Lower jaw (mandible) fracture surgery

Information for patients
Department of Maxillofacial Surgery, Sheffield Teaching Hospitals
This leaflet has been designed to improve your understanding of your forthcoming treatment and contains answers to many of the commonly asked questions. If you have any other questions that the leaflet does not answer or would like further explanation, please do not hesitate to ask.

**Why do I need surgery?**

You have broken your lower jaw. A doctor has examined you and advised that you need surgery to help it heal. They have based their decision on the number of breaks (fractures), where they are and whether they need treatment to help them heal. You will have a general anaesthetic for your surgery so you will be completely asleep.

**What are the benefits?**

- It relieves pain
- You heal better and faster
- It supports your jaw shape and keeps your teeth in line, which allows you to bite normally again
- It reduces the risk of infection

**What are the risks?**

- **Infection**
  
  This is rare because we give you antibiotics. You also have a good blood supply to your face which makes infection less likely.

- **Bruised nerve**
  
  The nerve that runs through the centre of your lower jaw supplies feeling to your lower lip, chin and bottom teeth. You might feel some tingling or numbness in your lip and/or chin if this nerve was bruised when you broke your jaw or during your operation. This tingling may be caused by or made worse by surgery. The
numbness usually disappears on its own, but this can take several months, or may be permanent.

- **Damaged teeth**
  Sometimes the teeth next to the break can be damaged by the screws we use to fix it or by the fracture. You may need to have these teeth removed.

- **Bleeding**
  Bleeding from the cuts inside your mouth. You should be able to stop this if you press against the wound with a rolled up handkerchief or swab for at least 10 minutes.

**What are the risks of having a general anaesthetic?**

Straight after a general anaesthetic you may feel tired, dizzy or weak. You must have someone to collect you and stay with you for the first 24 hours. During the first 24 hours you must not:

- Drive or operate any motorised vehicle or electrical equipment
- Sign any legal documents or make important decisions
- Drink alcohol

You may feel weak or dizzy at times during the first seven to ten days. If this happens, sit down until the feeling passes. You may also have the "post-operative blues", though this should soon pass.

**Consent**

If you have not done so already we will ask you to sign a consent form. As with any treatment or procedure we must seek your consent beforehand. Staff will explain the risks, benefits and alternatives where relevant before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.
What are the alternatives?

You may not need surgery if the fracture is not displaced or is only slightly displaced, you are comfortable and you can bite together normally. Sometimes special screws or wires are placed around your teeth and elastics used to keep your teeth aligned. This is called intermaxillary fixation. This is removed after 6 weeks once the fracture has healed. You will need to eat only soft foods for six weeks and we will ask you to come to the Maxillofacial Surgery Trauma Clinic at the Charles Clifford Dental Hospital for regular check-ups.

What happens during surgery?

We will give you a general anaesthetic. Once you are completely asleep, we make a cut on the inside of your mouth through your gum, to open up the fracture.

We put your broken bones back together using small metal plates and screws to hold them in place. This restores your bite.

We use dissolvable stitches to stitch your gum back into place. These take up to two weeks or more to disappear.

Sometimes we also make a small cut on the outside of your mouth through your skin, by the angle of your jaw. If we plan to do this we will advise you before you sign the consent form. We use one or two stitches to close this cut. These need to be removed by a nurse five days after surgery.

During the operation, we sometimes place temporary wires or metal braces around your teeth or put screws between your teeth to fix elastic bands to. The elastic bands help us to guide your bite into the correct position.

We usually attach the elastic bands properly a few hours after your operation. This means that when you wake up from surgery you will be able to move your jaw freely.
If you have any wires, metal braces or screws put in to hold the elastic bands, we will take them out at an outpatient clinic appointment when your doctors are happy that the fracture has healed. This usually happens about four to six weeks after your operation.

If we put plates and screws in your jaw to hold it in position, we do not normally take them out unless they cause problems. They are made of titanium, a type of material that does not set off metal detectors in airports. You can still have MRI scans.

Sometimes we take out damaged or decayed teeth near your break.

**What happens after surgery?**

Your jaw is likely to be sore, so we will give you painkillers regularly to ease the pain. The discomfort is usually worse for the first few days and may take a couple of weeks to go away completely.

We will give you antibiotics through a vein in your arm (intravenously) to reduce the risk of infection of the fractures.

Before you go home you will have an x-ray to check the position of your fractures. We will also give you painkillers and might give you a course of antibiotics to take home.

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

This depends on what time you have your surgery and how well you recover. You can sometimes go home on the same day or more commonly you may need to stay one night in hospital.

**What can I eat and drink?**

Your lower jaw will take about six weeks to heal completely. During this time you will need to eat a soft diet, such as mashed potato, soup, smoothies, well-cooked pasta, scrambled egg, jelly and ice cream.
Chewing harder foods may make the plates bend or break. If you eat the right foods, you can prevent complications and you are more likely to heal quickly.

**Can I brush my teeth?**

It is important that you keep your mouth as clean as possible for the first few weeks after surgery to prevent infection. It will be sore and you may find it difficult to clean your teeth around the stitches. Try using a soft, small-headed toothbrush, such as a child's brush.

Starting the day after your surgery, gently rinse your mouth with mouthwash or warm salt water (dissolve a flat teaspoon of table salt in a cup of warm water) three times a day for five to seven days, to keep it free from food remains. We will give you mouthwash to start using in hospital and to take home with you. Please note that mouthwash does not replace brushing your teeth.

**Can I smoke after surgery?**

Smoking can affect healing after surgery and makes you more likely to develop an infection. We would advise you to stop smoking before and after your surgery. If you would like more information about stopping smoking please visit www.nhs.uk/smokefree, call the Smokefree National Helpline on 0300 123 1044 or speak to a member of staff for more information.

**How long will I need to take off work?**

It depends on what type of job you do. You may need to take about two weeks off work and avoid hard exercise. Do not play contact sports for three months after surgery. You can start gentle exercise after two weeks.
Will I need to come back to hospital?

Before you leave hospital, we will make a review appointment for you. We will keep a close eye on you for six weeks after treatment, to make sure that your jaw heals properly.

If you have any wires, metal braces or screws put in to hold elastic bands, we will take them out at an outpatient clinic appointment when your doctors are happy that your fracture has healed. This usually happens about four to six weeks after your operation.

If you had a cut made on the outside of your jaw during surgery, you will need to make an appointment with your GP to have the stitches taken out five days after surgery.

Who can I contact with queries and concerns?

From 9.00am to 5.00pm, Monday to Friday, you can contact the Maxillofacial Surgery department on:

- 0114 271 7800

Outside of these hours please contact the on call maxillofacial surgeon at the Royal Hallamshire Hospital, Sheffield, on:

- 0114 271 1900