

Jaw (orthognathic) surgery

Evelina London Cleft Service

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What is jaw surgery?

Jaw surgery is an operation to reposition the jaws. The operation corrects any imbalance between the upper and lower jaws and allows the teeth to bite together correctly. The surgery also has an effect on the way that the face looks (especially from the side), which many people choosing this surgery are keen to achieve. To prepare the teeth for surgery, braces are placed on the teeth and remain on the teeth during and after the surgery. Usually, the braces (orthodontic appliances) are on for 2 to 2 and a half years in total.

Why should I have jaw surgery?

We offer jaw surgery to people who are unhappy with the balance of their face or their bite (how their teeth and jaws meet) and who wish to do something about it. The surgery is only carried out if it is something that you want. There are sometimes other treatment options that do not involve surgery. You will be told if any of these are appropriate options for you and you will be advised on how the results would look different.

Why do I need braces?

It is important to move the teeth with braces to make sure that they will meet together correctly after the operation. Usually, fixed braces are fitted about 18 to 24 months before the surgery. They stay on during the surgery and afterwards for about 6 to 12 months, until the teeth and bite are correct. Whilst the braces are on, you will need appointments to have them checked by an orthodontist every 6 to 8 weeks. You will also still need to see your dentist for regular dental check-ups every 6 months.

Once the braces are removed, we advise that a removable brace (retainer) is worn at night to keep the teeth in their new position.

Why not just have braces instead of braces and surgery?

It is not always possible to correct the teeth and the bite with braces. This is because the bones of the face and jaws may be out of balance with one another. For example, you might have a small upper jaw and a larger lower jaw. Braces can move the teeth but cannot move the jaws in the way that a jaw operation will.

Why do I need a special speech assessment?

If you were born with a cleft palate (a gap or split in the roof of your mouth), you will be referred for a special speech assessment before you decide whether to go ahead with the surgery. This is because sometimes, if the top jaw is moved forwards, the soft part of the palate might not reach the back of the throat anymore. This can change the sound of your voice, as air will be able to get into the nose as you talk. The assessment will help to show whether it is possible to treat this problem if it happens. This might mean having another operation.

Why do I need to speak to a clinical psychologist?

Making the decision to have this type of surgery can be difficult for some people. We feel it is really important that you have the chance to talk about your decision with someone who is not involved in your treatment.

As well as helping you come to a decision, the clinical psychologist can talk through your hopes and expectations and any questions or concerns. You can also use this time to think about the practical issues such as when to have the surgery and how to fit in the appointments around your work.

How long will the treatment take?

In total, the treatment takes about 3 years from the time that the braces are fitted. Providing your teeth are healthy, braces can be fitted as soon as a decision has been made to go ahead with surgery.

How different will I look?

Your final appearance will take months to fully emerge as the more subtle swelling goes down and the shape of your face adjusts. You will still look like yourself and will be recognisable to family and friends, but certain aspects of your face will have changed. Jaw surgery balances the bones of the face so that the facial features are in proportion with each other and the teeth can bite together correctly. Most people are delighted with the changes they see. You are welcome to see photographs of other patients before and after their surgery when you come to your appointments.

What does the operation involve?

The operation is done with a general anaesthetic, so you will be asleep for the whole operation. Usually, all of the cuts are made from inside the mouth so that there are no visible scars. Occasionally, the surgeon needs to make a small (2mm) cut on the jaw line, but this is virtually invisible a few weeks after surgery.

The jaw bones are moved and secured by tiny plates and screws which remain under the gum. The jaws are not normally wired together; small elastic bands are used between the top and bottom brace to help the teeth close into the new bite. These elastics are checked and changed by your orthodontist and may need to stay in place for several months after the surgery.

How long will I be in hospital?

This depends on how you feel after the operation. Most patients stay in hospital for 1 or 2 nights and then go home. You will need someone to be with you at all times for the first few days as you may not feel well. Following this, people vary in their speed of recovery. You should take 2 to 4 weeks off work. We also recommend you do not do any sports for the first 4 weeks (6 to 8 weeks for contact sports).

Can I eat normally after the surgery?

Even immediately after surgery, your mouth will open and close. However, the swelling and elastics will prevent you opening your mouth fully. You will be encouraged to eat and drink from the first day and asked to gradually progress from eating very soft mushy food to a more normal diet over the first few weeks.

