



Oral and maxillofacial surgeons.  
The experts in face, mouth and jaw surgery.

# Dental and Soft Tissue Surgery



## Tooth Extractions

There are many reasons why your dental professional may recommend that you have one or more teeth removed. For example, the tooth may need to come out as part of your orthodontic treatment in order to allow space for your remaining teeth to move; your tooth may have been injured beyond repair; the tooth may be damaged by decay; or the tooth may be loose as a result of periodontal disease.

Whatever the reason, you will most likely be referred to an oral and facial surgeon, who will remove your tooth in the oral and facial surgery office using an anesthetic that is appropriate for your procedure.

## Apicoectomy

If you or someone you know has had a root canal to save an infected tooth, be assured the majority of root canals are successful; but sometimes the infection from the dead nerve inside the tooth spreads beyond the tooth root and into the surrounding bone. When this occurs, your dentist may refer you to an oral and facial surgeon for treatment. After reviewing your history and diagnostic images of the tooth and surrounding tissue, your surgeon may determine that a surgical procedure called an “apicoectomy” is an appropriate treatment for your case.

An apicoectomy surgically removes the infected portion of the tooth’s root in order to clean the infection from the tooth and surrounding bone. Your surgeon will reverse fill or seal the root to prevent further infection. In cases where there is significant bone loss in the area, a bone graft may be performed to promote healing. If left untreated, the infection could develop into an abscess or cyst, which may, in turn, lead to bone loss around the root of the tooth and cause the tooth to become loose.

An apicoectomy is usually performed in the oral and facial surgeon’s office using an anesthetic that is appropriate for your procedure.

## Exposure of Impacted Teeth

We know that third molars, or wisdom teeth, are often impacted, or blocked, from entering the mouth normally. But did you know that other teeth may be impacted as well? For example, it is not uncommon for one or both canine teeth, also known as “eyeteeth,” to be impacted. The good news is that your orthodontist, with the help of an oral and facial surgeon, can bring the impacted tooth through the gum and into the correct position – giving you a beautiful, healthy smile.

Before your orthodontist can reposition the impacted tooth, you must be fitted with braces so that enough space may be opened up to allow the tooth to come down into the proper position. When the orthodontist determines the time is right, you will be referred to an oral and facial surgeon, who will surgically expose the impacted tooth and affix a special brace that the orthodontist will attach to your braces to move the tooth into position.

The surgical procedure to expose and bracket an impacted tooth is usually performed in the oral and facial surgeon’s office using an anesthetic that is appropriate for your procedure. Once the surgical site has healed, you can return to your orthodontist to have the tooth repositioned into its proper place in your mouth.

## Frenectomy

The word “frenum” is defined as a small fold of tissue that secures or restricts the motion of a movable organ in the body. Frena may be found in the brain, digestive tract and, most notably, in the mouth. Several frena are located in the mouth: under the tongue, inside the upper lip, inside the lower lip, and connecting the cheeks to the gum.

Frena can affect speech, tooth position and gum health. In addition, they may cause gums to recede and keep teeth apart. In these cases, your dentist, orthodontist or pediatrician may refer you to an oral and facial surgeon, who can determine whether a procedure called a frenectomy is necessary to correct the problem and restore proper function to the tongue and lips.

The frenectomy is usually performed in the oral and facial surgery office using an anesthetic that is appropriate for your procedure. Using a scalpel, electrocautery or a laser, the surgeon cuts the frenum to loosen the connection and extend the range of motion, or removes the frenulum entirely. The surgery can be done in as little as 10 to 15 minutes.

## Dental Hemisection and Root Amputation

If the pulp, or connective tissue in the center of a tooth becomes infected, your dentist may recommend a root canal to remove the bacteria and infected pulp and save the tooth. While the majority of root canals are generally successful and allow the tooth to remain functional for years, sometimes a root canal may fail. One or more roots may become infected, or there may be significant bone loss around the tooth as a result of periodontal disease.

In general, most dentists will recommend removing the affected tooth and replacing it with a dental implant; but there are occasions where it may be prudent to keep the tooth in place and allow the site to heal until an implant may be placed. This option may be a wise choice, particularly if one root of the affected tooth is intact. In this instance, your dentist may refer you to an oral and facial surgeon for a hemisection or root amputation.

When performing a hemisection, your surgeon removes one-half of the tooth, leaving a serviceable one-rooted tooth. The term “root amputation” refers to the surgical removal of one root of a multi-rooted tooth.

