

Orthodontic Department

Orthognathic Surgery

This leaflet has been written for patients considering Orthognathic Surgery. 'Ortho' means straight and 'gnathic' relates to the jaws.

What is it?

- Treatment involves **surgery** to the **jaws**, either upper, lower or combination of the two
- Repositioning the jaw bones will help the teeth to fit together properly by the end of treatment
- Usually, **braces** will also be needed **before** and **after surgery** to align the teeth.

Why is it necessary?

- People seek treatment because of:
 - Difficulty **eating**
 - **Tooth damage**/tooth wear
 - Poor **facial appearance**
 - A **combination** of these problems.

What is involved?

- We need to ask questions about what **concerns you** and what you **hope treatment will achieve**
- A **full history** is taken, including a review of your **general** and **dental health**
- This is followed by an **examination** of your **teeth, jaws and face**
- **Special records** are taken, which include **x-rays, photographs, plaster moulds** of your teeth. These are used as case records and for further examination and planning
- A **joint appointment** with the **orthodontist and oral and maxillofacial surgeon** is then arranged:
 - This is to **discuss your concerns** and worries
 - We will discuss the **options** available to **correct your jaw problems** and the risks involved with each option
 - We can answer any questions you have about the brace treatment or jaw surgery. You may wish to **write** your questions **down** so you do not forget to cover everything
 - We can then decide on a **plan** for treatment going forward with treatment

- **After the joint consultation we will give you time to think about what has been discussed**
- We will ask you to **write to us** to confirm whether you wish to proceed with treatment or not
- The **decision for treatment will be yours, and yours alone**, and we ask that you are **100% committed** before you go forward with this form of treatment.

How long will treatment take?

- The **overall** treatment time is expected to take **three years**
 - Usually **18-24 months of initial brace treatment is needed**
 - Surgery, involving **two to three days** in hospital, will be carried out at **Poole Hospital**
 - Braces usually stay on for at least a **further six months** after your operation, so that we can finalise the fit of your teeth
 - When the fixed brace is removed, **retainers are used** to hold the teeth and jaws in their new position. These must be worn **at night-time, long term**

Do you need braces fitted for this treatment?

- **Usually yes**; it is important to get the **teeth into the correct position** for surgery and **produce the best possible** bite after surgery
- It also makes the surgery much **easier and the surgeon** is able to **achieve a better result**.

Are there risks with this surgery?

- There are **always risks with any surgery**
- These are **minimised by careful planning**
- This type of surgery is **relatively routine**, but possible complications will be explained to you before you start treatment, and you will be reminded of these before we book your surgery.

What are the risks?

- **Numb or tingling lower lip and/or chin**
 - After surgery to your lower jaw, there is a high chance that your **bottom lip and/or chin may feel strange or even numb**. Up to **90% of patients** experience an alteration to the feeling of the lower lip and/or chin immediately after surgery



- The numbness will **not affect the movement** of your lip or chin, only the feeling in it, a bit like the feeling after an injection at the dentist's.
- Feeling usually **returns within a few months** but **may take up to several years** to return to normal.
- In approximately **5% of patients** the feeling may **never return** to normal.
- **Bleeding after the operation**
 - This is **not usually a problem**
 - Occasionally a **little bleeding can occur**, and mixed with saliva it may **appear worse than it actually is**.
 - You may also get **some bleeding from your nose** in the first two weeks following surgery.
 - If you do get any **bleeding that causes you concern**, you should **contact the surgical team** immediately.
- **Nasal blockage**
 - Blockage of the nose may **occur for one or two weeks** following surgery.
 - **Gentle cleaning** of the nostrils with **cotton wool buds**, and the use of nasal **inhalations/spray**, will **provide some relief**.
- **Sore lips**
 - **For a week** or so after the operation, you may have **soreness around the lips**, particularly at the corners of your mouth.
 - Regular use of a **suitable lip moisturiser** such as Vaseline® is recommended.
- **Speech difficulties after surgery**
 - **Talking and making yourself** understood during the period when your jaws are sore and swollen may **initially be difficult** for the first few days.
 - However, once the **swelling reduces** you should have no problems.

