MAXILLOMANDIBULAR ADVANCEMENT (MMA)
POSTOPERATIVE INSTRUCTIONS

What to expect before surgery?
Before surgery, you will have a non-contrast CT scan of the face. We will also obtain a model of your teeth similar to those from dental offices, and we will take facial measurements. You will go through an extensive history and physical with both surgery and anesthesia teams. We will also communicate with your primary care physician if needed.

What to expect about the procedure?
The first night after surgery will always be spent in the intensive care unit. You may still have the breathing tube in. Once we are assured that the airway is protected, you will be transferred to the regular ward with continuous airway monitoring. The usual stay in the hospital is from 3 to 5 days.

What is the follow-up like?
You will see us once a week, for 4-5 weeks after the MMA. Initially, you will return home with your upper and lower jaw held together by tight rubber bands. These bands will be progressively removed in subsequent visits.

What are some common concerns about the MMA?
**Pain:** Tylenol with hydrocodone (Vicodin) usually controls pain adequately at time of discharge from the hospital. Most patients continue to take pain medications intermittently for the first 1-2 weeks after surgery.

**Numbness of the face and/or chin:** Sensory nerves that supply the upper and lower face and jaws are stretched during the MMA. There is almost always numbness of the chin. Sometimes, the cheek areas can also be numb. It can take a long time (weeks to months) for nerve sensation to return, and in some instances it does not. These are sensory nerves, which means there will be no changes to your appearance, speech, or facial expressions.
**Change in Bite:** Your occlusion ("bite") may shift a little after surgery. In less frequent instances, the bite may need to be adjusted before and after surgery, in which case we will refer you to orthodontists. Nonetheless, for most of our patients with proper perioperative care, there is minimal change to the existing occlusion.

**Diet:** Your diet progresses as the rubber bands that hold your upper and lower teeth together are removed. In the first two weeks after the MMA, you will be on a full liquid diet (juices, milk, soup). By week three, this is advanced to a Puree diet (mashed potato consistency). By weeks four or five, you may be advanced to a soft diet. While the exact timing of this sequence will vary, this is the general trajectory.

**Appearance:** Studies have shown that most people have a favorable response to the change in facial appearance after MMA. However, unlike cosmetic facial bone surgery, this procedure is intended to maximally relief sites of airway obstruction. The cosmetic changes are considered, but not a primary focus. The most frequent changes are flaring of the nostrils and upward tipping of the nose. We do modify the upper jawbone during surgery to minimize and control soft tissue changes.

**Nasal Congestion:** The nasal congestion can be bothersome especially when the jaws are banded shut. Most of the nasal congestion comes from blood clots associated with surgery, and does clear in a few weeks. To maximize comfort during that period, vasoconstrictive nasal sprays such as Afrin can help for a defined period of time. Frequent use of saline nasal spray is recommended. Humidifier for the room may also help.

**Infection:** Infections of the intraoral wounds are very infrequent, and when they do occur, are easily managed with antibiotics and possible surgical drainage. Sometimes, if there is delayed bone healing, there can also be indolent infection (osteomyelitis) of the jaw bones that requires more extensive treatment. We carefully screen for risk factors including certain medical conditions, medications, and smoking habits.

**Temporomandibular Joint Pain:** Any form of jaw surgery can potentially cause temporomandibular joint pain. For patients with existing TMJ pain who still need the MMA, we will work closely with TMJ experts to assist with perioperative management. Adjunctive procedures including Botox injection to muscles of mastication and night guards may also be offered.