



Oral, Maxillofacial, and Dental Implant Surgery  
1440 28<sup>th</sup> Street, Suite #2  
Boulder, CO 80303  
303-444-2255

## **Patient Surgical Instructions:**

### **Jaw Surgery**

#### **Preparation For Surgery**

[This should be read 1-2 weeks prior to surgery](#)

#### **Preoperative Evaluation:**

Either on the day of admission or several days before admission a physical examination will be performed to insure that there are no medical contraindications to surgery or general anesthesia. You will be seen preoperatively by an anesthesiologist or nurse clinician who will discuss the anesthetic plan. For young, healthy patients a limited number of laboratory tests may be obtained prior to surgery. Women of childbearing age that have experienced any menstrual irregularity or missed periods must discuss this with the surgeon and/or anesthesiologist. If there is any possibility that you are pregnant you should not proceed with anesthesia and surgery. All women of child bearing age who have not undergone a tubal ligation will undergo at least a urine pregnancy test. All adults over the age of forty will undergo an ECG (electrocardiogram) prior to surgery. It is extremely important that you reveal any medical problems and/or recent health status changes to both the surgeon and anesthesiologist prior to surgery. To not provide an honest disclosure of any and all health problems may jeopardize your health and safety during and after surgery.

#### **Diet:**

It is suggested that prior to surgery patients acquire a blender. Commercial dietary supplements may also be of assistance during the period after surgery. These can be purchased in local pharmacies. Sustacal, Ensure, and Boost are examples of dietary supplements available. Most have a variety of flavors. Generic instant breakfast offered by most grocery stores is comparable to these supplements and is less expensive. It is recommended that the diet be kept simple for the first week after surgery. After the first week you may explore many possibilities using a food processor/blender. High calorie, high protein intake is very important. Nourishment should be

taken regularly. You should prevent dehydration by taking fluids regularly. At least 1 liter of liquid should be taken daily. Try not to miss a single meal. You will feel better, have more strength, less discomfort and heal faster if you have good calorie intake. After adequate healing has occurred (usually 6 weeks following surgery), your diet will be advanced to solid foods. Caution: If you suddenly sit up or stand from a lying position you may become dizzy. If you are lying down following surgery, make sure you sit for one minute before standing.

You will be asked not to eat any solid food after lunch the day before surgery. Further, you will be asked not to take anything by mouth after midnight the day before surgery. This will insure an empty stomach at the time of surgery. You should brush your teeth on the morning of surgery. If it has been longer than 3 months since your teeth were professionally cleaned you should have them cleaned at least 1-2 weeks before surgery. If you are on any regular medications you should discuss this with the surgeon and the anesthesia doctor prior to the morning of admission. High blood pressure medication, in particular, should be taken on schedule with a small sip of water. Do not take any aspirin or aspirin containing medications for 2 weeks prior to your surgery. Do not take any anti-inflammatory medicines (Ibuprofen, Advil, Aleve, Bextra, Celebrex, etc.) for 1 week prior to surgery. Do not take any herbal preparations containing garlic, ginkgo or ginseng for at least 1 week before surgery. **These medications will promote bleeding at the time of surgery.**

## **Time Away From Work Or School:**

Following surgery you should expect to fatigue more easily but will be allowed to be as active as tolerated. Normal physical stamina usually returns by 2-3 weeks. Patients are encouraged to resume their normal activities as soon as possible with the exception of those who have had an upper jaw operation. Those who have had the upper jaw surgery should avoid straining and lifting more than 20 lbs. for the first two weeks after surgery. As far as planning the length of time an individual should be off work, I feel that patients should notify their employer that they will require two weeks away from work to recover. Certainly some individuals will return to their usual activities before 2 weeks. Students may generally return to school 1 week after surgery, but they should be limited to non-strenuous physical activities

## **Care After Corrective Jaw Surgery**

### **Day of Surgery**

#### **Prior to Surgery:**

You are to arrive approximately 2 hours before your scheduled surgery. You will be seen by the anesthesiologist and certified nurse anesthetist who will be administering your general anesthetic during the operation. If you have not done so at your pre-surgery clinic visit you or your parent(s) will be asked to read and sign a consent document providing consent for your surgery. A nurse will place an I.V. catheter and help you put on a pair of calf-length anti-embolic stockings. If you are a female of child-bearing age you will be asked to provide a urine specimen for a urine pregnancy test. The anesthesia staff will spray your nose with a decongestant. Just

prior to being transported to the operating room the anesthesia staff will administer a sedative in your I.V.

