AMERICAN DENTAL ASSOCIATION POLICY STATEMENT: THE USE OF SEDATION AND GENERAL ANESTHESIA BY DENTISTS

As adopted by the October 2007 ADA House of Delegates

Introduction

The administration of sedation and general anesthesia has been an integral part of dental practice since the 1840s. Dentists have a legacy and a continuing interest and expertise in providing anesthetic and sedative care to their patients. It was the introduction of nitrous oxide by Horace Wells, a Hartford, Connecticut dentist, and the demonstration of anesthetic properties of ether by William Morton, Wells' student, that gave the gift of anesthesia to medicine and dentistry. Dentistry has continued to build upon this foundation and has been instrumental in developing safe and effective sedative and anesthetic techniques that have enabled millions of people to access dental care. Without these modalities, many patient populations such as young children, physically and mentally challenged individuals and many other dental patients could not access the comprehensive care that relieves pain and restores form and function. The use of sedation and anesthesia by appropriately trained dentists in the dental office continues to have a remarkable record of safety. It is very important to understand that anxiety, cooperation and pain can be addressed by both psychological and pharmacological techniques and local anesthetics, which are the foundation of pain control in dentistry. Sedation may diminish fear and anxiety, but do not obliterate the pain response and therefore, expertise and in-depth knowledge of local anesthetic techniques and pharmacology is necessary. General anesthesia, by definition, produces an unconscious state totally obtunding the pain response.

Anxiety and pain can be modified by both psychological and pharmacological techniques. In some instances, psychological approaches are sufficient. However, in many instances, pharmacological approaches are required.

Local anesthetics are used to control regional pain. Sedative drugs and techniques may control fear and anxiety, but do not by themselves fully control pain and, thus, are commonly used in conjunction with local anesthetics. General anesthesia provides complete relief from both anxiety and pain.

This policy statement addresses the use of minimal, moderate and deep sedation and general anesthesia, as defined in the Association's *Guidelines for the Use of Sedation and General Anesthesia by Dentists*. These terms refer to the effects upon the central nervous system and are not dependent upon the route of administration.

The use of sedation and general anesthesia in dentistry is safe and effective when properly administered by trained individuals. The American Dental Association strongly supports the right of appropriately trained dentists to use these modalities in the treatment of dental patients and is committed to their safe and effective use.

Education

Training to competency in minimal and moderate sedation techniques may be acquired at the predoctoral, postgraduate, graduate, or continuing education level. Dentists who wish to utilize minimal or moderate sedation are expected to successfully complete formal training which is structured in accordance with the Association's *Guidelines for Teaching Pain Control and Sedation for to Dentists and Dental Students*. The knowledge and skills required for the administration of deep sedation and general anesthesia are beyond the scope of predoctoral and continuing education. Only dentists who have completed an advanced education program accredited by the Commission on Dental Accreditation (CODA) that provides training in deep sedation and general anesthesia are considered educationally qualified to use

these modalities in practice. ¹ The dental profession's continued ability to control anxiety and pain effectively is dependent on a strong educational foundation in the discipline. The Association supports efforts to expand the availability of courses and programs at the predoctoral, advanced and continuing educational levels that are structured in accordance with its *Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students*. The ADA urges dental practitioners to regularly participate in continuing education in the areas of sedation and anesthesia.

Safe Practice

Dentists administering sedation and anesthesia should be familiar with the ADA *Guidelines for the Use of Sedation and General Anesthesia by Dentists*. Dentists who are qualified to utilize sedation and general anesthesia have a responsibility to minimize risk to patients undergoing dental treatment by:

- Using only those drugs and techniques in which they have been appropriately trained;
- Limiting use of these modalities to patients who require them;
- Conducting a preoperative evaluation of each patient consisting of at least a thorough review of
 medical and dental history, a focused clinical examination and consultation, when indicated, with
 appropriate medical and dental personnel;
- Conducting physiologic and visual monitoring of the patient;
- Having available appropriate emergency drugs, equipment and facilities and maintaining competency in their use;
- Maintaining fully documented records of drugs used, dosage, vital signs monitored, adverse reactions, recovery from the anesthetic, and, if applicable, emergency procedures employed;
- Utilizing sufficient support personnel who are properly trained for the functions they are assigned to perform;
- Treating high-risk patients in a setting equipped to provide for their care.

The Association expects that patient safety will be the foremost consideration of dentists who use sedation and general anesthesia.

State Regulation

Appropriate permitting of dentists utilizing moderate sedation, deep sedation and general anesthesia is highly recommended. State dental boards have the responsibility to ensure that only qualified dentists use sedation and general anesthesia. State boards set acceptable standards for safe and appropriate delivery of sedation and anesthesia care, as outlined in this policy and in the ADA *Guidelines for the Use of Sedation and General Anesthesia by Dentists*.

The Association recognizes that office-based, ambulatory sedation and anesthesia play an integral role in the management of anxiety and pain control for dental patients. It is in the best interest of the public and the profession that access to these cost-effective services be widely available.

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¹ Until the CODA accreditation cycles for those advanced education programs in deep sedation and general anesthesia are completed, the 2005 ADA *Guidelines for Teaching* remain in effect.

Research

The use of minimal, moderate and deep sedation and general anesthesia in dentistry will be significantly affected by research findings and advances in these areas. The Association strongly supports the expansion of both basic and clinical research in anxiety and pain control. It urges institutions and agencies that fund and sponsor research to place a high priority on this type of research, which should include: 1) epidemiological studies that provide data on the number of these procedures performed and on morbidity and mortality rates, 2) clinical studies of drug safety and efficacy, 3) basic research on the development of safer and more effective drugs and techniques, 4) studies on improving patient monitoring, and 5) research on behavioral and other non-pharmacological approaches to anxiety and pain control.