What are the risks or complications?

Any operation has some degree of risk. The Cleft Team will advise you about this at your clinic visits. In our hospital, this is a routine operation and our surgeons, anaesthetists and nurses are all specialised and experienced in looking after people before and after jaw surgery.

Complications associated with this type of surgery are rare and might not apply everyone, but it is important that you are aware of them. Complications can include the following.

- **Numbness.** Your lips will be numb for a short while after the operation. This will feel similar to the feeling after having an injection at the dentist. The top lip usually returns to normal quickly. The bottom lip is more unpredictable and can take 6 to 9 months to feel normal. For some people, the feeling in the lip never completely returns, but this is very rare, and since the lips still look and move normally, this rarely causes the patient any problems.
- **Infection.** The tiny fixing plates are usually left in place permanently. Sometimes (in less than 10% cases) the plates have to be removed due to an infection. Usually at this stage, the bones have healed fully, so taking the plates out does not make the jaw weaker.
- **Relapse of position of the jaws.** For most people, relapse or movement of the jaws back to the position that they came from is not a problem. However, for more complicated jaw movements, which include those patients who have had previous operations on their palate or jaws, the risk can be higher. If this happens, your surgeon and orthodontist may review you more frequently after the surgery. You may need extra elastics or even a slightly different appliance. Very rarely, another operation may be offered. You would be able to choose whether to go ahead with this.

- **Deterioration of speech.** You will have an assessment of your speech before this treatment, and the options for future surgery will be discussed. There is a risk that there may be an increase in the nasal tone of your speech or air coming down the nose when you speak. This may be temporary and you may recover slowly, but could also be permanent unless you undergo further speech surgery. This will be explained to you in more detail in the planning clinics.

Will I feel any pain?

After the surgery, you are more likely to feel uncomfortable rather than be in pain. Painkillers are given regularly while you are in hospital, and you will be given some to take home if necessary. The lips, face and mouth will feel numb and swollen, and this, along with having had a long operation, makes most people feel uncomfortable. Everybody is different, but most patients find that the swelling is at its worst 3 to 4 days after the surgery. The swelling and bruising then gets better over the next 2 weeks. Often, and understandably, people having this type of surgery can feel quite low in mood for a few days afterwards.

Are there any alternatives?

You will be told if there are any other options available that are appropriate for you, however these options may be a compromise and it is important that you understand what the different options would achieve.

How can I prepare for jaw surgery?

Attending your clinic appointments with the surgeon, orthodontist, clinical psychologist and speech therapists will help you to prepare for the treatment and surgery. It is also important that you prepare for the surgery by making sure that you are in good health and by seeing your dentist to make sure that you have healthy teeth and gums. Please ask for a copy of the leaflet **Recovering from jaw surgery**, which offers information.

Is there any information on the internet?

There is a lot of information on the internet but some is more helpful than others. We recommend that you look at the British Orthodontic Society website which has information specific to this type of surgery.
web www.bos.org.uk/Your-Jaw-Surgery

Giving my consent (permission)

The staff caring for you may need to ask your permission to perform a particular treatment or investigation. You will be asked to sign a consent form that says you have agreed to the treatment and that you understand the benefits, risks and alternatives. If there is anything you do not understand or if you need more time to think about it, please tell the staff caring for you.

Remember, it's your decision. You can change your mind at any time, even if you have signed the consent form. Let staff know immediately if you change your mind. Your wishes will be respected at all times. If you would like to read our consent policy, please tell a member of staff.

Contact us

If you have any questions or concerns about having jaw surgery, please contact the Evelina London Cleft Service, **phone** 020 7188 1321 Monday to Friday, 9am to 5pm, **email** cleftservices@gstt.nhs.uk

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit **web** www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or contact our helpline.

phone 020 7188 8748 Monday to Friday, 9am to 5pm

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

phone 020 7188 8801 (PALS) **email** pals@gstt.nhs.uk

phone 020 7188 3514 (complaints)

email complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch.

phone 020 7188 8815

email languagesupport@gstt.nhs.uk

NHS 111

This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

phone 111 **web** www.111.nhs.uk

NHS website

This website gives information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.

web www.nhs.uk

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