

## POST-OPERATIVE INSTRUCTIONS: ORTHOGNATHIC SURGERY (JAW SURGERY)

### HOSPITAL STAY

The hospital will contact you at least 48 hours prior to let you know exactly what time and where you should report. You will be asked to arrive a few hours before your scheduled surgery. The length of your actual surgery is approximately 2–3 hours per jaw.

#### Immediately Post-Op

You will likely recover from the anesthesia in the Post-Anesthesia Care Unit (PACU) for an hour or so. You will then be transferred to a room for further recovery.

#### During Your Care In The Recovery Room

A hospital nurse will monitor and assist you. You will be provided with medications for pain, congestion, and nausea as needed. You will receive antibiotics and steroids at scheduled intervals. You should be able to open your mouth, but you will have some light guiding rubber bands in place. You may have an acrylic bite splint wired to your upper teeth. You will have an ice pack wrapped around your face. You will have an IV in your hand or arm providing you with fluids and medications. You might have a nasogastric tube (through your nose and into your stomach) to reduce the chances of nausea. These tubes are usually taken out early the next morning for overnight stays.

#### While In Your Hospital Room

A hospital nurse will care for you as directed by Drs. Bryan or Goodson. Intravenous fluids and medications for pain, congestion, and nausea will be provided as needed. You will be encouraged to start drinking liquids. You will be instructed on oral hygiene, oral and/or facial wound care, and breathing exercises to assist in your recovery from general anesthesia. You may be instructed to walk around (ambulate) to assist your recovery.

### FIRST 24 HOURS

#### Medication

Take your medications as instructed. You will be receiving an antibiotic to reduce your chances of infection. A steroid may be given to reduce inflammation and swelling. Ibuprofen or a similar NSAID will reduce discomfort and inflammation. Norco® (hydrocodone with Tylenol®) or a similar narcotic analgesic will reduce pain and discomfort. Sudafed® or a similar decongestant will help you breathe through your nose easier. Saline nasal spray will keep your nasal passages moist. Chlorhexidine gluconate or a similar disinfectant mouth rinse will help keep your mouth clean and reduce the chances of infection. Most patients prefer liquid medications. You may request pill form.

#### To Help Reduce Swelling

Keep your head elevated above the level of your heart. Apply ice to your face for at least 30 minutes out of the hour. Expect a good amount of swelling despite our best efforts.

Keep any dressings around the face intact until Drs. Bryan or Goodson sees you the next morning. Your steroid, NSAID, and pain medication will all help to decrease swelling.



## POST-OPERATIVE INSTRUCTIONS: ORTHOGNATHIC SURGERY (JAW SURGERY)

### FIRST 24 HOURS (CONT.)

#### Diet

- Take in as much fluid as is tolerable while awake to prevent dehydration. A full glass of water (8 oz.) every 3 hours if an IV is not running (= 64 oz./day = 1/2 gallon/day = 2 liters/day).
- You will be placed on a clear liquid diet (water, light juice, broth, etc.) to start.
- You should use the restroom as needed. The nurse may be available to assist you.

#### Expect

- Minor bleeding and oozing from the surgery wounds and nostrils for the first 24–48 hours.
- A mild sore throat from the breathing tube.
- Numbness of your lower lip, chin, cheeks, tongue, and teeth (for lower jaw surgery) and your upper lip, cheeks, nose, and teeth (for upper jaw surgery).
- Nasal congestion from upper jaw surgery and the breathing tube.
- Limited jaw mobility due to the surgery.

#### Oral Hygiene

- Use a baby toothbrush to keep your teeth clean. Be careful around the incision sites, which will be in the upper vestibule of the mouth (for upper jaw surgery) or the cheeks near the molar teeth along the back sides of the lower jaw (for lower jaw surgery).
- Rinse with chlorhexidine gluconate solution twice a day and brush your teeth at the same time. You may wish to brush your tongue during your hygiene periods.
- Rinse with warm salt water (one teaspoon of salt per 6-8 ounces of water) every hour or so. Wounds heal faster when they are clean and moist.
- Depending on the type of surgery, you may have a plastic splint wired to your upper teeth to help you guide your bite into the right location. Keep this area clean also.
- Depending on your specific surgery, you may be asked to use elastic (rubber bands) around your braces to help guide your teeth/jaw into the right bite.
- **For upper jaw surgery:** Do not blow your nose nor sneeze through your nose for the first 2–3 weeks. Take any additional antibiotics/medications (nasal decongestants, nasal sprays) as directed by the doctors.

