

# Oral facial surgery

## Surgical procedure information leaflet

**Name of procedure:**                      **Mandibular (lower jaw) osteotomy**

This leaflet explains some of the benefits, risks and alternatives to the operation. We want you to have an informed choice so you can make the right decision. Please ask your surgical team about anything you do not fully understand or want to be explained in more detail.

We recommend that you read this leaflet carefully. You and your doctor (or other appropriate health professional) will also need to record that you agree to have the procedure by signing a consent form, which your health professional will give you.

### 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, 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.

### Benefits of the procedure

The aim of the procedure is to reposition your jaw to a more functional and better cosmetic position

### Serious or frequent risks

Everything we do in life has risks. Fixing an osteotomy of the lower jaw is generally a safe operation with few risks. The general risks of surgery include problems with:

- the wound (for example, infection);
- breathing (for example, a chest infection);
- the heart (for example, abnormal rhythm or, occasionally, a heart attack); and
- blood clots (for example, in the legs or occasionally in the lung).

Those specifically related to repairing a fractured lower jaw include problems with the following.

- 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.
- 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.
- Nerve damage
  - 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 last for ever.
- 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.

Most people will not experience any serious complications from their surgery. The risks increase for the elderly people, those who are overweight and individuals who already have heart, chest or other medical conditions such as diabetes or kidney failure. As with all surgery, there is a risk that you may die.

You will be cared for by a skilled team of doctors, nurses and other healthcare workers who are involved in this type of surgery every day. If problems arise, we will be able to assess them and deal with them appropriately.

## **Other procedures that are available**

None

### **Your anaesthetic**

We will usually carry out your surgery under a general anaesthetic. This means that you will be asleep during your operation and you will feel nothing.

### **Before you come into hospital**

There are some things you can do to prepare yourself for your operation and reduce the chance of difficulties with the anaesthetic.

- If you smoke, consider giving up for several weeks before the operation. Smoking reduces the amount of oxygen in your blood and increases the risks of breathing problems during and after an operation.
- If you are overweight, many of the risks of anaesthesia are increased. Reducing your weight will help.
- If you have loose or broken teeth or crowns that are not secure, you may want to visit your dentist for treatment. The anaesthetist will usually want to put a tube in your throat to help you breathe. If your teeth are not secure, they may be damaged.
- If you have long-standing medical problems, such as diabetes, hypertension (high blood pressure), asthma or epilepsy, you should consider asking your GP to give you a check-up.

### **Your pre-surgery visit by the anaesthetist**

- After you come into hospital, the anaesthetist will come to see you and ask you questions about:
  - your general health and fitness;
  - any serious illnesses you have had;
  - any problems with previous anaesthetics;
  - medicines you are taking;
  - allergies you have;
  - chest pain;
  - shortness of breath;

- heartburn;
- problems with moving your neck or opening your mouth; and
- any loose teeth, caps, crowns or bridges.
- Your anaesthetist will discuss with you the different methods of anaesthesia they can use. After talking about the benefits, risks and your preferences, you can then decide together what is best for you.
- Also, before your operation a member of the theatre nursing staff may visit you. He or she will be able to answer any questions you may have about what to expect when you go to theatre.

## **On the day of your operation**

### **Nothing to eat and drink (nil by mouth)**

It is important that you follow the instructions we give you about eating and drinking. We will ask you not to eat or drink anything for six hours before your operation. This is because any food or liquid in your stomach could come up into the back of your throat and go into your lungs while you are being anaesthetised. You may take a few sips of plain water up to two hours before your operation so you can take any medication tablets.

### **Your normal medicines**

Continue to take your normal medicines up to and including the day of your surgery. If we do not want you to take your normal medication, your surgeon or anaesthetist will explain what you should do. It is important to let us know if you are taking anticoagulant drugs (for example, warfarin, aspirin or clopidogrel).

We will need to know if you don't feel well and have a cough, a cold or any other illness when you are due to come into hospital for your operation. Depending on your illness and how urgent your surgery is, we may need to delay your operation as it may be better for you to recover from this illness before your surgery.

### **Your anaesthetic**

When it is time for your operation, a member of staff will take you from the ward to the operating theatre. They will take you into the anaesthetic room and the anaesthetist will get you ready for your anaesthetic.

To monitor you during your operation, your anaesthetist will attach you to a machine to watch your heart, your blood pressure and the oxygen level in your blood.

General anaesthesia usually starts with an injection of medicine into a vein. A fine tube (venflon) will be placed in a vein in your arm or hand and the medicines will be injected through the tube. Sometimes you will be asked to breathe a mixture of gases and oxygen through a mask to give the same effect.

Once you are anaesthetised, the anaesthetist will place a tube down your airway and use a machine to 'breathe' for you. You will be unconscious for the whole of the operation and we will continuously monitor you. Your anaesthetist will give you painkilling drugs and fluids during your operation. At the end of the operation you will be taken to the recovery room.

