

#### **Contact Details**

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# Orthognathic Surgery (Jaw Surgery)

Please speak to a member of staff if you need this leaflet in large print, braille, easyread, audio or another language



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#### Introduction

This leaflet provides you with information on what to expect during your treatment and will help you to understand what is involved. If after reading the leaflet you have any questions, please speak to one of the nursing staff.

# What is orthognathic surgery?

Orthognathic surgery involves the modification of the jaws in order to change their alignment and position. It improves both the function and appearance of the mouth and sometimes airway (how you breathe).

# What does orthognathic surgery involve?

For the best results, orthodontics and orthognathic surgery should be planned together.

The alteration of the positions of both your jaw and teeth is not a speedy process.

The details of what to expect will be explained to you by your orthodontist and maxillofacial surgeon.

You will be asleep under general anaesthetic whilst the surgery is carried out.

# **Preparing for surgery**

You will be required to wear fixed appliances/braces for a period of time before surgery.

#### **Numbness in orthognathic surgery**

Numbness (known as paraesthesia) is a reduction in the sensation of an area where there are sensory nerves and their nerve endings.

The larger nerves that run through the upper and lower jaws are usually bruised during the surgery, and can be prone to injury.

Numbness after the operation is common but will usually improve with time and tends to fully resolve.

Occasionally you may be left with a long-term change in sensation in areas of your face, particularly the lower lip and chin. This happens in about 15% (15 in 100) patients.

If injured, nerves can repair themselves if they are just bruised and if the cut ends lie closely, can mend on their own.

The movement of the face and lips should not be affected by orthognathic surgery.

#### Possible risks/side effects

- You may experience some numbness in the cheeks, upper lip and teeth if we have moved your upper jaw.
- You may experience some numbness in the lower lip, chin and teeth and possible the tongue if we moved your lower jaw.

# Follow up

- You will be reviewed regularly during the month after your orthognathic surgery to monitor and assess your progress.
- You will then be seen after 3 months and after 6 months.
- Orthodontic appointments will also be arranged for you to adjust your braces in addition to the above.

# **Further surgery**

Most people require at least some orthodontic treatment after surgery to fine tune the tooth alignment and obtain the best fit of the upper and lower teeth in the new position of the jaws. This can take from 3 to 12 months, after which the fixed braces are removed.

Once the fixed braces are removed, there is usually a settling in of the teeth.

During this time, fixed or removable retainers are used to control unwanted tooth movement.

In the upper jaw, a removable retainer is usually used which can be removed for cleaning.

In the lower jaw, a discreet fixed retainer is usally glued behind the lower front teeth and can be used for up to 12 months.

# **During surgery**

- The surgery will aim to re-position part or all of the top and/or lower jaw(s).
- The surgeon will usually gain access to the bones inside the mouth via the gums.
- Once the areas of bone have been revealed and loosened, they are moved into a new position and fixed in place with small metal plates and screws.
- The screws will remain in the bone.
- Sometimes, you may require a plastic splint on the teeth to locate the bite after the operation..
- Great care is taken to protect the nerves that run through the jaws although sometimes these can be damaged during the surgery.
- Dissolving stitches are used to neatly close up the gums.
- The only visible scars will be tiny white lines along your gum line.

#### **After surgery**

- You will feel sleepy when you wake up from the anaesthetic and will have swelling and soreness around the mouth and face.
- There will be some multi-coloured bruising on your swollen face but as the swelling goes down and the bruising fades, you will start to see improvements to your face.
- Some areas of your face may feel numb however this will recover with time.
- You may have some bruising especially under your chin and on your neck due to resolving bruising from your jaws.
- You will usually be able to open your mouth when you first wake up however you are likely to have elastic bands on the braces to guide your teeth into their new bite.
- You will spend a couple of days in hospital and further x-rays may be taken. You will be provided with some dietary advice and your pain will be kept under control.
- It will take a couple of days for you to be up and about and around 1 month to get back into a normal routine.

#### **Recovery period**

The length of time it takes for people to heal depends on how old and fit you are but in general the jaw bones are almost healed after 2 to 3 months.

# To aid recovery and healing, please follow the recovery plan below:

- Depending on the nature of your work it may be necessary to take 2 to 4 weeks off work, school or college.
- Your mouth and braces will need to be kept clean to prevent any infection and you will be shown by the dental hygienist how to do this.
- The elastics that hold your teeth in their new alignment will need to be replaced with fresh ones as the elastic bands lose their flexibility. This will be done by us before you leave hospital and you will be shown how to do this yourself at home.
- You will only be able to eat small amounts for the first few months. Staff will advise you on how to prepare liquid and soft diets that are nutritious. You may need a blender to prepare easy to eat food.