Both procedures are usually performed in the oral and facial surgery office using an anesthetic that is appropriate for your procedure.

## Trigeminal Nerve Repair

The trigeminal nerve, which is responsible for sensation in the face and such functions as biting and chewing, may be at risk for injury during some oral and maxillofacial surgical procedures. Oral and facial surgeons are able to diagnose and manage these injuries with both non-surgical and surgical treatments to restore sensation and function.

## Other Soft Tissue Surgeries

### Soft tissue grafts

In general, soft tissue grafts are used to add more tissue in areas where your gums have receded, the gum tissue is too thin, there is evidence of periodontal disease, an injury has affected the tissue, or where the roots of a tooth are exposed. Soft-tissue grafts are important procedures to maintain a healthy mouth.

They may be used to:

- Prevent further gum recession;
- Cover an exposed root;
- Stop sensitivity in the affected area;
- Improve the look of the tooth; and/or
- Prevent problems in the future.

Soft tissue grafting is usually performed in the oral and facial surgeon’s office using an anesthetic that is appropriate for your procedure.

In addition to performing soft tissue grafts in the mouth, oral and facial surgeons are often called upon to treat victims whose face, head or neck has been injured in an accident, fire or other trauma, or patients who have suffered the ravages of disease. Their knowledge of soft and hard tissue structure has made oral and facial surgeons indispensable in emergency rooms and trauma centers across the country.

It is in this role that oral and facial surgeons may be called upon to perform a skin graft in combination with a vestibuloplasty in the mouth. Skin grafts are also performed when significant portions of the skin on a patient’s head or neck have been severely damaged.

### Temporary Anchorage Devices (TADS)

If you or someone in your family is undergoing orthodontic treatment, your orthodontist may refer you to an oral and facial surgeon for a relatively minor surgery to place a small titanium screw in the bone of your upper or lower jaws, or sometimes in the roof of your mouth.

Known as temporary anchorage devices, or TADS, these screws serve as “anchors” that the orthodontists may connect to various areas of your mouth to help reposition your teeth. TADs allow orthodontists to

overcome the limitations presented by holding arches and headgear. They allow the orthodontist to predictably perform difficult tooth movements.

TADS are usually placed in the oral and facial surgeon's office using an anesthetic that is appropriate for your procedure. There is little or no discomfort. Once placed, the orthodontist is immediately able to use the TAD as an orthodontic anchorage.

Typically, temporary anchorage devices are only used for a short period of time during orthodontic treatment. When they are no longer needed, they are removed and the site is usually fully healed in a couple of days.

### **Gingivectomy and Gingivoplasty**

Gingivitis is an inflammation of the gum tissue surrounding your teeth that is caused by bacteria. While the disease may be controlled by good dental hygiene and regular visits to your dentist, gingivitis can lead to periodontitis, a stage of the disease where pockets of infection may lead to loose teeth and even tooth loss. If conventional treatments like scaling and root planing have been unsuccessful in returning your gum tissue to a healthy, firm state, a surgical procedure known as a "gingivectomy" may be appropriate. A gingivectomy may also be appropriate for patients with excessive gum tissue, or in cases of gingival hyperplasia, which may occur from the use of certain drugs, such as Dilantin. In an effort to stop the progression of the disease, a gingivectomy surgically removes and eliminates the microbial factors that create periodontitis.

A gingivectomy is usually performed in the oral and facial surgeon's office using an anesthetic that is appropriate for your procedure.

Gingivoplasty, the surgical reshaping of the gum tissue, is often performed in combination with gingivectomy for cosmetic or functional purposes. After a gingivectomy procedure, your surgeon may perform a gingivoplasty that thins the remaining gum tissue so it looks natural.

### **Crown Lengthening Procedures**

Has your dentist advised you to have a crown placed on a tooth that has been weakened by decay, is cracked or broken, or severely worn down? Your dentist may refer you to an oral and facial surgeon for a crown lengthening procedure to ensure that enough of the tooth's structure is available to hold a crown.

Crown lengthening is usually performed in the oral and facial surgery office using an anesthetic that is appropriate for your needs. Depending on your case, your surgeon may remove a small amount of gum tissue to provide enough room for the crown placement. Once the site has healed, about 4 to 6 weeks following surgery, your dentist will complete the restorative work.

