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Treating a fracture of the lower jaw

Oral & Maxillofacial Surgery	Last reviewed:	October 2023
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This leaflet includes information on treating your lower jaw fracture, as well as, answers to a number of frequently asked questions.

What are fractures of the lower jaw?

Your lower jaw has been broken. This is also know as a mandibular fracture. You may have been involved in a sporting injury, a fight, fall or road traffic accident.

You have had X-rays and have been checked to find out where your fracture(s) are and how complex it may be. Sometimes a computerised tomography (CT) scan may be needed.

The injuries can be managed in a number of ways, depending on where they are and how bad the fractures are. This can range from no treatment, to various surgical options.

What are the symptoms of a fractured jaw?

- Pain, swelling and bruising of your lower jaw, jaw joint and mouth.
- Bleeding from your mouth.
- Difficulty chewing.
- Unable to open your mouth fully, or difficulty closing your mouth.
- Your teeth do not meet in the same way (abnormal bite or malocclusion) as before.
- Numbness or a change in sensation of your gums, lower lip and chin.
- Torn gums.
- Loose or broken teeth/ fillings.
- Swelling of the area under your tongue (floor of the mouth).

Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

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What treatment is needed?

Treating lower jaw fractures can be quite complex and will depend on where the fracture is and how bad it is. The aim is to get the bone to heal and correct the abnormal bite but this is not always possible.

Operations are usually done while you are asleep (general anaesthesia), but some procedures can be done while you are awake (local anaesthesia).

The options for treatment include:

Surgery

- A small cut is made to expose the fracture, allowing the surgeon to put the teeth and bones in the correct position.
- The fracture is held in place with small titanium plates and screws, to allow the fracture to heal.
- The gums are then stitched together with dissolving stiches.



- In some cases, a small cut on the facial skin to insert a screw may be needed; this will be stitched. In this case ,stitches will need to be taken out at your GP practice in 7 to 10 days. It will heal leaving a small scar.
- The titanium plates do not usually need to be removed unless they are causing problems such as infection or sensitivity when cold. The plates will not be an issue at airport security.

Elastic traction and splinting

- Depending on where the fracture is and how bad it is, elastic bands may be used to support or hold your jaw in place.
- This involves putting a metal bar over your teeth and holding it there with metal wires that are wrapped around them.
- After that, elastic bands are put on the top and bottom bars of the teeth, guiding your bite into the right place. The elastic bands may be taken off, so you can carry out normal oral hygiene routine (brushing and flossing) as normal.
- You will be given extra elastic bands and shown how to use them.
- You will need to use elastic tractions for up to 6 weeks, during which time your progress will be checked. The metal bar and wires around your teeth are usually removed after 6 weeks. After which, it is advised to see your dentist for oral hygiene care as it can affect your gums.

Wiring the jaws

This is a technique used in the past, and is similar to elastic traction but is now only occasionally needed for complicated fractures.

- The teeth and jaws are wired together using a metal bar and wires, preventing any opening or movement, usually for a 6 week healing period.
- You will need to have a liquid diet during this time, and your oral hygiene routine will be limited. After removal you will need to see your dentist for oral hygiene care as it can affect your gums.

Allowing fracture to heal on its own (conservative management)

In some cases surgery may not be necessary, and simply resting the jaw and having a soft diet for 6 weeks may be the only treatment needed. You must avoid further injury or trauma for 2 to 3 months after the injury, as the fracture can become displaced and need surgery.

What to expect after surgery

- You are likely to be discharged the day after the operation.
- You will have swelling, bruising and discomfort.
- You will have X-rays to check the position of the jaw.
- You may experience numbress or a change in sensation to your lower lip and chin. This usually improves over a few months, but sometimes it can be permanent.
- Stiffness and/ or clicking of the jaw joint.
- Unable to open your mouth fully which is usually temporary
- Painkillers and antibiotic is usually prescribed.
- You will need to follow a strict liquid diet at first, moving onto a soft diet for 6 weeks.
- We strongly advise against smoking whilst you are healing as it can cause an infection.
- Avoid further injury or trauma for 2 to 3 months.

What are the possible risks of surgery?

- Oozing of blood from your wounds.
- Damage to the teeth next to the fracture or sometimes a loss in teeth vitality (where the tooth nerve dies) may happen, with the tooth needing <u>Root canal treatment</u>.
- Sometimes, the tooth/teeth near the fracture may need to be removed (extracted) by the dentist).
- Numbness or a change in sensation to your lower lip, chin, tongue or gums. The nerve that provides sensation to these areas runs through the center of the jaw, and has been damaged.

- You may already be feeling some numbness following your injury. This can be worsened by surgery, but usually this improves. Permanent numbness is possible.
- The way your teeth meet (your bite) may not be exactly the same as before the injury, especially with complicated fractures. This can sometimes be improved by your dentist grinding the teeth. Occasionally, a second operation may be needed.
- Infection of the wound or plates. Sometimes, the plates, screws or teeth at the fracture site may need to be taken out either while you are asleep (under general anaesthetic) or awake (under local anaesthetic).
- If a cut is needed in the neck or skin near the jaw to gain better access to the fracture, the nerve which controls movement of the lower lip/ face may be bruised or damaged, causing weakness. This is usually temporary and rarely permanent (less than 5% (5 in 100 patients)).

What happens next?

- Depending on what your job involves, you may need to take around 2 weeks off work.
- Avoid heavy exercise.
- Do not drive or operate machinery for 48 hours after surgery.
- You will be given follow-up appointments in the department to check your recovery and identify any problems you may be having.
- Avoid further injury or trauma.
- See your dentist for a check-up and clean after the metal wires have been removed.

Contact details

Please contact us if you have any further queries or problems:

Reception:0116 258 5301

Nurses station: 0116 258 5671

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