### **Operating Room/Recovery Room:**

You will receive a general anesthetic and be completely asleep during your operation. When you awaken your operation will be completed and you will be in the recovery room. Most patients will be in the recovery room approximately two (2) hours before they are awake enough to be safely transported to a hospital room. The recovery room is staffed by specialized nurses and anesthesiologists. This is a critical phase of your recovery and family are generally not permitted in the recovery room. Your mouth may be wired shut when you awaken. You will have ice packs on your face and you will receive I.V. pain medication as well as medication for nausea as needed. Many patients have very little recollection of the recovery room because of the lingering effects of the anesthetic.

### **After Surgery:**

When you are sufficiently awake and stable you will be transported to a hospital room where you will spend the night of surgery. You will be permitted to sip clear liquids. Antibiotics and medications to control swelling and nausea will be administered through your I.V. Your pain will initially be managed with I.V. pain medication. Once you are able to take sips of liquid you will manage your pain with liquid pain medication, and then by mouth as a liquid. You will have compression stockinettes on your legs to prevent blood clot formation. These will be removed as soon as you are up and walking. You may get out of bed the night of surgery. It is very important that you do not attempt to get out of bed without assistance while in the hospital. Your diet will be limited to clear liquids (iced tea, juice, broth, Jell-O, pop-cicles, etc.) for the first night. You will also have a source of humidified air to keep your nasal passages moisturized. We ask that you have the humidified air hose close to your face. Your nurse will help you with nose sprays to keep your nasal passages open. **Do not blow your nose.** You will have a suction catheter that you may use to suction your mouth as needed.

### **Swelling:**

Most of your swelling the night of surgery is from fluids administered during surgery. Swelling will be controlled with head elevation, ice application and I.V. medications that you are receiving for the first 12-24 hours after surgery. Swelling inside your nasal passages will give you a stuffy nose.

### **Bleeding:**

Expect slight bloody oozing from your nose (upper jaw surgery) and the gum incisions during the first evening after surgery. Application of ice packs, head elevation and avoidance of nose blowing will control such bleeding.

### **Nausea/Vomiting:**

Patients and family are understandably worried about nausea and vomiting after surgery when the jaws are wired closed. You will receive medication to control nausea before you awaken from the general anesthetic. In spite of this you may experience nausea and require additional doses of anti-nausea medication. It is not unusual for patients to swallow some blood in the recovery room. This will upset your stomach and produce some nausea and possibly vomiting. Remember that if you must vomit there is a only a small amount of liquid in your stomach that will easily pass out your mouth and/or nose. If you feel that you are going to vomit roll to one side and use your suction catheter. Your nurse will do everything possible to treat your nausea with potent medications. In spite of this, vomiting is sometimes inevitable. If you wish you may gently rinse and suction your mouth with saline the evening of surgery.

### **Speech:**

You will notice an acrylic splint between your teeth. The splint is important to control your bite during and after surgery. The splint will make intelligible speech more difficult. With practice you will speak quite well. Most patients resort to writing some communications during the first 24-48 hours after surgery. The splint will be in place at least until your wires are cut and possibly longer.

### **Sleep:**

Most patients do not sleep well in the hospital. You will be frequently disturbed for assessments by the nursing staff. These important assessments are, of course, for your safety and comfort. You will enjoy better sleep once discharged home, though it is not unusual to experience several restless nights after surgery. We suggest sleeping in a recliner for 2-3 nights to assure that your torso and head are elevated.

### **Visitors:**

Visitors should be limited to immediate members of the family. It has been my experience that, while this may not be a difficult time for the patient, it can be for people who may not understand what is happening. Therefore, it is advisable to limit the number of visitors during the period immediately after surgery.

## **Day After Surgery**

The first day after surgery is generally a good day from the standpoint of swelling. You will continue to apply ice packs and keep your head elevated. I will encourage you to take clear liquids by mouth. You must demonstrate that you can take sufficient oral liquids to prevent dehydration before you will be discharged from the hospital. Your I.V. will be left in place until discharge. You will be encouraged to get out of bed and walk with assistance. I will encourage you to make the transition from I.V. to oral pain medication. You will be asked to moisturize your nasal passage every 2-3 hours with saline nose spray. Your nurse is to help you spray your nose with the medicated nose sprays (e.g. Afrin and steroid nasal spray) twice a day. We will have you brought to clinic by wheel chair for routine post-operative x-rays.

