

Information for Patients about Orthognathic Treatment

Orthodontics Department

Orthognathic literally means "surgery to create straight jaws". Its aims are:

- 1. To improve the relationship between your upper and lower jaws
- 2. To improve the way you eat and speak by straightening your teeth and correcting the way your upper and lower teeth meet
- 3. To improve your facial and dental appearance

Consultation / Appointments

Before starting on a course of treatment you will be invited to attend clinics where individuals involved with your care will be able to discuss treatment options with you and your family. Both the orthodontist and surgeon will be present. There will also be time between appointments to discuss the information at home before making a decision.









Treatment before your operation

Before you start your treatment records are taken, which include models of your teeth, photographs and x-rays. These may be repeated at intervals throughout treatment. All patients will require upper and lower fixed braces before surgery and this stage usually lasts from twelve to eighteen months. Braces are left in place after the surgery to maintain the correct tooth positions and to make sure the bite and appearance are as ideal as possible. When the teeth are in the planned positions you will be ready for your operation. One to three weeks before surgery you will be given a longer outpatient appointment to check details, discuss any problems or answer any further questions. You will be admitted to hospital the day before your operation.

Your Operation

This requires a stay in hospital and is performed under general anaesthetic in an operating theatre. Surgery on each jaw takes approximately ninety minutes. The recovery period in hospital is usually 2-4 days. On the day of admission, routine blood tests and other investigations including a physical examination are carried out, to make sure that you are fit for the operation. The anaesthetist will also examine you, and this is an opportunity to request further information regarding the anaesthetic from them. The operation will be carried out the following day.

Before going to theatre you may be offered medicine to help you relax. Wherever possible, surgery is carried out by cuts inside the mouth, to avoid producing scars on the face. The operation involves controlled breaks of the jaws to move the bones into their new relationship. They are fixed back together into position using small metal plates and screws- these rarely need to be removed. In nearly all cases you will be able to open your jaws immediately at the end of surgery. Light elastics between the upper and lower teeth (which you put on and take off yourself) may be needed for a few weeks to guide your jaws into their new position.

Very rarely it may be necessary to fix your jaws together to keep them in the right position. If this happens, it is routine to transfer you to the Intensive Care or High Dependency Unit for 24 hours before returning to the ward. If the jaws are fixed together this is usually held like it for a period of 6-8 weeks. Blood transfusion is rarely required to replace blood loss during the surgery. This is avoided wherever possible. A bone graft may be needed; this is usually taken from the hip. This can be more painful than the facial surgery. All stitches are dissolvable and do not have to be taken out.

2

After Surgery

There may be several things that concern you:

Pain, Swelling and Numbness

Swelling can be expected following surgery. This varies according to the individual and the type of surgery carried out. Steroids will be given to reduce the amount of swelling you experience. Most of the swelling will resolve within two or three weeks, but some may persist for several months. Antibiotics are given to prevent infection whilst in hospital. Analgesia (pain control) is always available, but most patients are surprised to find they experience only minimal discomfort. It is common following surgery to have numbness to the areas in the areas of your mouth and face that have been operated on. This may be more noticeable in your lower lip and chin area and this does not always recover.

Swallowing

After a short period you will be able to swallow normally and you will be encouraged to take fluids and soft foods by mouth. It is very important to maintain a high standard of oral hygiene and you will be encouraged to brush your teeth after each meal. An antiseptic mouthwash will be prescribed but this is not a substitute for good tooth brushing (a baby tooth brush may be useful).

Diet

You will see a dietician during your hospital stay and you will be given a diet sheet to take home. Your weight will be closely monitored. It is always possible to have a liquid diet after surgery and usually soft semi-solid foods are possible too. Some weight loss is to be expected following surgery but this weight is usually regained quickly as you recover.

Post operative treatment

After being discharged from hospital you will have to attend for regular check ups to monitor your progress. This is for us to check that your operation is stable and further photographs, models and x-rays will be taken. These visits are also for you to talk to us about any problems or concerns that you have.

Further treatment

Further orthodontic treatment to complete correction of the bite is usually required for several months after the operation. When the braces are removed retainers are needed to retain the teeth in their final position. Sometimes a permanent retainer is necessary especially if certain tooth movements have been made.

In some cases more than one operation is planned, such as surgery to your nose and/or chin. These are usually smaller procedures and you will have been informed of this during you treatment. If you have any further questions, please make a written note (so that you don't forget) and discuss them with your consultant.

Questions that you may have

What are the options I have?

If you have attended a joint consultant clinic and been seen by the orthodontist and maxillofacial surgeon, then it is likely that the only way of fully correcting your bite and balancing the appearance of your face would be with a combination of surgery and brace work. If this plan has been discussed with you it is unlikely that braces alone will be able to completely correct the problem with your teeth due to the position of the underlying bones of the face. Having no treatment is always an option and you need to be 100% sure that you want to proceed down the surgical route.

What are the benefits of the surgery?

The benefits of surgery on your jaws are to improve the balance of your face and to enable your teeth to meet together in the correct way.

What are the risks of surgery?

The main risk following surgery is a permanent altered sensation of your lower lip and chin which occurs in 0-24% of cases. Other risks include infection . Your face will be bruised and swollen following surgery however this will improve in the week following surgery.

Write down any questions you may have	

Contact details