

# Clinical considerations and interdisciplinary management of oral-maxillofacial surgery: A longitudinal study.

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## Abstract

**Surgery to treat injuries and defects of the hard and soft tissues of the head, neck, face, jaw, mouth, jaw and face. It is widely recognized as one of the specialties of dentistry. Oral and Maxillofacial Surgery is a surgical specialty that deals with the diagnosis, surgery and concomitant treatment of infections, wounds and defects that affect both the functional and aesthetic aspects of the rigid, supple tissue of the oral and maxillofacial area Oral and Maxillofacial Surgery includes: Cosmetic and facial surgery, clinical pathology, computational surgery, congenital and craniofacial malformations, alveolar surgery, head and neck oncology, implantology, oral surgery, maxillary surgery, reconstructive surgery, skull base surgery, TMJ and trauma. A maxillofacial surgeon is a local specialist surgeon who heals the entire craniomaxillofacial network. Anatomical regions of the mouth, jaw, face, skull and related tissues. alveolar bone surgery (surgery to remove impacted teeth, difficult tooth extractions, tooth extractions in medically at risk patients, implantation of skeletal parts or a better anatomy to place implants, dentures, or other dentures Pre-prosthetic surgery to create a symmetrical structure.**

**Keywords:** Oral cancer, Oral-Maxillofacial Surgery, Surgery planning, Oral surgery imaging.

## Introduction

The complex anatomy of the mouth, jaw, and face is responsible for various physiological functions such as speech, chewing, swallowing and breathing, as well as facial aesthetics. Preservation and restoration of vital organs and functions should be considered by clinicians when treating diseases that affect this area. Therefore, the advent of functional surgery is on the horizon. Since the beginning of cervical dissection in the late 19th century, surgeons have moved from conventional resections to spare the sternocleidomastoid muscle, internal jugular vein and spinal accessory nerves and to separate more of the affected regional lymph nodes. There has been a gradual shift to conservative selective resection. This significantly reduced common postoperative complications such as shoulder syndrome, facial asymmetry and impaired neck movement. Oral and maxillofacial surgeons are also among the first groups to practice functional surgery. Over the years, clinicians have extended this concept to other procedures [1].

Glandular tissue and part of the ear nerve can be saved to treat certain benign parotid tumors. Submandibular hilar stones can now be removed endoscopically or through an intraoral incision, eliminating the need to remove the submandibular gland. In patients with nasopharyngeal or oropharyngeal cancer who require radiation therapy, surgical transplantation of the submandibular glands into the submental region significantly reduces radiation-induced xerostomia [2].

Treatment of impacted incisors with extended roots is challenging for clinicians due to the location of the impacted incisors, root abnormalities, poor prognosis and particularly long treatment times. We report on her two young patients with adversely affected maxillary central incisors and developed cleft labial roots. Both patients were treated with her *in situ* rotation, a novel surgical approach. This method conversely resulted in gentle rotation of the crown of the affected incisor to a relatively normal position, with the tip position relatively unchanged. Spontaneous eruption of the treated incisors was observed approximately two weeks after surgery. Three months later, the postoperative central incisors were further aligned to the maxillary arch using fixed orthodontic appliances. At the follow-up observation 2-3 years after the operation, the position of the severed incisor was stable, the esthetic appearance of the gingiva was good and the vitality of the pulp was also good [3]. The root continued to grow in a direction relatively perpendicular to the long axis of the incisor, different from the initial curvature angle. In addition, *in situ* rotational surgery significantly shortened the treatment time compared to conventional treatment and improved the prognosis [4].

Given the extent to which this surgery is performed by surgeons who specialize in maxillofacial surgery, serious complications and morbidity after orthognathic surgery are rare and even less reported. Maxillary avascular necrosis after Le Fort I osteotomy is perhaps the most feared consequence

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of double jaw surgery. However, it accounts for only a very small subset of all surgical complications. Reported risk factors associated with maxillary avascular necrosis include segmental osteotomy, vertical posterior impaction, large lateral extension, anterior pre-extension greater than 9-10 mm, inadequate surgical technique, and excess maxillary soft tissue. Removal of intraoperative bleeding, perforation or damage to the maxillary palate. Pedicles, previous maxillary or palatal surgery and other comorbidities. Anecdotal cases of total maxillary necrosis after orthognathic surgery have been reported within the field as a whole, but to our knowledge, total maxillary necrosis after conventional orthodontic surgery has not been reported in previous studies. We presented a truly unique case of total maxillary necrosis occurring after standard Lefort I one-piece osteotomy in a patient with no known medical or surgical risk factors for complications [5].

## Conclusion

Local and systemic phenomena induced by oral and maxillofacial surgery are characterized by local bone mineral density reduction and accelerated bone turnover, which may affect implant osseointegration. Therefore, conservative prosthetic rehabilitation and implant placement were deferred after her 98% facial growth potential in boys. The risks and benefits of treatment were first explained to the patient's legal guardian. Both the orthodontic and maxillofacial surgery departments perform follow-up surgery to monitor treatment growth and stability. Maxillary avascular necrosis is a very

rare but very serious complication of routine maxillary surgery for both patients and surgeons. Although the maxillary blood supply associated with osteotomy has been extensively studied in both animal models and human anatomical studies, definitive identification of the specific causative etiology of maxillary avascular necrosis remains elusive. It remains a proposition without Consideration should be given to including acute cases in the current classification system.

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