### **Discharge from Hospital:**

Most patients are ready for discharge home by mid day or early afternoon on the first post-operative day. The most important criterion for discharge is the demonstration

that you can take an adequate volume of oral liquids. I would like you to drink approximately one (1) liter (approximately 1 qt.) of liquids prior to discharge. If you or any family members are not comfortable with discharge planning and/or instructions you have received, please speak to me before you leave the hospital. Please take the three (3) nose sprays and bottle of mouth rinse home.

### **Emotional Considerations:**

Any major surgery can challenge one's emotional balance. It is not unusual to feel blue and even depressed after surgery. Patients who come into the operation with a positive attitude generally "bounce back" very quickly from the insult of surgery. You will "turn the corner" and feel both emotionally and physically better. It generally takes about 5 days to appreciate the temporary nature of the physical and emotional insult of surgery at which time you will feel better in all respects.

## **Home Care**

The following information is to assist you and your family in caring for you after you are discharged from the hospital.

### **Swelling:**

Swelling is a natural consequence of surgery. Your swelling will increase after you leave the hospital and will reach its maximum on about the 3<sup>rd</sup> day after surgery. You should apply ice for at least 2-3 days after surgery. Make sure your head is elevated on 2-3 pillows for 5-7 nights after surgery.

### **Stuffy Nose:**

Especially if you have had upper jaw surgery you will need to use the medicated nose spray (e.g. oxymetazoline) twice-a-day to decongest the lining of your nasal passage. To prevent drying of your nasal passage rinse your nose with saline nose spray every 2-3 hours. Twenty (20) minutes after using the decongestant spray, give each nostril one (1) squirt of the nasal steroid (e.g. Flonase-fluticasone). Finally, sleep with a humidifier at bedside to minimize nasal passage drying. If your nasal passage becomes completely blocked and will not respond to the sprays, please contact me. This usually means the nasal passages have become dry and blocked with crusting. If you do not feel that you are receiving enough air, you may temporarily use a moistened spoon handle to hold your cheek away from your teeth. **Do not** blow your nose for two weeks following surgery.

### **Bleeding:**

A slight bloody ooze from the incisions and nose is expected for 2 days after surgery. If you experience persistent (more than 10 minutes) bright red nasal and/or mouth bleeding, please call me.

### **Bruising:**

Is variable but may produce “black eyes” and discoloration of the neck and chest. Bruising is, of course, temporary.

### **Smoking:**

**DO NOT SMOKE** for a minimum of 4 weeks following surgery. The heat and toxic chemicals in cigarette smoke are harmful to the healing of wounds and increases the likelihood of infection

### **Oral Hygiene:**

Good oral hygiene is very important for adequate healing and preventing infection. You should begin brushing your teeth the day following surgery. You should brush your teeth following each meal. A child’s soft toothbrush can be utilized for this purpose, paying particular attention to keeping the brush in direct contact with the teeth. It is very important to keep you mouth clean as the wounds are healing. You can decrease the accumulation of debris on the inside surface of your teeth and tongue by rinsing with warm tap or salt water after each meal/snack. You will take home a bottle of Chlorhexidine mouth rinse from the hospital. Rinse with warm salt water (1/2 teaspoon of salt in a cup of warm water) six times a day. Continue this procedure until healing is complete. Do not use a water-pik for 2 weeks after surgery. You will be provided with a portable suction machine to have at home to help with hygiene.

**REMEMBER:** A clean wound heals better and faster.

### **Stitches/Sutures:**

Your stitches/sutures will dissolve over the first two weeks and do not need to be removed.

## **Diet**

### **While wired shut:**

After you return home you should advance your clear liquid diet to full liquids (dairy products, etc.) and blenderized (liquefied) foods. It is very important that you drink an adequate volume of liquid to prevent dehydration. You should drink at least 1-2 quarts of liquid each day. It is not unusual to lose 5-10 lbs during the first week after surgery. You will need to have 5-6 meals/snacks each day to maintain adequate hydration and caloric intake.

### **After Mouth Unwired:**

After your mouth is unwired and you are able to open you may advance your diet to soft, mushy foods (mashed potatoes, etc.). Your diet must be soft enough that chewing is not necessary. You will resume chewing 5-6 weeks after surgery when the bones have healed.

