Reconstructive Oral and Maxillofacial Surgery

Section 1: Parameters of Care as the Basis for Clinical Practice

Introduction

This statement is intended to summarize the procedures used in the management of patients presenting for care by oral and maxillofacial surgeons. The definitive guide to the management of such patients is Parameters of Care: AAOMS Clinical Practice Guidelines for Oral and Maxillofacial Surgery (AAOMS ParCare) Sixth Edition 2017. Any references used in the development of this statement can be found in AAOMS ParCare 2017. This statement is not intended as a substitute for AAOMS ParCare 2017, but rather as a synopsis of the information contained in AAOMS ParCare 2017.

Section 2: Reconstructive Oral and Maxillofacial Surgery

Preface

The successful replacement and restoration of missing or dysfunctional body parts necessitates knowledge and understanding of the complex interrelationships of function, form and anatomy in the oral and maxillofacial region. The overall goal of treatment is to restore optimal function and esthetics of the defective or missing structures.

Definitions

Reconstructive oral and maxillofacial surgery involves the correction of soft- and/or hard-tissue deformities and/or defects of the maxillofacial region including the teeth, jaws, face and contiguous structures. This includes reduction, revision, augmentation, grafting and implantation for the correction or replacement of defective structure to assist in restoring function to the compromised patient.

Indications

Conditions that require reconstructive oral and maxillofacial surgery include congenital defects (present at the time of birth), developmental defects (occurring after birth) and acquired defects and diseases (including post-traumatic, post-surgical and those resulting from a variety of pathologic processes). Functional deficits resulting from these conditions may include impaired masticatory function, speech, swallowing, demonstrated nutritional deficiencies, inadequate hard-tissue support for the associated soft tissues, airway obstruction, malocclusion, facial bone asymmetries, oral-nasal and oral-antral communications, abnormal function of the paranasal sinuses and/or temporomandibular joint pain/dysfunction, and cutaneous disfigurement.

Various anatomic sites may be involved such as the hard and soft tissues of the face including neurological and vascular components.

Factors Affecting Risk

Reconstructive surgery includes a number of aspects that must be considered when addressing the defect/deformity. These include the patient’s understanding, demographics, socioeconomic status, social support/cooperation and access to care/resources. Other factors that need to be address are the presence of coexisting local, systemic or psychologic diseases/disorders; severity of defect; site contamination, infection or disease; underlying anatomy; and surgical history.
Treatment Goals

The goals of treatment, as outlined in AAOMS ParCare 2017, include the repair or replacement of missing or defective hard and/or soft tissues to improve the following: mastication, esthetics, speech, swallowing, airway, nutritional status; enhancement of social and psychological well-being; limitation of the severity and period of disability; replacement of missing or qualitatively deficient soft tissue and improved physiologic function; maintenance of form and function over time; appropriate understanding by patient of options and plan; and appropriate understanding by patient of outcomes, risks and complications.

Treatment

Reconstructive oral and maxillofacial surgical procedures are based on the principles of restoring the function and form of the affected anatomical structures. Such procedures may include hard- or soft-tissue procedures, or a combination of both. These procedures may also include the use of prosthetic devices implanted on a temporary or permanent basis, tissue-transfer techniques, reduction, revision and/or removal procedures and/or a variety of other options. The choice of the appropriate surgical treatment is specific to each patient based on the type and degree of the deformity, the available surgical options, experience of the surgeon and the needs of the patient.

Summary

The correction of deformities to the oral and maxillofacial regions is an extremely valuable and necessary service to those patients affected by these debilitating conditions. Such procedures are performed for reasons of medical and sometimes dental necessity even though there may be a restoration of normal form as well.

A more exhaustive list of the indications for and appropriate procedures to correct such deformities is included in the Parameters of Care: AAOMS Clinical Practice Guidelines for Oral and Maxillofacial Surgery (AAOMS ParCare) Sixth Edition 2017.