JACKSONVILLE
SURGICAL ARTS
ORAL AND MAXILLOFACIAL SURGERY

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PRE-OPERATIVE INSTRUCTIONS

Corrective Jaw Surgery (Orthognathic Surgery)

ABOUT YOUR PROCEDURE

You are scheduled for corrective jaw surgery, also known as orthognathic surgery. This procedure repositions the upper jaw (maxilla), lower jaw (mandible), or both to correct problems with jaw alignment, bite (occlusion), facial balance, and function. Orthognathic surgery is performed under general anesthesia in a hospital or surgical center and typically requires an overnight stay of 1–3 nights.

Your procedure may include one or more of the following:

- **Le Fort I osteotomy:** Repositioning of the upper jaw — it may be moved forward, backward, upward, downward, or widened, depending on your specific needs.
- **Bilateral sagittal split osteotomy (BSSO):** Repositioning of the lower jaw — it may be moved forward (advancement) or backward (setback) to correct the bite and improve facial profile.
- **Bimaxillary surgery (two-jaw surgery):** Repositioning of both the upper and lower jaws during the same operation.
- **Genioplasty:** Repositioning of the chin to improve facial balance and profile. This may be performed alone or in combination with jaw surgery.
- **Segmental osteotomy:** Repositioning of a segment of the jaw to correct localized bite problems.

The jaws are repositioned according to a precise surgical plan developed by your surgeon and orthodontist. Small titanium plates and screws are used to hold the bones in their new position while they heal. These plates and screws are permanent and do not need to be removed unless they cause a problem.

This is a major surgical procedure. Please read the following instructions carefully and contact our office with any questions.

ORTHODONTIC PREPARATION

Orthognathic surgery is part of a coordinated treatment plan between your surgeon and your orthodontist. In most cases, orthodontic treatment (braces or clear aligners) is required before surgery to align the teeth within each jaw so that the teeth fit together properly after the jaws are repositioned.

- **Continue all orthodontic appointments** as scheduled in the weeks and months leading up to surgery. Your orthodontist will place specific wires and may attach surgical hooks or brackets to your braces before surgery. These are essential for guiding the jaws into their planned position during the operation.
- **Do not miss your final pre-surgical orthodontic appointment.** This visit — typically 1–2 weeks before surgery — is critical. Your orthodontist will place the final surgical archwires and hooks, take impressions or scans for the surgical splint (wafer), and confirm that your teeth are ready for surgery.
- If a bracket, band, or wire becomes loose or broken before surgery, **contact your orthodontist immediately.** Damaged orthodontic hardware can delay or cancel your surgery.

ORTHODONTIC PREPARATION (CONT.)

- **Surgical splint (wafer):** A custom acrylic or 3D-printed splint will be fabricated from your dental records. This splint is used during surgery to guide the jaws into their planned position. It is an essential part of the procedure.

BEFORE YOUR APPOINTMENT

- Inform our office of any changes to your medical history, including new diagnoses, hospitalizations, or surgeries since your last visit.
- Provide a complete and updated list of all medications you are currently taking, including:
  - Prescription medications
  - Over-the-counter medications (including aspirin, ibuprofen, naproxen)
  - Vitamins, herbal supplements, and nutritional products
  - Blood thinners (warfarin, Eliquis, Xarelto, Plavix, or others)
  - Inhalers
  - Birth control pills or hormonal medications
- **Blood Thinners:** If you take blood-thinning medications, please inform our office well in advance. Your surgeon will coordinate with your prescribing physician regarding whether to continue, adjust, or temporarily hold your blood thinner before surgery. **Do NOT stop any blood thinner on your own.**
- **Heart Conditions Requiring Antibiotic Premedication:** If you have a prosthetic heart valve, a history of endocarditis, certain congenital heart conditions, or a heart transplant with valve problems, please confirm with our office that appropriate arrangements have been made.
- **Steroids:** If you take oral steroids (such as prednisone or dexamethasone) or use a steroid inhaler, please inform our office, as supplemental dosing may be necessary.
- **Diabetes:** If you are diabetic, please inform our office. Good blood sugar control is important for bone healing. Contact our office for specific instructions about adjusting your insulin or diabetes medication, as fasting will be required before general anesthesia.
- **Sleep Apnea:** If you use a CPAP or BiPAP machine, please inform our office and bring your machine to the hospital on the day of surgery.
- **Allergies:** Please confirm all known allergies, including allergies to medications (especially antibiotics, latex, and adhesive tape), foods, and metals.