How long will I be in bed for after the operation?

- You will be encouraged to **leave bed** and **walk** as much and as **frequently** as possible **on the day following surgery**.
- You may **feel quite down in yourself** for the first week or so **after the surgery**, and you will become very tired, very quickly, during the day. This is normal and will gradually **improve**.

Does the surgery hurt?

- This is **not a common problem**
- Immediately after your operation there will be **some discomfort**, but **pain relief** will be **prescribed** by the hospital staff
- By the **time you go home** from hospital, you should be having **minimal pain** and ordinary pain killers, such as paracetamol or ibuprofen, should be sufficient
- If this is **not the case** then you should **contact the surgical team**

Will my face be swollen?

- **Yes**. Swelling **increases for up to 48 hours** after surgery
- Thereafter, it tends to **gradually decrease**, with most of the swelling having **gone by 10 days post-operation**
- It may take **several months** for the remaining soft tissue **swelling to completely disappear**
- **Medication** is used during the operation to **reduce the degree of swelling**
- You will be **advised to sleep with one or two extra pillows** to **lift your head at night**, and, in addition, you can also use **ice packs** to help reduce the swelling

Will my face be bruised?

- At first your **face will be swollen**
- **Bruising** may appear a **few days, or even a week, after the surgery** and occurs on the **cheeks** and at the **angle of the jaw line**. This may spread down the neck and on to the **top of the chest**. This may take a further week or so to disappear.

Will my jaws be wired together?

- **Usually no**; small **bone plates** and screws are used to **fix the bones** in their new positions
- Only in **exceptional** cases will the teeth be **wired together**
- **However, tight elastic bands** are normally used to help **hold the position of the teeth and jaws** for several weeks after the operation.

Will I need the plates and screws removed at a later date?

- The **plates and screws** are usually **left in place**. Only if they cause a problem will they be removed
- They **do not set off security alarms** at airports, so there is nothing to worry about.

Can I eat after surgery?

- For a **few days after surgery** you will **only** be able to **manage fluids**
- We **encourage a gradual progression** into a **soft diet**, leading on **to a more normal diet** over the next four to six weeks. It is important that your jaw muscles and bones can gradually build up strength
- **Dietary advice** will always be given from the **dieticians in Poole Hospital** to ensure an adequate nutritional intake is maintained, to avoid weight loss and promote good healing.

On the rare occasion that your teeth are wired together for six weeks, you will remain on a liquid diet throughout this period

How is the surgery performed?

- All the surgery is **carried out inside the mouth** unless specifically stated. No scars are left on the face

How long will I be off work or college?

- In most circumstances you will be **fit to return to work/college** after **two to three weeks**
- If your **work** is particularly **heavy duty**, or involves heavy manual labour, **additional time off work** would be advised

What are my responsibilities during treatment?

- **One hundred percent co-operation** is **essential** throughout treatment to achieve the best possible result
- **Oral hygiene** must be maintained at the **highest standard** throughout treatment to prevent damage to the teeth
 - **Daily fluoride mouthwashes** are recommended and additional mouthwashes may be prescribed from time to time
 - The teeth, **orthodontic appliances**, surgical wires and elastics should be kept **perfectly clean at all times**.

Do I need to keep seeing my regular dentist?

- **Yes**, it is **very important** you continue with your routine dental check-ups with your dentist.

Finally

- If you have **any unanswered questions**, write them down before your **next appointment**.

Further Information



Contact Numbers:

We hope you have found this information useful, but if you have any questions or are worried about anything, please speak to the Orthodontic team:

Orthodontic Department (Dorset County Hospital): 01305 2551747

Orthodontic Department (University Hospitals Dorset): 0300 019 4694

Useful Websites

www.yourjawsurgery.com

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email patientinformation.leaflets@dchft.nhs.uk



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