### UPON DISCHARGE FROM THE HOSPITAL

#### You Should Have Prescriptions and Instructions For

- Strong pain medicine (a narcotic analgesic)
- Antibiotic
- Anti-nausea medicine (if it was necessary)
- Chlorhexidine gluconate mouth rinse (an antibacterial mouth rinse)
- Instructions to follow up in the office in 1 week after discharge

***You will have the doctors' cell phone numbers. They are available 24/7 if you have any concerns.***



## POST-OPERATIVE INSTRUCTIONS: ORTHOGNATHIC SURGERY (JAW SURGERY)

### FIRST WEEK

#### Swelling

Expect significant swelling. Double jaw surgeries will swell more. It will maximize during the first week and diminish thereafter. Keep your head elevated above the level of your heart at all times. Do not lay flat. Sleep in a recliner if possible or propped up with 3 pillows. Ice should be used for the first 48-72 hours. Remember, your face will be numb. You will be given some form of steroid to reduce swelling, usually an injection prior to leaving the hospital. Your nasal passages will also be swollen resulting in congestion and difficulty breathing through your nose. Over-the-counter decongestants, expectorants, and nasal sprays will help. A steam humidifier placed next to you at all times will also make you feel better. Similarly, some patients feel better sitting in a steamy shower. Heat in the form of a warm moist washcloth may be used after 72 hours. You may experience rebound swelling near the end of the first week as the effects of the steroids wear off and you begin to use heat. This is a minor increase in swelling and should not be of concern.

#### Bleeding

Minor oozing from the incisions inside of the mouth should be expected in the first 72 hours. Upper jaw surgeries usually experience some minor trickling of blood through the nose. Although less common, lower jaw surgeries may experience this also due to the tubes used during surgery. This should not be concerning. Nasal sprays and decongestants will help with this. Drs. Bryan or Goodson should be notified for a sudden or prolonged gush of bright red blood. Dark blood clots may be coughed up or expressed through the nose toward the end of the first week for upper jaw surgeries.

#### Bruising

Expect bruising along with swelling. The bruising should begin to dissipate as the swelling subsides. The bruising may travel in the skin as it dissipates. It will likely change colors from black/blue/purple to green, to yellow, and may travel down the neck to the upper chest. This is normal and will resolve in 1-2 weeks. Firm, swollen, painful bruising (hematoma) should be reported to your surgeon immediately.

#### Numbness

The numbness of the face and lips may persist for weeks, sometimes months. This is a normal outcome of this type of surgery. Usually, upper face and lip sensation resolves before the lower face and lips. Younger patients resolve faster. Motor nerves are usually NOT affected, so you should have normal face and lip movement. Ask your surgeon about this outcome if you have further questions.

#### Activity

Do not overexert yourself during the first week. You may return to light housework or daily activities during this first week. Slowly resuming your activities will help speed your recovery and should make you feel better. Walking is highly encouraged. Avoid sunbathing or other activities in the sun so as not to become dehydrated.

#### Diet

A full liquid diet should be enforced during this first week. Although you are not allowed to chew, it is very important to remain hydrated (see above hospital course). Suggestions for a full liquid diet include milkshakes, smoothies, juices (not very acidic types, as they may irritate the stomach), Jell-O®, and blended foods (use the liquefy setting on your blender). Ensure®, Carnation® Instant Breakfast and protein shakes are good sources of much needed calories. Avoid alcohol and carbonated drinks. Carbonated drinks may distend the stomach, leading to nausea, etc. You may remove the elastics to eat, but replace them as instructed by your surgeon.