PRE-OPERATIVE APPOINTMENTS AND TESTING

In the weeks before surgery, you may be asked to complete the following:

- **Pre-operative medical evaluation:** A visit with your primary care physician or the hospital's pre-anesthesia clinic to review your medical history, perform a physical examination, and ensure you are medically cleared for surgery under general anesthesia.
- **Pre-operative blood work:** A complete blood count (CBC) is typically required. Additional tests (metabolic panel, coagulation studies, blood type and screen) may be ordered based on your medical history and the complexity of the planned procedure.
- **Imaging:** Final imaging (panoramic radiograph, cephalometric radiograph, cone-beam CT, or 3D CT scan) will be obtained if not already completed. These are used for surgical planning and fabrication of the surgical splint.

PRE-OPERATIVE APPOINTMENTS AND TESTING (CONT.)

- **Autologous blood donation:** In some cases, your surgeon may recommend donating your own blood 3–4 weeks before surgery so it can be available for transfusion if needed. This is uncommon but may be discussed for complex bimaxillary procedures.
- Complete all pre-operative appointments and testing as directed. **Surgery may be postponed if required clearances or testing are not completed on time.**

MEDICATIONS — WHAT TO CONTINUE AND WHAT TO AVOID

Continue taking all regular medications unless specifically instructed otherwise by your surgeon, anesthesiologist, or prescribing physician.

- **Anti-inflammatory medications:** Unless otherwise directed, avoid aspirin, ibuprofen (Advil, Motrin), naproxen (Aleve), and other NSAIDs for **7 days** before your surgery, as they may increase bleeding. Acetaminophen (Tylenol) is acceptable.
- **Herbal supplements:** Stop taking fish oil, vitamin E (high dose), ginkgo biloba, garlic supplements, turmeric, St. John's wort, and other herbal products at least **7–14 days** before surgery, as they may increase bleeding or interact with anesthesia.
- **Birth control pills / hormonal medications:** Discuss with your surgeon whether to continue or temporarily stop these medications, as they may increase the risk of blood clots during and after surgery.
- **Accutane (isotretinoin):** If you are currently taking or have recently taken Accutane, please inform your surgeon. Some surgeons recommend discontinuing isotretinoin at least 6 months before elective bone surgery due to concerns about impaired bone healing, though this remains debated.
- **Medications on the morning of surgery:** Your surgeon or anesthesiologist will provide a specific list of which medications to take on the morning of surgery with a small sip of water. Typically, blood pressure medications, anti-seizure medications, and thyroid medications should be taken. Diabetes medications and blood thinners require specific instructions.

ORAL HYGIENE PREPARATION

Excellent oral hygiene before surgery is essential. Orthognathic surgery is classified as a clean-contaminated procedure because it involves incisions inside the mouth, and reducing the bacterial load in the oral cavity helps lower the risk of surgical site infection.

- If a chlorhexidine (Peridex) mouth rinse has been prescribed, begin using it as directed — typically starting **3–5 days** before surgery. Rinse twice daily for 60 seconds.
- Brush and floss all teeth thoroughly, including around orthodontic brackets and wires. Use an interdental brush, floss threader, or water flosser to clean areas that are difficult to reach with braces.
- If a professional dental cleaning has been recommended before surgery, please keep that appointment.
- Rinse with chlorhexidine mouth rinse the morning of surgery.
- **Do not have any dental work (fillings, crowns, extractions) performed in the weeks immediately before surgery** without first consulting your surgeon, as this could affect the surgical plan or introduce infection risk.

NUTRITIONAL PREPARATION

After surgery, your jaws will be held together with elastic bands (and in some cases wires), and you will be on a **strict liquid diet for approximately 2–6 weeks,** followed by a soft diet for an additional 4–6 weeks. Preparing for this dietary change in advance is extremely important.

- **Stock your kitchen before surgery** with the following:
  - Protein shakes and nutritional supplement drinks (Ensure, Boost, Orgain, or similar) — plan for at least 4–6 servings per day during the liquid diet phase
  - Broth and cream-based soups (strained, no chunks)
  - Yogurt (drinkable or thin consistency)
  - Applesauce, baby food, and pureed fruits
  - Smoothie ingredients (frozen fruit, protein powder, milk, nut butter)
  - Juice, milk, and water
  - Instant oatmeal (blended thin), mashed potatoes (thinned with broth or milk)
  - Ice cream, milkshakes, pudding, Jell-O
- **Consider purchasing a high-quality blender** if you do not already own one. You will be blending most of your meals for several weeks.
- **Practice the liquid diet for 1–2 days before surgery** to familiarize yourself with the consistency and volume of food you will need to consume. Many patients underestimate how much liquid nutrition is required to maintain adequate calorie and protein intake.
- **Aim for at least 2,000 calories and 60–80 grams of protein per day** during recovery to support bone healing and prevent excessive weight loss. Weight loss of 5–15 pounds is common after orthognathic surgery, but adequate nutrition helps minimize this.
- **Purchase a large syringe (60 mL catheter-tip syringe) or squeeze bottle** for feeding during the first 1–2 weeks when mouth opening is very limited. Our office can provide these or direct you to a supplier.
- If you have concerns about maintaining adequate nutrition, ask our office about a pre-operative consultation with a dietitian.

