

Orthognathic (jaw) surgery, pre-operative patient information

This is a fundamental overview of what you might expect during your surgical orthognathic experience. We have tried to make this as comprehensive as possible. We feel that you should be knowledgeable of what you might encounter in order to avoid “surprises”.

MENTAL ATTITUDE

A very important factor in the success of your surgery is your mental attitude. There has been much interest recently in the effect of attitude on one's overall health and healing. Laughter and good feelings are thought to cause the release of neurotransmitters (messengers) in the brain, which have a widespread effect on many biochemical processes taking place throughout your body. We do encourage a very positive mental attitude to promote good healing and a speedy recovery. Support from your family members is essential.

ADMISSION TO THE HOSPITAL

Prior to admission to Hospital you will be required to complete an examination by a Medical Doctor and a visit to the Pre-admission Clinic at the Hospital. Pediatric patients (<16 years old) are usually seen at the Stollery Children's Health Centre Pre-admission Clinic. A review of your medical history and appropriate tests will be completed. On the day of your surgery, you will be required to check into the hospital. At this time you will settle into the hospital and await your surgery.

LENGTH OF THE SURGERY

Most of these surgeries last anywhere from one to five hours, depending on the amount and type of surgery to be done. Perhaps this sounds long to you, but the amount of time in surgery is no call for upset. You are carefully monitored at all times throughout your surgery.

RECOVERY ROOM

Part of what appears to be time in surgery is time spent in the recovery room. You are released from the recovery room when the general anaesthesia has worn off and you can demonstrate normal reflexes. Sometimes hospitals allow family members into the recovery room. If not, your family will be able to visit you once you have returned to your hospital room. On occasion a patient has to be transferred to an intensive care unit for special supervision for 24 to 48 hours following orthognathic surgery.

Depending on hospital policy, one of your family members may be able to stay in the hospital room with you the first night following surgery. This may make you feel more secure and comforted.

INTENSIVE CARE UNIT

Immediately following surgery, you may be taken to the intensive care unit. This is not necessarily a cause for alarm, but is only a precautionary measure following certain surgeries. You will be returned to your room as soon as possible. Any family member waiting for you should be fully informed of the possibility.

IMMEDIATE POST-SURGICAL APPEARANCE

It is very common to wake up with your teeth fixated together with either tight or loose elastics. These are used to guide your jaws into their new position. There maybe a splint (plastic bite wafer) between your teeth to maintain your new bite. Nasal tubes are used customarily with all surgical procedures done using general anaesthesia. One leads to your stomach (nasogastric) and the other, to your lungs (endotracheal). Commonly, these tubes are removed just as you are “waking up” so you may not remember them. The hospital staff may not have removed the tubes from your nose when your family members are first allowed to see you. Please explain this to them as it may cause them to be alarmed.

YOUR APPEARANCE DURING THE FIRST WEEK

After the surgery there is always temporary swelling (especially of the lips and cheeks) and perhaps bruising. At first your appearance might cause concern to your family, this is to be expected. You should warn your family or any other visitor so that they will not be overly surprised. Remember; this is a healing response and should resolve greatly in one or two weeks. Should you look in a mirror, remember that this is only a stage or transition.

You will also notice that with the swelling that follows this type of surgery, it may be difficult for you to make facial expressions the first few days. You might explain to those around you that although you may have smiles on the inside, you may not be able to project your smiles to the outside for a couple of days.

THE INTRAVENOUS APPARATUS

The intravenous apparatus will be attached to your arm for one to two days following your surgery. Again, this is customary. You will require certain drugs during that time period, as well as intravenous feeding. This becomes an easy way to administer both and rarely presents significant discomfort. When you are consuming adequate liquids by mouth, it will be removed.

NASAL CONGESTION AND THROAT SORENESS

For the first day or two after surgery, you may experience nasal congestion. The nasal tubes used for your anaesthesia may cause your nose to feel stuffy and your throat to feel slightly irritated when you wake up. This is similar to the way you would feel if you have a common cold and sore throat. In a couple of days, both should resolve. The congestion may bring on a fear of not being able to breathe well. This is common in many patients. You will be given nasal decongestants.

