Surgical Orthodontics

Orthognathic surgery is corrective surgery to the jaw. It involves repositioning the jaw and the adjoining facial bones. This type of surgery is most often carried out in the late teenage years or on adults. Most patients require surgery on one jaw only, although occasionally the repositioning of both jaws is necessary.

Why use a combined orthodontic and surgical approach?
A large percentage of the population have a bite problem. However, only a small proportion of people with such problems require correction with a surgical procedure. When a problem exists with the position, shape or size of the jaw bone, an operation may be necessary to correct the problem. The surgeon can not align or straighten teeth so it is almost always necessary to combine the operation with orthodontic treatment, since placing the teeth in the correct positions with the jaws is usually required. The orthodontist and surgeon work closely together in order to achieve the best functional and aesthetic results possible.

How long will treatment take to complete?
This depends on the type and severity of the problem. Prior to the pre-surgical orthodontics, all necessary dental treatment must be completed. A pre-surgical phase of orthodontics is usually necessary which takes approximately 9 – 18 months. The exact time will depend on the age of the patient, how fast the teeth move, patient co-operation and the severity of the problem. Five to six weekly appointments with the orthodontist will be necessary at this stage of treatment. Often, as the teeth are aligned, the underlying jaw imbalance becomes more noticeable.

A post-surgical phase of orthodontics is routinely necessary to make final adjustments to the position of the teeth and to retain the teeth in their new positions. This also varies in time, but typically takes 6 – 12 months. Following this is a period of retention and observation for one to three years in order to maintain the correction.

Besides a normal bite, what other benefits does surgical correction provide?
The primary goal of the surgical procedure is to correct the jaw relationship so that they work more satisfactory. Severe dental and jaw imbalances such as underbites, overbites and open bites may prevent patients from chewing, swallowing and speaking correctly. Some patients with jaw problems develop compensatory or abnormal chewing, speaking or jaw movement patterns that may place increased demands on the teeth, gums and jaw and lead to future problems with these structures. This sometimes leads to pain in the muscles of the face and jaw.
What could happen if surgical treatment is not undertaken?
At best, the problems will stay the same. However, in some rare instances, the problem becomes worse with abnormal wear and loss of bone support to the teeth. In addition, continued stress to the jaw joint and associated muscles can lead to jaw-joint symptoms and facial pain.

Will the surgery change the facial appearance?
The more pronounced the imbalance of the jaws prior to surgery, the more pronounced will be the favourable change of appearance.

Questions to ask the surgeon.
How long will the operation take?
How long will I be in hospital?
What type of fixation will be used? Will my jaws be held together so I can’t open them?
Will I loose weight following surgery?
Will I have any bleeding following surgery?
Will my face be swollen after surgery?
Will there be bruising?
Will there be any visible scars after surgery?
How will I feel after the operation?
How long will I need off work after the surgery?