Orthognathic Surgery

Orthognathic Surgery Means: To straighten the jaws by way of surgery (ortho = straight, gnathic = jaw)

What is it?

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

Why is it necessary?

When jaw and facial structures have not grown in a harmonious way, a combination of problems may result.

These may include:
- Eating difficulties
- Tooth damage/tooth wear
- Poor facial appearance
- A combination of any of the above

What is involved?

- We need to know what you are concerned and worried about, and what you hope treatment will achieve for you.
- A full history is taken followed by an examination of the teeth, jaws and face. A full medical history is required.
- Special records are taken which include x-rays, photographs and plaster moulds of your teeth. These are used as case records and for further examination and planning.
- Various plans are drawn up by making special tracings from your x-rays and photographs. Potential jaw movements can be made with your plaster moulds. Computer tracings are also obtained from the x-rays and various jaw and tooth movements can be pre-planned and demonstrated.
A joint consultation with the Orthodontist and Oral and Maxillofacial Surgeon is then arranged to discuss all aspects of your concerns. In addition, the options that may be available to correct your jaw problems may be discussed in general terms. N.B. This is the time for your questions to be answered, so please, feel free to ask any questions you may have concerning the proposed treatment. Please remember to write your questions down so you do not forget to cover everything.

The plan for treatment is then formulated and discussed with you.

After a full consultation, you will be asked whether you wish to proceed with the treatment. 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 suggest that you must be 100% committed before you go forward with this form of treatment.

The overall treatment time is expected to take three years. Approximately eighteen months of preliminary Orthodontic Brace treatment. This will be fixed braces glued to your teeth. Surgery involving three to four days in hospital will be carried out at Poole General Hospital. A further six months or so of Orthodontics is then necessary to complete treatment. When the fixed brace is removed, removable type retainer braces are fitted to hold the teeth and jaws in their new position. These will be worn at night time only, long term (for as long as you want your teeth to stay straight).

Do you need orthodontic braces fitted for this treatment?

Usually yes, it is so 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 produce a better result.

Are there risks with this surgery?

There are always risks with any surgery that is carried out. These are minimised by precise planning before thinking of any treatment. This type of surgery is relatively routine, but possible complications will be explained to you before you embark on the treatment. These may include:

**Numb lip**

After surgery to your lower jaw there is a high chance that your bottom lip may feel strange or even numb, up to 80% of patients may experience an alteration to the feeling of the lower lip immediately after surgery. This is because the nerve passing through the jaw bone gets bruised. The numbness will not affect the movement of your lip, only the feeling in it, a bit like the feeling after an injection at the dentist. Feeling usually returns within a few months, but may take up to several years to return to normal. In approximately 5% of cases 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 the 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 (first few days). However, once the swelling starts subsiding 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 will 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 improve rapidly after the initial two weeks.

Does the surgery hurt?

This is not a common problem. Immediately post-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 / discomfort from your face 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 the bulk 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 and it may take a few days or even a week for bruising to appear in 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. Today little bone plates and screws are used to fix the bones in their new positions. These are usually able to cope with all situations, but there may always be an odd exception, in these cases the teeth may need to be wired together. So it may always be a possibility. Elastic bands are often 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 letter 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. There after 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, 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 an additional time off work would be advised.

Patient co-operation

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, additional mouth-washes 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 see my regular dentist?

Yes, it is very important you continue with your routine dental checkups with your dentist.

Finally

If you have any unanswered questions, write them down before your next appointment. Be sure to clarify all your concerns completely with the Surgeon and the Orthodontist before moving forward with treatment.

Further information

Orthodontic Department telephone number: 01305 255174

http://www.dchft.nhs.uk/patients/departments-G-O/orthodontics/Pages/default.aspx

The British Orthodontic Society (BOS) have a Jaw Surgery information section on their website which we would highly recommend you take a look at. This is called Your Jaw Surgery and is available to everybody to access via:

www.bos.org.uk/public-patients/your-jaw-surgery

or

www.yourjawsurgery.com