

Kristian
DR KRISTIAN VAN MOURIK

ORAL & MAXILLOFACIAL SURGEON



ORTHOGNATHIC (JAW) SURGERY

.....
A COMPREHENSIVE GUIDE

Orthognathic surgery

Orthognathic surgery	2
Signs and symptoms of jaw malalignment	3
Planning for corrective jaw surgery	4
Orthognathic surgery procedure	5
Recovery and care after the procedure	7
Possible complications of the surgery	8

Correct alignment of your jaws can result in significant aesthetic and functional benefits.

Orthognathic surgery (also called corrective jaw surgery) involves repositioning the bones of your upper and/or lower jaw.

Problems that can be corrected by corrective jaw surgery include:

- A jaw that is too large or small
- A jaw that is too far forward or too far back
- A jaw that is crooked

Your jaw problem may be due to injury, disease, developmental growth problems or it can be the way you were born.

You may have difficulty with chewing, speaking or caring for your teeth and gums— or you may be concerned about how your jaw problem affects your appearance.

With correct positioning of your jaws, eating and speaking may become easier.

Other problems that may be solved with corrective jaw surgery include:

- Chronic jaw pain
- Headaches
- A poorly-aligned bite
- Obstructive sleep apnea

This guide is for general information only. Dr van Mourik will assess you individually, and recommend treatment which is most appropriate for you.

Several problems related to a poorly aligned jaw can be helped with orthognathic surgery.

They include:

- Difficulty with biting, chewing or swallowing food
- Speaking problems
- Jaw pain
- An unbalanced look to your lower face
- An injury or birth defect
- Teeth wearing down rapidly or unevenly
- Front top and bottom teeth not meeting properly
- Lips do not meet easily
- A receding chin or protruding jaw
- A dry mouth and inflamed gums caused by mouth breathing
- Breathing problems while sleeping such as snoring and/or sleep apnoea

Dr van Mourik plans the surgery in conjunction with your specialist orthodontist and your general dentist.

First you will have a consultation with Dr van Mourik to discuss: the problem, the surgery process, risks and likely outcomes. If you decide to go ahead with surgery, the following steps are taken:

- Before surgery you may need orthodontic work performed to straighten your teeth.
- Following the orthodontic work, you will have a consultation with Dr van Mourik where things are discussed in greater detail.
- A cone beam X-ray, measurements and 3D modelling of your jaws are done.
- Surgery is then planned on a computer using virtual surgical planning and specific surgical plates and cutting guides are made.
- Your corrective jaw surgery operation is performed
- You may need to have minor orthodontic work after the surgery. This can commence approximately 6 weeks after surgery.
- Periodic reviews will monitor your healing and ensure that your jaws are staying properly aligned.

Orthognathic surgery procedures

There are 3 types of corrective jaw surgery

Upper jaw surgery

Your upper jaw (maxilla) can be operated on if it is too large, too small, too far forward, too far back or crooked. Gummy smiles, incorrect bites, lip and midfacial support can be significantly helped by upper jaw surgery. Sometimes upper jaw surgery is done simultaneously with lower jaw surgery or chin surgery.

Lower jaw surgery

Your lower jaw (mandible) can be operated on if it is too large, too small, too far forward, too far back or crooked. An incorrect bite, facial profile or symmetry can be significantly improved by lower jaw surgery. Sometimes lower jaw surgery is done simultaneously with upper jaw surgery or chin surgery.

Upper and lower jaw surgery

Sometimes both jaws need to be adjusted to correct a bite or facial problem. This is also called 'bimaxillary surgery'.

How corrective jaw surgery is performed

The surgery is performed under general anaesthetic administered by a specialist anaesthetist. The anaesthetist is also in charge of providing your post-surgery pain relief.

The procedure involves carefully cutting through your jawbone and moving your jaw (or jaws) into the correct position.

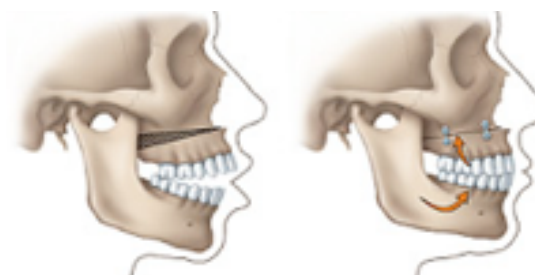
Once your jaws have been positioned correctly, they will be fixed in place with small plates and screws. The plates and screws are left in place permanently.

If your jaw is too small, it may be lengthened and if it's too large it can be shortened.

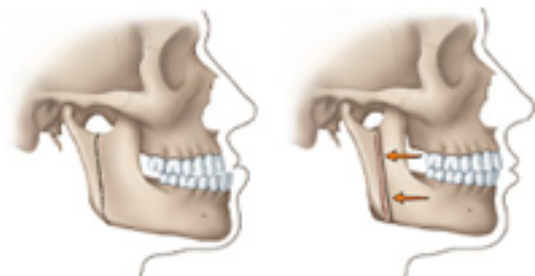
The incisions are usually made inside your mouth so you have no visible scars. If Dr van Mourik needs to make an incision in your face, he will take care to hide it in the natural skin creases to reduce visibility.

