

Oral and Maxillofacial Surgery Department

This leaflet explains: **Mandibular (lower jaw) osteotomy**

This leaflet has been designed to improve your understanding of your forthcoming treatment and contains answers to many of the common questions. If you have any other questions that the leaflet does not answer or would like further explanation please ask your surgeon or orthodontist.

The problem

It has not been possible to correct your teeth and how they bite together with orthodontics alone. This is because the bones of your face and jaws are out of balance with one another. Surgery will change the relationship between your lower jaw and upper jaw and will correct these problems. The surgery will take place under a general anaesthetic, i.e. you are going to be put to sleep completely.

What does the operation involve?

The operation is almost entirely 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 inside the mouth is stitched back into place with dissolvable stitches that can take a fortnight or even longer to fall out.

What can I expect after the operation?

Perhaps surprisingly it is not a particularly painful operation but 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. Your throat may also be uncomfortable and swallowing can be difficult to begin with. In all you should expect to feel a bit miserable and sorry for yourself for the first few days.

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 and sleeping propped upright for a few days. Most of the swelling has disappeared 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 surgery?

You can't eat normally to begin with. For the first day or two you will only want liquids but very quickly you should be able to manage a soft diet and then gradually build up to normal food over a few weeks.

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.

Do I need to take any time off work?

Again this varies enormously from person to person and also depends on what kind of job you do. We recommend that most people have about three weeks off work. It is important to remember that you will not be able to drive or operate machinery for 48 hours after your general anaesthetic.

What are the possible problems?

There are potential complications with any operation. Fortunately with this type of surgery complications are rare and may not happen to you. 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. 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.

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 and in a minority of patients may be permanent.

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.

Will I need further appointments?

A review appointment will be arranged before you leave hospital to see both your surgeon and orthodontist.

Adapted from the British Association of Oral and Maxillofacial Surgeons (BAOMS)

Available online at www.baoms.org.uk