

CORRECTIVE JAW SURGERY

ORTHOGNATHIC SURGERY

About 20% of the population has some level of significant facial growth deformity. Jaw Surgery is the surgery to correct these deformities of the bite and face called skeletal malocclusions. The technical name for jaw surgery is Orthognathic Surgery (pronounced ôr'thæg-nāth'ik). Orthos is the Greek word for straight or right or correct. Gnathos is the Greek word for jaw.

The deformity is usually related to disproportionate growth of the lower jaw called the mandible or the upper jaw called the maxilla. Either one

or both may be too large or too small in any of three dimensions. Skeletal malocclusion affects the ability to chew and speak. It can lead to deterioration of the teeth and the jaw joints called the temporomandibular joints (TMJ's).

Some jaw deficiencies cause the patient to have difficulty breathing at night. This is called obstructive sleep apnea (OSA). OSA may cause daytime sleepiness, nighttime snoring, and restless leg syndrome. Some OSA patients require surgery because they are unable to tolerate the nighttime air mask required to treat the obstruction.

The orthognathic surgery is usually covered by major medical insurance. Some plans, unfortunately, have an exclusion due to growth and only provide coverage if the deformity is due to trauma, tumors, or congenital deformities such as cleft lip and palates or various other craniofacial problems.

Many times the functional aspect of the deformity is not large enough to be visible and the face looks normal except the chin may be perceived as too large or too small. However, in some cases, the deformity is disfiguring and affects how the patient looks and feels about himself.

In some extreme cases the patient may even be teased and ostracized. Therefore, the purpose of the surgery is to correct four things: the bite, the TMj's, the airway, and the face.

The surgery is typically performed by oral and maxillofacial or craniofacial surgeons in coordination with orthodontists.

The orthodontist is usually the one making the diagnosis that

the bones are not lined up close enough to get the bite fully corrected. If there is a doubt, the patient should have a consultation with the surgeon so that an informed

decision can be made before starting braces. There are many patients who have undergone years of braces to avoid surgery only to require braces again and then surgery. Make sure the orthodontist is familiar with surgery and how to prepare the pre-surgical braces correctly.

The surgery takes about 3-5 hours and is performed under general anesthesia in the hospital or in a surgery center. The patient usually goes home the next clay. During the surgery the bones are cut and then repositioned according to a specific plan to address the four areas listed above. In most cases the jaws are not wired together because of the modern use of titanium fixation plates and screws. It takes about six weeks for the bones to heal in the new position. During this time the patient eats a soft, non-chew diet.

The patients usually have orthodontic treatment for 12 months before surgery to align the teeth in the bone. After the bones have healed in the correct position there is another six months of braces to finalize the position.