The surgery takes 1 to 4 hours, depending on its complexity.

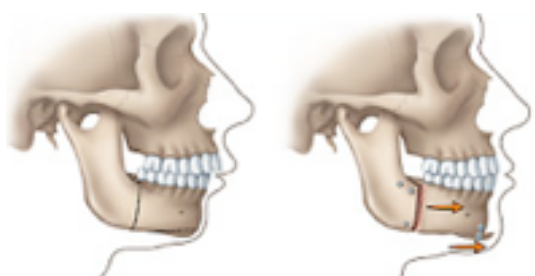
Correction of common dentofacial deformities



CORRECTING AN OPEN BITE: Some of the bone in the upper tooth-bearing portion of the jaw is removed. The upper jaw is then secured in position with plates and screws.



CORRECTING A PROTRUDING LOWER JAW: The bone in the rear portion of the jaw is separated from the front portion and modified so that the tooth-bearing portion of the lower jaw can be moved back for proper alignment.



CORRECTING A RECEEDING LOWER JAW OR "WEAK CHIN": The bone in the lower portion of the jaw is separated from the base and modified. The tooth-bearing portion of the lower jaw and a portion of the chin are repositioned forward.

Dr van Mourik will give you detailed post-operative instructions during your consultation. To maximise your chance of making a quick recovery without complications, please pay careful attention to these instructions.

Hospital stay

Single jaw surgery, usually involves 2 to 3 nights in hospital. If you have had surgery on both jaws, you will spend 4 to 5 nights in hospital. Once you can eat and drink without assistance you can go home.

Pain management

To control pain while in hospital, intravenous analgesia, will be prescribed by the anaesthetist. This can be self-administered by pressing a button. Usually by 48 hours after the operation, pain tablets such as Nurofen® or Panadeine® are sufficient to keep you comfortable. Painkillers are usually not required 7 – 10 days after surgery.

Work/School

You will need to allow 2 to 3 weeks off.

Diet

A soft food diet is required for 4 to 6 weeks after surgery.

Jaw support

You may need to wear elastic bands on your teeth for up to 4 weeks post-surgery to keep your teeth in their new bite position.

Follow up care

Dr van Mourik will want to see you periodically to monitor your healing and ensure that your jaws are staying properly aligned.

Complete healing

Can take 3 to 6 months.

It is unusual to have complications if a skilled oral and maxillofacial surgeon performs your orthognathic surgery. However, all surgeries have some potential risks and complications.

Dr van Mourik makes every effort to minimise risk. Most people having surgery will not have any complications. He will discuss the risks with you to make sure you are well informed before any surgery is performed. If you are concerned about any potential risk or complications, please discuss your concerns with Dr van Mourik.

The risks of orthognathic surgery include:

General Risks

After general anaesthesia you may have trouble swallowing, and have a dry, sore throat. You may also have generalised muscle pains. Nausea and vomiting are not uncommon.

Infection is a risk, particularly if you have diabetes. It is usually treated with antibiotics. Occasionally further surgery is needed.

Scarring may occur inside your mouth but it generally heals quickly.

Arm veins are accessed for intravenous fluids and medications and they may be affected by swelling. You may have trouble moving your arm for a while.

Blood loss during surgery sometimes requires a blood transfusion. Bleeding may also occur in the first few days after surgery.

Swelling is to be expected. It may worsen for the first 48 hours and should then begin to subside.

Bruising is often noticed as the swelling subsides.

Sense of smell is often lost for a while after upper jaw surgery. In rare cases further surgery will be required.

Opening of the wound may occur, particularly if oral hygiene is poor.

You may have trouble opening your mouth, particularly if you have elastic bands between your teeth.

Bone screws seldom loosen and if they do, they can be removed after the bone has healed.

Bones may fail to heal in a timely way, particularly if you smoke. This may require further surgery.

Numbness, reduced sensation, tingling or itching in your mouth or face is common but is usually temporary. Small risk of permanent numbness or nerve pain.

Return of the jaw to its original position may occur, requiring further surgery.

Teeth may die because their roots have been damaged by the surgery. If so, they need to be removed.

Pain in your temporomandibular joint (TMJ) may follow surgery, requiring further treatment.

Your voice may sound different due to changes in the spaces between your soft palate and throat. This may occur after some types of upper jaw surgery.

Kristian
DR KRISTIAN VAN MOURIK
ORAL & MAXILLOFACIAL SURGEON

CONTACT US

DR KRISTIAN VAN MOURIK
(02) 9416 4809
SUITE 5, 12-18 TRYON ROAD LINDFIELD NSW 2070.