## POST-OPERATIVE INSTRUCTIONS: ORTHOGNATHIC SURGERY (JAW SURGERY)

### FIRST WEEK (CONT.)

#### Hygiene

You may remove elastics for hygiene, but replace them as instructed by your surgeon. Use Peridex™ mouth rinse 2–3 times per day for the first week. Use a baby-sized, soft-bristled toothbrush to clean the teeth, splint, and adjacent gums (avoid the sutures and wounds) at least 2–3 times per day. Keep the splint as clean as possible, especially the area behind the upper teeth. Keeping the mouth clean will also help prevent a wound infection. The sutures should start to dissolve in the first week as the gum tissue starts to heal. You may rinse with warm salt water often to help soothe the wounds. Avoid mouth rinses with alcohol (a majority of commercial over-the-counter mouth rinses), as they may burn and irritate the healing wounds. Avoid smoking, as it will slow or prevent healing and may result in an infection. Avoid directing waterpiks to the incision wounds in the first week, as fluid may become trapped in the wound.

#### Medications

Take ibuprofen (Advil® or Motrin®), 600 mg every 6 hours for the first week to help reduce pain and swelling. If you are still in discomfort, you will use a stronger narcotic pain medication (narcotic plus Tylenol®) at least 1 hour after taking ibuprofen. Remember, most narcotic pain medications already have Tylenol® in it, so do not take any extra Tylenol®, as it may cause a serious problem. Avoid alcohol while taking any of these medications.

Take your antibiotics as directed. If you also take birth control pills, antibiotics may alter the function of birth control pills, and it would be strongly advised for you to take other necessary precautions to prevent pregnancy while on antibiotics simultaneously. Take any other prescribed medications as directed by your surgeon. Should you have any questions, please contact our surgeon on call.

#### Follow-Up

You will return for a post-op visit with the doctors after 1 week to evaluate your healing progress. At this visit, you will have an opportunity to discuss any questions. We will review hygiene and medications. X-rays may be taken if they were not taken the week prior.

### SECOND WEEK

#### Swelling

Swelling should start to resolve and will lessen significantly by the end of the second week.

#### Bruising

Bruising should start to resolve and be gone by the end of the second week.

#### Numbness

Upper lip and face sensation should begin to return. Lower lip and chin may remain numb. You may experience tingling sensations in both upper and lower lips.

#### Activity

You may start to resume more of your regular activity as you see fit. Longer walks are encouraged. Still, do not overexert yourself. Exercise is not recommended at this time.



## POST-OPERATIVE INSTRUCTIONS: ORTHOGNATHIC SURGERY (JAW SURGERY)

### SECOND WEEK (CONT.)

#### Diet

Continue full liquid diet, and you may add or advance to a soft mechanical diet (scrambled eggs, flaky fish, well-cooked [soft] pasta, grits, and oatmeal—foods you can squash with your tongue and swallow without much chewing action). You must maintain a good protein intake along with plenty of hydration.

#### Hygiene

Continue hygiene as above. Frequent (every hour if possible) warm water or saline mouth rinses are encouraged. Continue to use chlorhexidine gluconate (Peridex™) mouth rinse twice daily. Sutures may begin to dissolve and loosen toward the end of this week. They may trap food. If they are bothersome, your surgeon may remove them. You may resume your pre-operative hygiene routine with toothpaste, etc. A waterpik can be safely used at this time.

#### Medications

You will probably continue to use ibuprofen every 6 hours. The discomfort should be greatly reduced. Narcotics will probably not be needed—remember, they can be habit-forming and cause sleep problems, nausea, and constipation. Consider using Tylenol® in place of the narcotic if the ibuprofen is not quite enough. Your antibiotics should be finished, and no more should be needed after the initial course.

#### Follow-Up

You will be seen at the end of the second post-operative week. You may request bothersome sutures be removed. If everything appears to be normal, you may be scheduled to return 2 weeks later.

### THIRD AND FOURTH WEEKS:

#### Diet

Continue soft mechanical/non-chewing diet.

#### Activity

You may begin to resume light, non-impact aerobics, such as walking, then biking, or running on the treadmill. Start slow.

### SIXTH WEEK AND BEYOND:

At your 6-week follow-up, your splint will be removed if you still have one (multi-piece upper jaw surgeries). You will return to your orthodontist for final adjustments (fine tuning). Resume your regular diet. Take it slow; your muscles will be weak at first. You will be followed at 3, 6, and 12 months, then yearly. Post-op i-CAT scans and photos will be taken as needed to follow progress.