

# Assisting in Implant Surgery

*Herbert Bader, DDS & Ellen Gambardella, CDA, RDA, FADAA, M.Ed.*

**Check your State Dental Practice Act before performing any expanded function!!!**

## **Important Facts to Remember**

Surgical procedures require team effort

Follow strict infection control protocols

The assistant must be a second pair of eyes for the dentist

Maintain a clear operating field

Place 4x4 gauze between arches to prevent aspiration of small parts or fragments

Place suction tip gently to avoid injury of soft tissue i.e. no jabbing or poking

Use a suction tip with a small orifice to prevent grasping the cheek, tongue, lip, etc

NEVER touch the implant surface with anything except a titanium instrument.

Examine extracted teeth for completeness – if a part is missing notify the dentist

Use retractors with gentle pressure

Pay attention to detail – do not rush

Clean patients face before dismissal

Always be positive

## **Terminology**

- Titanium - a metallic element that is manufactured under sterile conditions and rigid specifications to fabricate a dental implant for surgical placement in the oral cavity. Titanium's ability to osseointegrate is documented and is essential to the successful healing of the implant.
- Dental Implant - a titanium fixture used to replace a missing root. It is biocompatible with bone and may be referred to as a "fixture". It is able to osseointegrate under the correct conditions.
- Osseointegration - the direct connection between bone and the implant surface. The implant is anchored or fused within the bone but has no blood supply. The bone's compatibility with titanium allows integration without rejection.
- Surgical Stent - the surgical template or guide for implant placement. Indicates the number, position and angulations of implant(s).

- Healing screw-placed into implant after placement to seal orifice during healing.

## **Team Approach**

Patient

Staff for both surgical and restorative offices

Restorative Dentist

Surgical Dentist

A general dentist may surgically place and restore implants

Laboratory Technician

## **Two-stage Surgery**

### **First Surgery**

Works on opposite side of surgeon & is the second set of eyes

Interprets patient concerns when delivering operative and postoperative instructions

Proper pre-surgical planning

Prepares and assists during sedation and anesthetic delivery

Passes surgical template

Maintains clear surgical site

Transfers sterile implant without compromising sterility

Passes implant instruments i.e. handpieces, pilot drills, direction indicators, ratchet, wrench, cover screw, screwdriver

Assists in flap repositioning and suturing

Exposes radiographs requested by dentist

### **Second Surgical Procedure** ...follows after osseointegration

Prepares and assists during local anesthetic

Passes template

Passes appropriate instruments

Suctions while healing cap is exposed via punch or flap procedure

Assistant receives cover screw in 2 X 2

Assistant prepares & transfers cotton pellet with H<sub>2</sub>O<sub>2</sub> for cleaning implant

## **Important Considerations**

Be a second set of eyes for the surgeon

Gently retract soft tissue to avoid damaging tissue

Do not touch sterile implant with anything except sterile instruments

Use copious amounts of chilled sterile saline during drilling – this cools bone and bur surfaces

Instruct patient not to chew hard foods on implant site

## **Post Operative Instructions for Implants**

In addition to the general post-operative instructions, these instructions also apply:

- Typically, minimal pain is associated with implants. Start with ibuprofen (Motrin or Advil) first as prescribed by your doctor.
- Do not brush area of two-stage implant; rinsing will keep this area clean.
- After placement of a one-stage implant, keep the metal part that protrudes from the gingiva clean. A cotton-tipped swab saturated with salt water or Listerine may be used to swab the metal area. Progress to a soft toothbrush.
- Avoid chewing on the implant site(s). Chewing forces (especially of hard foods) may delay healing.

## **Post Operative Instructions for Bone Grafting**

In addition to the general post-operative instructions, these instructions also apply:

The bone graft material is made up of small particles which may be seen in the mouth after surgery, and may feel like small sand like particles. To minimize dislodging of these graft materials, follow these instructions:

- Do NOT forcefully rinse or spit after a bone graft for 3-5 days.
- Do NOT apply any pressure to the surgical site with your tongue or finger. You do not want to displace the graft material.
- Do NOT lift your lip to inspect the surgical site. This may harm the area.

### Post Operative Instructions

### Care of the Mouth Following Oral Surgery

**BLEEDING** - Continue biting on the gauze with firm pressure for the next 30 minutes, then replace it with two pieces of the clean gauze you were given. The gauze must contact the gum tissue where the bleeding is occurring so that pressure can be applied. If after several hours there is persistent bleeding, moisten a tea bag, place it over the surgical site and apply firm constant pressure for 30 minutes.

**SWELLING** - Swelling is a *normal* component of healing which peaks between 48 - 72 hours after surgery then resolves over several days. When you return home, apply an ice bag to the outside of the face (15 minutes on, 15 minutes off) for the next 6 hours. This will help to minimize swelling.

**PAIN** - For *mild* discomfort take Tylenol (acetaminophen) or Advil or Motrin (ibuprofen). If you have been given a prescription for a narcotic pain medication, avoid alcoholic beverages and hazardous activities like driving a car or operating machinery.

**NAUSEA** - As a result of inadequate fluid intake, medications, or anxiety, nausea can occur after surgery. Carbonated beverages, Pepto-Bismol, or over-the-counter Benadryl caplets (25 mg taken every 6 hours as needed) are generally effective in controlling a queasy stomach.

**DIET** - Stay on a liquid or soft diet for the remainder of the day. Thereafter, diet can be progressed as tolerated. Avoid using straws. Milk products should be avoided for the next 3 hours if you were given intravenous anesthesia.

**ORAL HYGIENE** - Since rinsing the mouth encourages bleeding, do not rinse (or spit) today. Remember to swallow your saliva. Beginning tomorrow, rinse after meals using 1/4 teaspoon of salt in 8 ounces of warm water. The teeth should be brushed as usual with a soft-bristled toothbrush. If you have been given a prescription for an antibacterial rinse, use it as directed. Use of Listerine in lieu of a prescription rinse is excellent. Any mouth rinse used must be held in the mouth for a minimum of 30 seconds to be effective.

**ACTIVITY** - Avoid bending or heavy lifting today--keep your head elevated (for example, sitting in a lounge chair or using two pillows when lying down). Strenuous activity should be avoided for *1 week* following wisdom tooth surgery.

**SMOKING** - Avoid smoking for as long as possible! Smoking directly affects wound healing and can result in "dry sockets" or infection.

**ANTIBIOTICS AND BIRTH CONTROL PILLS** - Antibiotics can interfere with the effectiveness of birth control pills. Alternative forms of birth control should be utilized until 1 week has elapsed since the completion of antibiotic therapy.

**PATIENTS WHO HAVE HAD INTRAVENOUS ANESTHESIA** - You should not drive, drink alcohol, climb stairs unassisted, sign important documents, or engage in any potentially hazardous activity for 24 hours. If you feel light-headed or faint, lie flat on your back and elevate your legs with pillows. Remain in this position for 15 minutes and then get up *slowly*. Do not be alarmed if a bruise appears at the intravenous needle site. If the area becomes tender to touch, moist heat applications (3 times a day) are usually effective in relieving this condition.

*Feel free to contact the office at any time if questions arise concerning your progress and recovery.*