

ORTHOGNATHIC (CORRECTIVE JAW) SURGERY POST-OPERATIVE INSTRUCTIONS

Hospital stay

The hospital will contact you at least 24-48 hours prior to let you know exactly what time and where you should report. You will be asked to arrive a few hours prior to your scheduled surgery. The length of your actual surgery is approximately two to three 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. You will likely remain in the hospital overnight for observation.

During your care in the PACU/ICU

A hospital nurse will monitor and assist you. You will be provided 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 a light gauze dressing wrapped around your face. You will have an IV in your hand or arm providing you with fluids and medications. The head wrap dressing will be removed on the morning after surgery.

While in your hospital room

A hospital nurse will care for you as directed by your surgeon. 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. You may also be transferred to radiology the morning after surgery for routine post-operative radiographs.

First 24 Hours

Medications

Take your medications as instructed. You will be receiving an antibiotic to reduce your chances of infection. Steroids will reduce inflammation and swelling. Ibuprofen or a similar NSAID will reduce discomfort and inflammation. Narcotic analgesic will be prescribed to 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 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.

Diet

- Take in as much fluid as is tolerable while awake to prevent dehydration. A 60cc syringe with a red rubber catheter will be provided to you to aid in fluid intake. You should aim to drink a full syringe every hour to stay hydrated.
- You will be placed on a clear liquid diet (water, light juice, broth etc.) to start and advance to full liquids (milk, etc.).

Expect

- Minor bleeding and oozing from the surgery wounds and nostrils for the first 24-48 hours.
- A mild sore throat from the endotracheal 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 endotracheal 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 in the cheeks near the molar teeth along the backsides of the lower jaw (for lower jaw surgery).

Rinse with Chlorhexidine Gluconate solution twice a day & brush your teeth at the same time. You may wish to brush your tongue during your hygiene periods.

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 your surgeon.



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)
- Oral care
- Follow-up appointments (usually one week)

First Week

Swelling

Expect significant swelling. Double jaw surgeries will swell more. It will maximize during the 1st week and diminish thereafter. Keep your head elevated above the level of your heart at all times. Do not lie flat. Sleep in a recliner if possible or propped up with three pillows. Ice should be used for the first 48-72 hours. You may place crushed ice in a Zip-Lock ® bag or use a bag of frozen baby peas. Wrap the bag in a towel prior to placement on your face. You may use the ice pack for 20 minutes at a time, and then remove to give the skin some rest from the cold. Direct placement of ice to the skin for prolonged periods of time may produce a burn. Remember, your face will be numb. 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. Your nasal sprays and decongestants will help with this. Your surgeon should be notified of 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-you should have normal face and lip movement. Ask your surgeon about this outcome if you have further questions.

Activity

Do not over-exert 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: milk shakes, smoothies, juices (not very acidic types, as they may irritate the stomach), Jell-O, blended foods (use the liquefy setting on your blender). Ensure, Boost, 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. Avoid very sugary fluids as they may promote dehydration. You may remove the elastics to eat but replace them as instructed by your surgeon.

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. Avoid mouth rinses with alcohol (many commercial OTC 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 water picks 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 + Tylenol). 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 your surgeon in a week to evaluate your healing progress. On 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 should start to resolve and will lessen significantly by the end of the 2nd week.

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. The lower lip and chin may remain numb. You may experience tingling sensations in both upper and lower lips.

Mouth opening

You will begin "physical therapy" to re-establish your mouth opening and range of motion. This is important as scarring can in rare instances lead to permanent restriction of opening. You will be instructed to remove rubber bands at least 4 times daily and stretch your mouth open. This can be coordinated with your dosing of ibuprofen. Waiting 30 minutes after ibuprofen while applying heat to the jaw joints can allow for increased comfort. Applying ice to the same area for 20 minutes immediately following will reduce inflammation and decrease discomfort. The goal should be to open greater than 30mm or two fingers by the end of the week.

Activity

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

Diet

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. Continue to use Peridex 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, cause sleep problems, nausea and constipation. Consider using Tylenol 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 two 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

Mouth opening

Increase range of motion exercises as needed to increase your opening. By the end of the fourth week, you should be able to open your mouth as wide as before your surgery. If there is still significant restriction, you may be referred for physical therapy.

Six Weeks and Beyond

At your six 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 radiographic images and photos will be taken as needed to follow progress.