugs carry some risk, however small. Available evidence suggests that *the use*

of sedative anesthetic drugs in the dental office by appropriately trained professionals has a remarkable record of safety [Emphasis added].

The consensus statement concluded the following regarding personnel:

For conscious sedation, the practitioner responsible for treatment of the patient and/or the administration of drugs must be appropriately trained in the use of such techniques. The minimum number of people involved should be two, i.e., the dentist and an assistant trained to monitor appropriate physiologic parameters. For deep sedation or general anesthesia at least three individuals, each appropriately trained, are required. One is the operating dentist, who directs the deep sedation or general anesthesia. The second is a person whose responsibilities are observation and monitoring of the patient . . . The third person assists the operating dentist.

The American Dental Association Policy Statement on “The Use of Conscious Sedation, Deep Sedation and General Anesthesia in Dentistry;” the 2011 American Association of Oral and Maxillofacial Surgeons [AAOMS] “Parameters of Care for Anesthesia and Outpatient Facilities;” “The Accreditation Standards for Advanced Specialty Education Programs in Oral and Maxillofacial Surgery;” and the AAOMS’s “Office Anesthesia Evaluation Manual” are consistent with the conclusions of the NIH Consensus Development Conference. Further, AAOMS “Parameters of Care for Anesthesia and Outpatient Facilities” are reviewed and concurred with by the American Society of Anesthesiologists.

The President of the American Society of Anesthesiologists has written,

Since members of the AAOMS [American Association of Oral and Maxillofacial Surgeons] have a long history of safely using general anesthesia in the care of their patients, it is the feeling of the American Society of Anesthesiologists that the joint ASA/AANA statement [regarding restrictions on the use of propofol by physicians with no training in the performance of general anesthesia] is not intended for these AAOMS members.

In order to maintain AAOMS membership, oral and maxillofacial surgeons must complete AAOMS’s mandatory

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Office Anesthesia Evaluation (OAE) program every five years, and maintain malpractice insurance coverage from the OMS National Insurance Company (OMSNIC).

The Bylaws of the American Association of Oral and Maxillofacial Surgeons state:

AAOMS fellow/members must have their offices successfully evaluated and re-evaluated by their component society every five years or in accordance with the state law, provided that the state law does not exceed six (6) years between evaluations and otherwise meets AAOMS office anesthesia guidelines. State or component societies will notify AAOMS immediately of any state/component society fellow/member who does not fulfill this requirement.

The AAOMS Office Anesthesia Evaluation program is not mandated or suggested by any government or outside agency. It was conceived, developed, implemented and mandated by the AAOMS through its component state societies to benefit the public, whom its members serve. The AAOMS Office Anesthesia Evaluation program consists of four parts:

- Part I. An evaluation of the office facilities, emergency medications, and emergency equipment available;
- Part II. A demonstration by the oral and maxillofacial surgeon and his/her team of the management of simulated office emergencies;
- Part III. A discussion between the evaluators and the oral and maxillofacial surgeon that involves a critique of the emergency demonstrations and/or facility; and
- Part IV. An observation of the anesthesia/surgeries performed in the office (subject to state laws and patient consent)

The AAOMS Office Anesthesia Evaluation process encompasses training and evaluation of office facilities; equipment and personnel; monitoring; complications and emergencies, including laryngospasm, syncope, venipuncture, bronchospasm, emesis and aspiration of

foreign material, airway obstruction of foreign body, angina pectoris, myocardial infarction and cardiac arrest; cardiopulmonary resuscitation (CPR); management of blood pressure problems; drug allergies; hyperventilation and convulsions; malignant hyperthermia; and anesthesia for patients suspected of substance abuse.

As the surgical specialists of the dental profession, oral and maxillofacial surgeons are trained in all aspects of anesthesia administration. OMS residents complete a rotation on the medical anesthesiology service, during which they train alongside anesthesiology residents under the supervision of an anesthesiologist. Those who complete an oral and maxillofacial surgery residency training program are competent to administer safe and efficient anesthesia in the outpatient setting. With their training in both patient evaluation and emergency management, they are prepared to address any situation they may encounter. The ASA, the educational, research and scientific association of physician anesthesiologists, supports the ability of oral and maxillofacial surgeons to safely and competently administer anesthesia in the office-based surgical setting. Quick onset and smooth induction, short duration and recovery time, and few side effects make propofol a necessary agent in providing oral and maxillofacial surgery patients a safe, predictable and comfortable anesthetic experience.

As insurance costs continue to rise, more people are electing not to pay for health insurance. At the same time states are being faced with enormous deficits and have cut Medicaid benefits for many constituents. As a result, when dental problems arise, the emergency room is the place where many of these patients seek treatment. The cost for this can be significant, especially if the patient must be admitted and treated in the hospital operating room or even intensive care. Often these visits could be avoided by early intervention in the safe and economically reasonable environment of an oral and maxillofacial surgeon's office utilizing the anesthesia techniques employed on a daily basis.

The oral and maxillofacial anesthesia team model is not only safe, but also offers significant cost savings compared to other forms of out-patient anesthesia. Office-based anesthesia services eliminate out-patient facility fees and fees generated by other medical professionals such as anesthesiologists or CRNAs. The anesthesia model used by oral and maxillofacial surgeons provide safe and cost-effective treatment that allows access to care for fearful patients and permits trained professionals to deliver surgical services that require deeper levels of anesthesia in the office. We

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must never relinquish our leadership role in providing safe and effective anesthetic care that is essential to the health and well-being of our patients.

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