No legitimate history of anesthesiology can exclude the contributions of American dentistry. Similarly, no history of anesthesiology in dentistry can exclude the contributions of oral and maxillofacial surgery (OMS). Many contributions of OMS to the art and science of anesthesiology have been singular, cutting edge when introduced, have stood the test of time, and have subsequently been universally incorporated into the general discipline. The process continues to this day with regard to the innovations and refinements OMS has proffered to the control of anxiety and pain. This article offers a brief review of some of these gifts.

This article reviews the anesthesia modalities available to the practicing oral and maxillofacial surgeon, including the anesthesia TEAM makeup. If office-based anesthesia is not the best option for the patient, alternative locations are discussed including out-patient surgery centers and hospitals. The American Association of Oral and Maxillofacial Surgeons (AAOMS) has fought long and hard to establish and maintain our ability to provide office-based anesthesia. This is our Standard of Care!

This article discusses the general methods used to assess patients before, during, and after operative procedures, sedation, or general anesthesia by the oral and maxillofacial surgery team. The details about specific disease processes will be discussed in other articles. These methods and modalities are not standards, but are commonly used in offices and clinics in the United States where sedation and anesthesia are provided.

The physical design of an oral and maxillofacial surgeon’s office is highly individualized and unique. Every office must incorporate certain essential equipment and features to safely deliver office anesthesia, regardless of the scope of anesthesia services provided. Furthermore, the office design and anesthesia armamentarium must take into account patient safety and comfort. This article discusses the necessary elements, ranging from preanesthesia assessment forms and intraoperative records to office design, anesthesia monitors, and equipment related to the safe and successful administration of office-based anesthesia by oral and maxillofacial surgeons and their staff.
Patients with a history of difficult intubation or with conditions associated with difficult airway should be approached with organized primary and secondary plans for airway management. When these potential problems are detected, patient safety may be improved with use of advanced airway management techniques and equipment. Additionally, patient referral for consultation and/or management at facilities where advanced airway management practitioners and equipment are available may be beneficial in some cases.

Minor and major allergic reactions occur during oral and maxillofacial treatment. Immediate diagnosis and pharmacologic intervention are imperative. Signs and symptoms may be variable. The early administration of epinephrine is critical.

Patients undergoing an office-based anesthetic require a thorough preoperative evaluation to identify medical illnesses and undertake appropriate investigations or studies. This article addresses common medical illnesses seen in oral surgery offices and provides insight into their anesthetic management, concentrating on open-airway office-based anesthesia.

This article provides an overview of historical and current sedative agents available to the dentist anesthetist. The surgeon is given rational choices for sedation and the individualization of drug selection for each patient. Total intravenous anesthesia is becoming increasingly popular for dental sedation because of the availability of ultra–short-acting drugs and computerized infusion technology. Levels of sedation are more easily achieved and maintained, and recovery is enhanced, which gives the operator extreme, moment-to-moment control of the anesthetic experience and improves patient outcomes.

This article provides a comprehensive review of the pharmacology of local anesthetics as a class, and provides details of the individual drugs available in dental cartridges. Maximum recommended doses of local anesthetics and vasoconstrictors are presented for healthy adult and pediatric patients, and for patients with cardiovascular system impairments. Various complications and reasons for failure of local anesthesia effectiveness are discussed, and current and future trends in local anesthesia are presented to provide an overview of current research in local anesthesia.

Even simple oral and maxillofacial surgical procedures can become challenging when the child patient has a high degree of fear and anxiety. This article reviews
differences in anatomy and physiology between the adult and pediatric patient, pre-
anesthetic assessment, fasting guidelines, and choices of sedation routes, and dis-
cusses equipment options for the management of pediatric anesthesia. After
reflection on these topics and based on training and experience, oral and maxillofa-
cial surgeons can decide the ages of patients, medical comorbidities, and tech-
niques with which they are comfortable in performing surgery in their offices in
a safe and effective manner.

**Respiratory Anesthetic Emergencies in Oral and Maxillofacial Surgery**
Daniel J. Gesek Jr

Respiratory anesthetic emergencies are the most common complications encoun-
tered during the administration of anesthesia in both the adult and pediatric popula-
tions. Regardless of the depth of anesthesia, a thorough review of the patients' health history, including the past medical history, medication list, prior anesthesia history, and complex physical examination, is critical in the promotion of safety in the oral and maxillofacial surgery office. The effective management of respiratory anesthetic emergencies includes both strong didactic and clinical skills.

**Cardiovascular Anesthetic Complications and Treatment in Oral Surgery**
Edward C. Adlesic

Perioperative hypertension is a common problem. If hypertension is left untreated in patients at risk, infarctions and stroke are possible. There are limited choices of antihypertensive agents for the office. Aggressive antihypertensive therapy is not indicated because most of the episodes seen in the office are hypertensive urgencies and not emergencies. Hypotension is usually managed by decreasing the depth of anesthesia, intravenous fluids, and then vasopressors, typically ephedrine or phen-
ylephrine. Consider treatment of hypotension whenever the mean arterial pressure decreases less than 60 mm Hg.

**Anesthetic Emergencies in Oral Surgery: Malignant Hyperthermia, Endocrinopathy, and Neurologic Events**
Andrew Herlich

Despite the impressive safety of office-based anesthesia, serious emergencies still occur. Early and appropriate treatment is likely to improve outcomes. This article discusses selected emergencies with backgrounds and rationale for emergent treatment.

**Managing the Untoward Anesthetic Event in an Oral and Maxillofacial Surgery Practice**
Steven I. Kaltman, Michael Ragan, and Osbel Borges

The safe and efficient use of outpatient surgical anesthesia modalities is a significant part of the training and expertise of the oral and maxillofacial surgeon. Although adverse outcomes are rare, they can have considerable traumatic psychological and professional consequences for the surgeon involved. The goal of this article is to develop guidelines to educate the doctor, the second victim, on how to manage a bad outcome and how to navigate through a difficult and arduous process.