## Activities:

There are three activities that are not permitted after surgery:

1. While wired shut do not swim in water where you cannot touch the bottom.
2. If you have had upper jaw surgery do not blow your nose for at least 2 weeks. If you forget and experience the sudden onset of facial swelling please notify me.
3. Protect your face from injury: Wear lap and shoulder restraint while driving, maintain a safe distance from airbags, and do not participate in contact sports for 12 weeks.

## Medications:

You have received several prescriptions. Please have these filled the day you leave the hospital. Follow the instructions on the bottle.

1. **Pain Medication:** A prescription for liquid pain medication will be provided when you leave the hospital. You should begin taking pain medication at the first sign of discomfort. For moderate pain, take a dose (400-600mg) of liquid Ibuprofen (children's Motrin) every 4-6 hours as needed for pain. Do not exceed the maximum daily dosage suggested on the bottle. Do not take Ibuprofen if you are intolerant of this medication or have a history of stomach ulcers or kidney disease. For severe pain, 2-3 teaspoons of the prescribed liquid narcotic medication (hydrocodone/acetaminophen) should be taken as needed. It is best to take pain medication with a small snack or following a meal to avoid stomach upset. The prescribed pain medicine will make you groggy and will slow down your reflexes. Do not operate a motor vehicle or machinery (lawn mower, etc.) while taking the pain medication. Do not drink alcoholic beverages. Notify the clinic if you are experiencing pain that is not improving 3-5 days after surgery. Do not take any of the above medication if you are allergic, or have been instructed by your doctor not to take it.

**We recommend the following protocol for optimum pain management:** Take each medication with a small snack and full glass of liquid.

Immediately Following Surgery: 1 Prescription Pain Pill

3 Hours Later: Ibuprofen dosage

3 Hours Later: 1 Prescription Pain Pill

3 Hours Later: Ibuprofen dosage

NOTE: The dosage of the prescription pain medication can be increased to 1 1/2 to 2 pills if needed for pain management.

2. **Antibiotic:** Be sure to take the prescribed antibiotics as directed to help prevent infection. Discontinue antibiotic use in the event of a rash or other unfavorable reaction and notify our office. Otherwise, please finish your entire course of antibiotic. Antibiotics can sometimes cause an upset stomach. If this is the case, it is advisable to take acidophilus or pro-biotic tablets along with your antibiotic. Call our office if you have any questions.

Women taking oral contraceptives: Antibiotics that you have received for your surgery may make your oral contraceptive less effective. You should use an alternate form of birth control until your normal menstrual cycle.

3. **Nausea Medication:** You are not likely to experience nausea after returning home. Nausea can be caused by pain medication taken on an empty stomach. Drink plenty of liquids, do not let yourself become dehydrated. If you do experience nausea, take the nausea medication every 6 hours as needed for nausea. If you vomit more than two (2) times in a six (6) hour period, please contact me.
4. **Decongestant:** Purchase an over-the-counter liquid decongestant/expectorant of your choosing. Be certain that the decongestant contains **guaifenesin**. Avoid decongestants with pseudoephedrine if you are having trouble resting/sleeping or if you have a history of high blood pressure.
5. **Nasal Sprays:** You received three (3) nasal sprays in the hospital: decongestant (oxymetazoline), nasal steroid (fluticasone), and saline nasal spray. Use the medicated nasal sprays every 12 hours. After you are no longer experiencing nasal congestion you may stop the oxymetazoline. You should use the nasal steroid spray until you have exhausted your supply. Use the saline spray every 2-3 hours to moisturize the nasal passage and prevent crusting.
6. **Chlorhexedine Mouth Rinse:** You received a bottle in the hospital. Swish and spit two (2) teaspoons once a day.
7. **Lip Balm:** Keep your lips moisturized with a lip balm of your choosing. Avoid Vaseline or petrolatum base containing ointments. ChapStick products provide a number of good options for lip care. Crusting of the corners of the mouth is common after corrective jaw surgery. This irritation will not lead to scarring.

## Questions/Problems:

It is our desire that your recovery be as smooth and pleasant as possible. Following these instructions will assist you, but if you have any questions or concerns about your progress please call the office (303) 444-2255. We are available 24 hours a day.

*Thank you for trusting us with your oral and maxillofacial surgery needs.*

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