THE DAY BEFORE SURGERY

- Do not consume alcohol for at least 48 hours before surgery.
- Get a full night of rest.
- Fill all prescriptions provided by our office so they are ready when you return home. These may include:
  - Pain medication (liquid or dissolvable form)
  - Antibiotic (liquid form)
  - Anti-nausea medication
  - Steroid (to reduce swelling)
  - Chlorhexidine mouth rinse
  - Nasal saline spray or decongestant
- **Confirm that all prescriptions are in liquid, dissolvable, or crushable form.** You will not be able to swallow pills normally for several weeks after surgery.

THE DAY BEFORE SURGERY (CONT.)

- Prepare your recovery area at home:
  - Extra pillows to keep your head elevated (at least 2–3 pillows or a wedge pillow)
  - Ice packs or bags of frozen peas for the face (you will need several, to rotate)
  - Towels and washcloths
  - Tissues and a small basin (for managing oral secretions)
  - Lip balm (lips will become very dry)
  - A humidifier (optional, but helpful for nasal congestion)
  - Entertainment (books, tablet, phone — you may not feel like talking for several days)
- Shower and wash your hair the evening before surgery. You may not feel well enough to shower for 1–2 days after surgery.
- If you have been prescribed an oral sedative or anti-anxiety medication to take the night before surgery, take it as directed.
- **Do not eat solid food after midnight** (or as directed by your anesthesiologist). Clear liquids (water, apple juice without pulp, black coffee, tea without milk) may be consumed up to **2 hours** before your scheduled arrival time. Do not drink anything within 2 hours of your arrival.

THE MORNING OF SURGERY

- Do not eat or drink anything within 2 hours of your scheduled arrival time (see fasting instructions above).
- Take only the medications your surgeon or anesthesiologist has approved, with a small sip of water.
- Rinse with chlorhexidine mouth rinse.
- Brush your teeth carefully around your braces.
- Shower if you did not do so the night before.
- Wear comfortable, loose-fitting clothing — a button-down or zip-up top is ideal (you will not want to pull clothing over your face after surgery). Wear pants with an elastic waistband.
- **Do not wear:**
  - Contact lenses (wear glasses instead)
  - Jewelry, watches, piercings (including tongue, lip, or nose piercings — all must be removed)
  - Nail polish or acrylic nails (pulse oximeter must be able to read through your fingernail)
  - Makeup or facial moisturizer
  - Hair products (gel, spray, etc.)
  - Leave valuables at home.
- Arrive at the hospital or surgical center at the time instructed. You will typically be asked to arrive **1.5–2 hours** before the scheduled surgery time for pre-operative preparation (IV placement, anesthesia review, surgical markings).

TRANSPORTATION AND SUPPORT

- A responsible adult MUST drive you to and from the hospital.
- **Plan for someone to stay with you for the first 2–3 days after you return home.** You will be groggy, swollen, and on pain medication. You will need help with:
- Preparing and administering liquid meals
- Managing medications (keeping track of timing and doses)
- Applying ice packs
- Monitoring for complications (bleeding, difficulty breathing, excessive swelling)
- Helping you get up and move around safely
- You will not be able to drive for at least **1 week** after surgery, and possibly longer depending on your recovery and pain medication use.

SMOKING AND TOBACCO

- **Stop smoking, vaping, and all tobacco/nicotine products at least 2 weeks before surgery — and ideally 4 weeks or more.**
- Smoking significantly increases the risk of:
- Surgical site infection (the most common complication of orthognathic surgery)
- Poor bone healing and nonunion of the osteotomy sites
- Delayed wound healing
- Increased bleeding during and after surgery
- Respiratory complications under general anesthesia (coughing, bronchospasm, pneumonia)
- You must avoid all tobacco and nicotine products for a minimum of **6–8 weeks after surgery** — and ideally permanently.
- If you need help quitting, please ask our office or your primary care physician about smoking cessation resources, including nicotine replacement therapy (patches, gum, or lozenges — though these should also be discussed with your surgeon, as nicotine in any form impairs healing).

