MANDIBULAR (LOWER JAW) OSTEOTOMY

This leaflet is to improve your understanding of your upcoming surgery and contains answers to many of the common questions. If you have any other questions that the leaflet does not answer or you would like further explanation we will be happy to discuss these questions or concerns.

Where does the operation take place?

Your operation will take place at the Royal Hallamshire Hospital, Claremount Pl, Sheffield, South Yorkshire, S10 2TB. All your review appointments will be at the hospital where you usually have your orthodontic appointments, that is Barnsley Hospital NHS Foundation Trust. The surgery will take place under a general anaesthetic: ie you are going to be put to sleep completely.

What happens on the day of the operation?

Your operation will usually take place on a Friday. On the morning of the surgery you will be admitted to the ward by the nurses. You will meet your surgeon along with other members of the surgical team. The details of the operation will be again discussed and you will be asked to sign a consent form if you are happy with the proposed surgery and have not got any unanswered questions or concerns. You will also meet the anaesthetist (the doctor responsible for putting you to sleep for the procedure).

At the end of the procedure you will be transferred to the recovery area and your surgeon will apply a special Hilotherm Mask to your face which helps with the swelling. It is important that we put this mask on as soon as possible after the operation. You will be drowsy and tired after the procedure.

A wafer/splint will be secured in your jaw but you will be able to open your mouth. Once you are fully awake and back on the ward one of the members of the surgical team would place some elastics to help keep your jaw in the correct position.

RI Mohammed-Ali/2014/lower jaw surgery
You will see your surgeon following your surgery and he will discuss your operation. There will be an on-call Oral & Maxillofacial Surgical Team looking after you. You will be reviewed by one of the Oral & Maxillofacial Team the following morning and allowed home if you are fit to be discharged. A follow up appointment will be arranged for you to see your surgeon and orthodontist the following week.

**What does the operation involve?**

The operation is carried out from the inside of your mouth to minimise visible scars on the skin of your face. A cut is made through the gum behind the back teeth to gain access to the jawbone. The lower jaw is then cut with a small saw to allow it to be broken in a controlled manner. It is then moved into its new position and held in place with small metal plates and screws.

Occasionally it is necessary to make a small “stab” incision on the skin of the face to allow the screws to be inserted. This incision is a few millimetres long and usually only requires a single stitch to hold it back together. The gum is stitched back into place with dissolvable stitches that can take a fortnight or even longer to fall out.

We leave a plastic splint/wafer in with elastics to help maintain your bite until your first review appointment after the operation. At that appointment we remove the splint/wafer and replace the elastics as required at the time of assessment.

Depending on the complexity of the procedure the splint may need to stay in with elastics for up to six (6) weeks to help with the healing of the jaw.

**What can I expect after the operation?**

It is still likely to be sore and regular painkillers will be arranged for you. The discomfort is usually worse for the first few days although it may take a couple of weeks to completely disappear. It is also necessary to make sure that the area heals without any infection and so you will be given antibiotics through a vein in your arm whilst you are in hospital. You will be sent home with painkillers and a course of antibiotics.

Immediately after the operation your face will be swollen and feel tight, your jaws will be stiff and you will find that you cannot open your mouth widely. Initially your nose is often blocked and you may have to breathe through your mouth. Your throat may also be uncomfortable and swallowing can be difficult to begin with.
Swelling and bruising is variable but is generally worst on the second or third day after the operation. The swelling can be reduced by using cold compresses/ice pack and sleeping propped upright for a few days. Most of the swelling usually disappears after a fortnight but there is often some subtle swelling that can take several months to disappear although only you and your family are likely to notice this.

**Can I eat normally after my surgery?**

For the first few days it is recommended that you only have liquid and pureed food and once the splint is removed you should be able to manage a soft diet and then gradually build up to normal food over a few weeks. It takes approximately six weeks to form new bone where the surgical cuts were made, so it is advisable to have a soft diet for at least six(6) weeks. Biting or chewing on any hard food before this time can cause the position of your jaw to move.

**How long will I be in hospital?**

This obviously varies from person to person but most patients spend one or sometimes two nights in hospital after their operation. The position of your jaw will be checked with X-rays before you are allowed home.

**What will I be given to take home?**

You will be given antibiotics, pain killers and high calorie/high protein drinks to take home. Please let your surgeon know if you are allergic to any food or medications.

**Do I need to take any time off work?**

Again this varies from person to person and also depends on what kind of job you do. We recommend that most people have about three (3)-four (4) weeks off work.
What are the possible problems?

There are potential complications with any operation. However it is important that you are aware of them and have the opportunity to discuss them with your surgeon.

• **Bleeding** – some oozing from the cuts inside your mouth on the night of operation is normal and to be expected. Often you will notice slight bleeding from your nose as well which may take a week or so to settle. Again this is normal and nothing to be concerned about. Significant bleeding is very unusual but should it occur it can usually be stopped by applying pressure over the area for at least 10 minutes with a rolled up handkerchief or swab. It is very rare that patients have significant bleeding requiring blood transfusion, however you will be consented to have a blood transfusion if required. Please let your surgeon or orthodontist know if you have any personal or religious belief against having a blood transfusion.

• **Numbness** – your bottom lip will be numb and tingly after the operation, similar to the sensation after having an injection at the dentist. This numbness may take several months to disappear, however there is a 20 to 30 percent chance that you can have some degree of permanent numbness.

• **Infection** – the small plates and screws that hold your jaw in its new position are usually left in place permanently. Occasionally they can become infected and need to be removed but if this happens it is not normally a problem until several months after surgery. The metal that is used is titanium which does not set off metal detectors in airports etc.

• **Adjustment of the bite** – in the weeks following surgery it is often necessary to put elastic bands on your orthodontic braces to guide your bite into its new position. Rarely a second small operation may be required to reposition the fixing plates and screws if your new bite is not quite right. In a small number of patients the bone does not separate as planned and your surgeon may need to keep your jaws in tight elastics for six (6) weeks.
• **Bruising** – the extent of bruising varies among patients and can take a few weeks to clear completely

• **Weight loss** – of 2-5kgs may be anticipated during the early post-operative period. In most cases, this is due to a loss of appetite coupled with the wearing of elastics. After the first week, your appetite should have improved enough to maintain and possibly increase your weight.

This is an overview of the procedure and risk, however each case is assessed on an individual basis and there may be risk that might be unique to your case and this will be discussed at your consultation prior to treatment.

For further information please contact the Maxillofacial department Tel-01226432094