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**Information for patients with Jaw Fractures**

The following information is important. You should read it carefully and ask any questions that you might have about the information. You may have sustained other facial injuries in addition to the jaw fracture(s) that are not discussed here. You should discuss these other injuries with your doctor.

**General Information:** Jaw fractures are a very common result of facial trauma. Fractures can involve the upper jaw (maxilla), lower jaw (mandible) or both. The goals of treatment are to provide the formation of a solid union between the bone fragments, reestablish as normal a bite as possible and return the jaw to a normal function (chewing, etc.). Some fractures can be treated simply by wiring the jaws closed until the fractures have mended. Other fractures must be surgically exposed through incisions in the mouth, on the face or both. After exposure of the fracture, the bone fragments are manipulated into a satisfactory alignment and then secured with wires and/or bone plates and screws. Uncomplicated jaw fractures generally heal in 6 weeks.

After an adequate period of healing, the wires holding the jaws closed are removed and the jaws are examined to determine if any looseness exists between the bone fragments. If the jaws are not completely healed, the wires holding the jaws closed will be replaced until satisfactory healing occurs. If the fractures are stable, jaw opening exercises are started at this time. Depending on the nature of your fractures, you may be instructed to wear small elastics between your maxilla and mandible. At the end of this period if the fractures remain stable and the bite is not changing, the arch bars are removed.

**Swelling:** Swelling of the face is common with jaw fractures and usually increases after surgical treatment of the fractures. Swelling begins to subside approximately 72 hours following surgery. You can decrease swelling by sleeping with your head elevated on two pillows for the first five nights. **A dramatic increase in swelling after you have been discharged from the hospital may indicate infection, and you should contact your doctor.**

**Pain:** Most of the pain associated with jaw fractures occur from bone fragments shifting and moving. Therefore, the pain decreases after the fracture is treated. Pain after treatment comes from placement of the dental wires but is temporary. The teeth to which the wires are secured often become sensitive to hot and cold liquids, but this too is a temporary problem. A prescription for liquid pain medication will be provided when you leave the hospital.

**Nausea/Vomiting**: Nausea and Vomiting is an unusual problem when the jaws are wired closed. Because there are only fluids in your stomach, vomit can escape through your nose and mouth around the last molar teeth. However, you should notify our office if you are experiencing nausea as we may wish to prescribe anti-nausea medication.

**Diet:** Your diet will be liquid during the healing period, whether or not your jaws are wired shut. We recommend you that you have four to five meals per day. We recommend that you supplement your diet with three cans of ready to drink high calorie supplement each day. After adequate healing has occurred, your diet will be advanced to solid foods.

**Oral Hygiene:** Good Hygiene is extremely important for adequate healing. Brush the outside of your teeth as usual using a small children’s toothbrush. Hygiene can be improved by diligent rinsing with tap water after each meal or snack. If you have incisions in your mouth, rinse with warm salt water (one teaspoon table salt in 12 ounces warm tap water) for two weeks after surgery. You may use a mouth wash/rinse in addition to the tap water rinses if you desire. Do not use a Water-Pik until we tell you that it is safe to do so. If you have been given a prescription for Peridex oral rinse, swish and spit 2 teaspoons once or twice a day, and also after meals.

**Arch Bars/Wires:** You have arch bars secured to your teeth with dental wires. Any sharp wires that irritate the inside of your lips and cheeks can be covered with a small pinch of wax. This wax is available at the time of hospital discharge. Remove all of the wax at least once a day before brushing. If you break or loosen any wires, please contact the office so that the wires can be replaced or adjusted.

**Bone Plate/Screws:** Your fracture(s) may have been repaired using small bone plates and screws. This hardware is designed to be left in place. Rarely, because of irritation of overlaying gum tissue or skin, a plate may need to be removed. This can usually be done as an outpatient procedure.

**Nasal Stuffiness:** Nasal stuffiness is especially bothersome when the jaws are wired shut. Stuffiness should be initially treated with Afrin nasal spray. Afrin nasal spray is available over the counter and can be used for a maximum of three consecutive days. If this does not clear the nose, then you should contact our office. Occasionally, a person with nasal stuffiness and jaws wired closed may experience some shortness of breath. While the Afrin is allowed to work, the shortness of breath can be very easily relieved by holding the lips and cheeks away from the teeth with a spoon handle, tooth brush or other such object. This maneuver will improve mouth breathing until the nose can be cleared.

**Activity:** If other injuries allow, you may do anything that you feel up to with the exception that you should not swim until the wires holding your jaws closed have been removed. Jogging or aerobics may lead to some increase in pain and should be limited to an amount that is easily tolerated. You may return to work when you feel up to it. If you have any questions about your work, please discuss them with your doctor.

**Jaw Opening Exercises:** At least some temporary restriction of mouth opening is expected post jaw fracture(s). This can be a more serious problem with jaw fractures that involve the jaw joint. You will be instructed in jaw opening exercises, you should start exercises after satisfactory healing of the fracture(s) has occurred. Once you have been instructed to begin exercising, you should exercise 3-4 times a day for five minutes. Your progress will be measured each time you return for follow up visits.

**Complications:** This is not meant to be a complete discussion of all possible complications but includes those complications that we believe to the most important.

* **Infection:** Any jaw fracture, but especially those involving the lower jaw may become infected. Increased swelling, pain and/or skin redness may suggest that you have an infection. If you experience any of these problems after leaving the hospital, contact our office. If you have been provided with a prescription for antibiotics, it is very important that you begin taking these immediately after leaving the hospital and continue them as directed. If you do become infected, management of infection is usually straightforward, but hospitalization may be required. Infection of the bone can lead to failure or delay of healing and may require long-term treatment.
* **Delayed Healing:** For a number of reasons, a fracture may heal slowly. This may require a longer than usual period of having the jaws wired closed. It may also require a second operation to modify stabilization of bone fragments. In rare circumstances the fracture will require a bone graft from the hip for satisfactory healing.
* **Failure of Healing:** For a number of reasons, despite an adequate period of healing, a fracture may remain loose or mobile. Additional treatment will be required, often involving another surgical procedure, possibly including placement of a bone graft from the hip to assist satisfactory bone healing.
* **Malocclusion:** *Though one of the goals of jaw fracture treatment is to reestablish a satisfactory bite, this is not always achieved*. Bite problems (malocclusion) after complete healing of the fracture(s) may require a surgical procedure for correction. Minor bite disturbances can often be improved with a slight adjustment of the chewing adjustment of the chewing surfaces of the teeth.
* **Tooth Loss:** Teeth in the line of fracture may be lost either at the time of fracture treatment or at a later point, usually during the healing period. Missing teeth can usually be replaced with a dental prosthesis after fracture healing has occurred.
* **Numbness:** Many jaw fractures produce nerve damage that may lead to a partial or complete numbness involving the lower lip, chin, teeth, gums, cheeks or upper lip on the side of the fracture. Usually there will be a slow return of normal sensation, though occasionally the numbness may be permanent when the injury to the nerve has been severe.
* **Jaw Joint Problems:** Jaw Joint (TMJ) problems can occur following any lower jaw fracture but are most common when the fracture extends into the joint. Decreased jaw opening, joint pain, arthritis, and/or fusion of the joint can occur. Importantly, pre-existing jaw joint abnormalities may be aggravated by a lower jaw fracture. Most joint problems can be managed with medical treatment, but occasionally surgery may be required. If a fracture extends into the joint, jaw opening exercises are very important.

If you have questions or concerns following your surgery please contact our office.