### **Pain relief after surgery**

Pain relief is important as it stops suffering and helps you recover more quickly.

We will usually give you tablets, suppositories or injections to make sure you have enough pain relief. Once you are comfortable and have recovered safely from your anaesthetic, we will take you back to the ward. The ward staff will continue to monitor you and assess your pain relief. They will ask you to describe any pain you have using the following scale.

- 0 = No pain
- 1 = Mild pain
- 2 = Moderate pain
- 3 = Severe pain

It is important that you report any pain you have as soon as you experience it.

## **What are the risks?**

Your anaesthetist will care for all aspects of your health and safety over the period of your operation and immediately afterwards. Risks depend on your overall health, the nature of your operation and how serious it is. General anaesthesia is safer than it has ever been. If you are normally fit and well, your risk of dying from any cause while under anaesthetic is less than one in 250,000. This is 25 times less likely than dying in a car accident. Side effects of having a general anaesthetic include drowsiness, nausea (feeling sick), muscle pain, sore throat and headache. Side effects of having a spinal anaesthetic are headache, low blood pressure, itching of the skin due to the drugs injected and temporary difficulty in passing urine. Rare complications of a spinal anaesthetic are temporary loss of sensation in your legs, 'pins and needles' or muscle weakness in your legs. Permanent damage to the nerves is very rare. We will discuss with you the risks of your anaesthetic.

## **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?**

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.

## **Will I need further appointments?**

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

## **Contact details**

If you have any specific concerns that you feel have not been answered and need explaining please contact the following:

Worcestershire Royal Hospital

- Day Case Ward Nursing Staff (phone 01905 760258)
- Hawthorne Suite Reception (phone 01905 760212)

## Kidderminster Treatment Centre

- Day Case Ward Nursing Staff (phone 01562 826350)
- Reception (phone 01562 826397)

## Alexandra Hospital

- Reception (phone 01527 503854)

## Additional Information

The following Internet websites contain additional information that you may find useful:

- [www.worcestershirehealth.nhs.uk/Acute\\_Trust](http://www.worcestershirehealth.nhs.uk/Acute_Trust)  
Information about Worcestershire Acute Hospitals NHS Trust
- [www.patient.co.uk](http://www.patient.co.uk)  
Information fact sheets on health and disease.
- [www.rcoa.ac.uk](http://www.rcoa.ac.uk)  
Information leaflets by the Royal College of Anaesthetists about 'Having an anaesthetic'.
- [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)  
Online Health Encyclopaedia and Best Treatments Website.

## Patient Services Department

It is important that you speak to the department you have been referred to (see the contacts section) if you have any questions (for example, about medication) before your investigation or procedure.

If you have any concerns about your treatment, you can contact the Patient Services Department on 0300 123 1733. The Patient Services staff will be happy to discuss your concerns and give any help or advice.

If you have a complaint and you want it to be investigated, you should write direct to the Chief Executive at Worcestershire Acute Hospitals NHS Trust, Charles Hastings Way, Worcester WR5 1DD or contact the Patient Services Department for advice.

**Please contact Patient Services on 0300 123 1733 if you would like this leaflet in another language or format (such as Braille or easy read).**

## Bengali

“আপনি যদি এই লিফলেটটি বিকল্প কোনো ভাষায় বা ফরমেটে (যেমন ব্রেইল বা সহজ পাঠ) চান, তাহলে এই নম্বরে 0300 123 1733 প্যাসেন্ট সার্ভিসের সাথে যোগাযোগ করুন।”

## Urdu

“اگر آپ کو یہ دستی اشتہار کسی مُتبادل زبان یا ساخت میں چاہیے (جیسے کہ بریل / ایزی ریڈ) تو پبلیشنگ سروسز سے 0300 123 1733 پر رابطہ کریں۔”

## Portuguese

“Por favor, contacte os Serviços de Apoio ao Paciente através do número 0300 123 1733, caso precise deste folheto numa língua alternativa ou formato (como Braille / fácil de ler).”

## Polish

“Jeżeli pragniecie Państwo otrzymać tę broszurę w innym języku lub formacie (Braille / duży druk) proszę skontaktować się z Obsługą Pacjentów pod numerem 0300 123 1733.”

## Chinese

“如果您需要此份傳單的其他語言選擇或其他版本

(如盲人點字版/易讀版容易的閱讀),請致電 0300 123 1733 與病患服務處聯繫。”

## Comments

We would value your opinion on this leaflet, based on your experience of having this procedure done. Please put any comments in the box below and return them to the Clinical Governance Department, Finance Department, Worcestershire Royal Hospital, Charles Hastings Way, Worcester, WR5 1DD.

Name of leaflet: \_\_\_\_\_

Date: \_\_\_\_\_

Comments:

Thank you for your help.

Reference: British Association of Oral and Maxillofacial Surgeons