There are 2 types of ranulas: oral ranulas and plunging (cervical) ranulas. The management of the cervical ranula involves surgical excision of the oral portion of the ranula along with the associated sublingual salivary gland. The sublingual gland is easily removed from an intraoral approach. Significant anatomic structures associated with the removal of the sublingual gland are the submandibular duct, lingual nerve, and sublingual artery. Knowledge of the anatomy makes the surgery easier and without complications.

Transoral parotidectomy allows for the management of parapharyngeal space tumors and accessory parotid gland tumors without the need for a transfacial/transparotid or mandible splitting procedure. It is a minimally invasive approach that permits a faster recovery and with a lesser risk of facial palsy.

This article presents an overview of the history of the buccal fat pad flap, its relevant anatomy, and its indications and contraindications. The surgical technique for its harvest is described, as are the postoperative care and possible complications.

A heightened cultural emphasis on youth and beauty has resulted in an increase in cosmetic surgery in the Western world. Lip augmentation is one of the most popular cosmetic procedures done because full lips are considered youthful and voluptuous. With reliable and improved techniques, it is possible to change the appearance of the lips utilizing injectable materials and surgical techniques. This article focuses on popular materials and techniques utilized to augment the size and volume of the lips—the most common are dermal fillers. Lip augmentation requires a thorough understanding of anatomy and managing patient expectations, available materials, and techniques.

The delineation of excessive gingival display and review of current treatment options. Discussion over periodontal and prosthetic treatments, mucosal stripping
procedures, myotomies, Botox therapy, and orthognathic procedures for correction of the “gummy smile.”

**Bone Grafting for Implant Surgery**  
Ladi Doonquah, Pierre-John Holmes, Laxman Kumar Ranganathan, and Hughette Robertson

Osseous grafting serves to restore form and function to craniofacial defects. These grafts have been used with the aim of enhancing osteoinductive, osteoconductive, and osteogenic properties to address vertical and horizontal defects so as to render the edentulous ridge more amenable to implant placement. As the biology of bone grafts continues to be unearthed, the use of adjuvants to augment grafts has proved effective. Three-dimensional printing, tissue engineering with the use of stem cells, immunotyping and hormonal therapy all hold promise for the future in the thrust to discover the ideal graft.

**Bone Grafting of Alveolar Clefts**  
Hilary McCrary and Jonathan R. Skirko

The goals of alveolar cleft repair include (1) stabilization of the maxilla, (2) permitting tooth eruption, (3) eliminating the oronasal fistula, (4) improving aesthetics, and (5) improving speech. Alveolar cleft repair should be considered one of the steps of a larger comprehensive orthodontic management plan. In conjunction with closure of the oronasal fistula, a variety of grafting materials can be used in the alveolar cleft. Autogenous grafts have been found to have greater efficacy compared with allogenic or xenogeneic bone, substitute bone, and alloplasts but with more donor site morbidity.

**Diagnosis and Management of Lingual Nerve Injuries**  
Bradley Romsa and Salvatore L. Ruggiero

Injury to the lingual nerve is a well-recognized risk associated with certain routine dental and oral surgical procedures. The assessment and management of a patient with a traumatic lingual nerve neuropathy requires a logical and stepwise approach. The proper application and interpretation of the various neurosensory tests and maneuvers is critical to establishing an accurate diagnosis. The implementation of a surgical or nonsurgical treatment strategy is based not only on the established diagnosis, but also a multitude of variables including patient age, timing and nature of the injury, and the emotional or psychological impact.

**Management of Oroantral Communications**  
Natasha Bhalla, Feiyi Sun, and Harry Dym

Oroantral communication and fistula are commonly seen complications in the field of oral and maxillofacial surgery. Oral surgeons must be familiar with the diagnosis and proper management including multiple soft and hard tissue approaches to this surgical dilemma.

Leslie R. Halpern and David R. Adams

Oral and maxillofacial surgery (OMFS) has undergone a renaissance/metamorphosis as a specialty and in the technologic innovations that have enhanced the surgical
care of patients. This article reviews traditional maximal transoral approaches in the management of common pathologic lesions seen by OMFS, and compares these techniques with a literature review that applies minimally invasive technology and innovative robotic surgery (transoral robotic surgery) to treat similar lesions. The traditional approaches described in this article have transcended generations and future trends are suggested that will improve the training of the OMFS legacy as clinicians move forward in the care of patients.

**Use of Lasers and Piezoelectric in Intraoral Surgery**

Davani Latarullo Costa, Eduardo Thomé de Azevedo, Paulo Eduardo Przysiezny, and Leandro Eduardo Kluppel

Video content accompanies this article at [http://www.oralmaxsurgery.theclinics.com](http://www.oralmaxsurgery.theclinics.com).

Laser therapy has been delivering good results for more than 30 years. Therapeutic effects are seen due to its ability to stimulate cell proliferation, revascularization, cell regeneration, local microcirculation, and vascular permeability; leading to edema reduction and analgesic effects. The piezoelectric system has been used in several surgeries recently, following the trend of minimally invasive surgery. The system consists of crystals undergoing deformation when exposed to electric current, resulting in an oscillating movement with ultrasound frequency. In oral surgery it is used in orthognathic and temporomandibular joint procedures, alveolar corticotomies, tumor excision, bone grafts, third molars, and dental implants.

**Mouth Gags: Advantages and Disadvantages**

Ashley Lofters and Earl Clarkson

Mouth gags have been in use since 1220 as a solution to the cumbersome limitations encountered when visibility and access to the oral cavity, pharynx, and larynx are needed. The instruments being used today range from the simple but effective design of the bite block to the sophisticated and intricate design of the Feyh-Kastenbauer. This article highlights the most frequently used well-designed mouth gags and the applications for which they provide the most benefit. Disadvantages and risks of their use are explored, especially those that clinicians should be aware of for patient and operator safety.

**Uvulopalatopharyngoplasty**

David Sheen and Saif Abdulateef

Uvulopalatopharyngoplasty is a generally safe and widely accepted surgical procedure for the treatment of obstructive sleep apnea. Unfortunately, uvulopalatopharyngoplasty does not always result in success, and patients who initially experienced improvement in the severity of their obstructive sleep apnea may relapse. Proper patient selection and performing uvulopalatopharyngoplasty in conjunction with other surgical procedures that are directed at other sites of upper airway collapsibility may yield favorable outcomes.