WHAT TO BRING TO THE HOSPITAL

- Photo ID and insurance card
- Complete list of current medications
- Any prescribed pre-medications if not yet taken
- Your inhaler, if you have asthma
- Your CPAP/BiPAP machine, if you have sleep apnea
- Lip balm
- Comfortable, loose-fitting clothing for discharge (button-down or zip-up top)
- Slip-on shoes (you may be unsteady)
- A small pillow for the car ride home
- Your phone and charger
- **Do NOT bring valuables, large amounts of cash, or expensive electronics**

IF YOU ARE FEELING ILL

If you develop a fever, cold, sore throat, cough, congestion, cold sore, nausea, vomiting, or any new illness in the days before surgery, call our office immediately. Your surgery may need to be rescheduled. Upper respiratory illness significantly increases the risk of anesthesia complications, including laryngospasm, bronchospasm, and difficulty with intubation and extubation. It is much safer to postpone surgery than to proceed while ill.

WHAT TO EXPECT

- **Surgery duration:** Depending on the complexity of your case:
  - **Single-jaw surgery (Le Fort I or BSSO alone):** approximately 2–3 hours
  - **Bimaxillary surgery (both jaws):** approximately 3–5 hours
  - **Additional procedures (genioplasty, wisdom tooth removal, bone grafting):** may add 30–90 minutes
- **Anesthesia:** You will be completely asleep under general anesthesia. A breathing tube will be placed through your nose (nasotracheal intubation) to keep your airway open during surgery while allowing the surgeon to work inside your mouth.
- **Incisions:** All incisions are made inside the mouth. There are no visible scars on the face (with the rare exception of small incisions for certain genioplasty techniques or external pin fixation).
- **Fixation:** The repositioned bones are held in place with small titanium plates and screws. Elastic bands (and occasionally wires) will be placed between your upper and lower braces to guide your bite into the planned position. These bands will be adjusted at follow-up appointments.
- **Hospital stay:** Most patients stay **1–2 nights** in the hospital. Bimaxillary surgery patients may stay 2–3 nights. During your hospital stay, the surgical team will monitor your airway, manage pain and nausea, begin liquid nutrition, and ensure you are stable for discharge.
- **Swelling:** Facial swelling is significant and expected. Swelling peaks at **48–72 hours** after surgery and then gradually improves over 2–4 weeks. Most visible swelling resolves by 4–6 weeks, but subtle swelling may persist for several months. Ice packs applied to the face for the first 48–72 hours help reduce swelling.
- **Numbness:** Temporary numbness of the lower lip, chin, cheeks, upper lip, and/or gums is very common and expected. Sensation typically returns gradually over **weeks to months,** though some patients experience prolonged or permanent altered sensation in a small area.
- **Nasal congestion:** After upper jaw surgery, significant nasal congestion and stuffiness are expected for 1–3 weeks due to swelling inside the nose. You will need to breathe through your mouth during this time. Nasal saline spray and a humidifier are helpful. **Do not blow your nose** for at least 2 weeks after upper jaw surgery.
- **Diet:** You will be on a strict liquid diet (syringe or squeeze bottle feeding) for the first 1–2 weeks, transitioning to a no-chew liquid/pureed diet for 2–6 weeks, and then a soft diet for an additional 4–6 weeks. Your surgeon will guide the progression based on your healing.
- **Follow-up:** You will have frequent follow-up appointments — typically at 1 week, 2 weeks, 4 weeks, 6 weeks, 3 months, and 6 months after surgery. Elastic bands will be adjusted, healing will be monitored, and you will be cleared to advance your diet and activity level at each visit. Orthodontic treatment will resume approximately 4–6 weeks after surgery for final bite refinement.

ACTIVITY RESTRICTIONS

- **No strenuous physical activity, heavy lifting, or exercise for at least 4–6 weeks** after surgery. Increased blood pressure from exertion can cause bleeding at the surgical sites.
- **No contact sports for at least 3 months** after surgery (or longer, as directed by your surgeon). The healing bone is vulnerable to re-fracture during this period.
- Plan to take **2–3 weeks off from work or school.** Some patients return sooner for desk work, but most need at least 2 weeks before they feel well enough to resume normal activities. If your job involves physical labor, you may need 4–6 weeks or more.

IMPORTANT REMINDERS

- **Attend all pre-operative appointments —** orthodontic, surgical, and medical clearance.
- Do not have any other dental procedures (fillings, cleanings, extractions) in the 2 weeks before surgery without consulting your surgeon.
- **Confirm that all prescriptions are in liquid or dissolvable form.**
- **Arrange for help at home** for the first 2–3 days after surgery.
- **Stock your kitchen** with liquid and soft foods before surgery.
- **Practice your liquid diet** for 1–2 days before surgery.
- **Stop smoking and all nicotine products** at least 2 weeks before surgery.
- **Complete all pre-operative testing and medical clearance** as directed.
- If you have braces, **check all brackets and wires** 1 week before surgery. If anything is loose or broken, contact your orthodontist immediately.
- If you have any questions or concerns before your surgery, please do not hesitate to call our office. We are here to support you through every step of this process.

We look forward to caring for you and helping you achieve the best possible result.