NAUSEA

Patients are concerned about being nauseated and vomiting. First, this does not happen with everyone, secondly, you will have been on a liquid diet, and therefore, anything that “comes up” will be liquid. If your teeth are tight together with elastics, don’t worry, because liquid can come out between your teeth. You will have a suction apparatus near your hospital bed. This does not present as much of a problem as you may fear. If this happens, you should remain calm. There are drugs that may be given to you to help control nausea.

TEMPORARY NUMBNESS

Following surgery, you may experience small areas of altered sensations or partial numbness. During the first three to six months, the small nerve fibres are regenerating and mending. As healing takes place, you may encounter sensations of warmth and tingling in the affected areas. It is infrequent that these remain longer than six months; however, those individuals with small areas of residual altered sensations find they are able to adjust to them. In other words, this is an inconvenience of which to be aware, not afraid.

COMMUNICATION

At first you may have difficulty communicating and may want to have a small notebook on hand for messages. You may be unable to answer the telephone in your usual manner. If you will bite and hold your teeth together, you may closely approximate how you will be able to talk while you are in fixation. You should warn your friends who plan to call you in the hospital or at home that they may have some difficulty understanding you at first. However, most people are able to communicate relatively clearly. It is probably better if you don’t try to carry on lengthy conversations, as you may find it fatiguing.

POST SURGERY “BLUES”

Following any kind of surgery, a patient may go through a stage of mild depression. This is sometimes associated with a steroid medication given to minimize swelling. A slight mood-elevating effect is associated with this drug. Therefore, as the drug leaves your system, you may experience a form of depression (usually on the third day). This is a natural response. We feel that if you are aware of the potential from the start, you will work at minimizing this by keeping your mind and body active. By the fourth and fifth day you should return to good spirits. You must remember that this represents only a few weeks of discomfort in the “big picture of life”. If you maintain a good attitude, these first couple of weeks will soon be over.

OOPS!

During your hospital stay, if you are served solid foods, this is merely an oversight. If you will let the staff know the limitations of your fixation will be re-emphasized to the dietician.

LOSS OF WEIGHT

Following your surgery, you may lose as much as 10% of your body weight. Prior to your surgery, you may want to gain a few pounds in anticipation of this weight loss. Once your fixation is removed, you may easily gain back to your original weight.

RECOMMENDATIONS FOR EATING

Most types of orthognathic surgery require fixation of the teeth, while very few do not. Routinely, the hospital provides a large plastic syringe with rubber tubing. The end of the tubing can be places in the back of the mouth to allow passage of liquids or pureed food. By lubricating the rubber plunger of the syringe with cooking oil, the syringe should function throughout the fixation period.

DIET

During the first week after your surgery, your dietary intake is **critical!** Your tissues will be in a state of healing and your nutritional requirements will be great. This is no time to go on a diet. You will lose weight regardless.

If your teeth are fixated together, you will be limited to a strictly liquid diet. We recommend that you fortify your diet with liquid vitamins and other dietary supplements. There are many nutritional supplements on the market. As examples, Ensure™ and Boost™, available in assorted flavors, are excellent canned preparations and are found in most drug stores. Many grocery stores carry “instant breakfast” nutritional supplements.

Essential nutrients must all be present to promote complete soft tissue healing and a bony union at the surgical site. Calcium, Iron, Vitamins A, C and D, and protein will be especially important in your diet. At times, you may not feel like eating, but please remember that good healing requires a sufficient dietary intake. A blender may be used to puree almost any food. Fruit and raw eggs are excellent nutritional additions to milk shakes. Experiment with a variety of foods. One of our patients even blenderized a Thanksgiving dinner including the turkey and the dressing.

YOUR HOPSITAL STAY AND RECALL VISITS

You should anticipate a total hospital stay of two to five days. Plan to return to see us once every week, to 2 weeks for the next 6 to 8 weeks for routine observation. Once we are satisfied with your surgical stability, your recall visits will be less frequent. You may be in tight elastics for 2 to 4 weeks followed by a few loose elastics that allow you to move your lower jaw into your new bite. This may be for up to 4 weeks or until the Doctor is comfortable with your bite and range of motion.

YOUR RETURN TO WORK OR SCHOOL

You are encouraged to return to school or work as soon as you feel up to it. Each individual will differ in speed of recovery. Some patients return to their regular activities as early as two weeks after their surgery. Reasonable, you should not be absent from school or work longer than two to four weeks. By this time, you should have adequately regained your strength.

LENGTH OF FIXATION

A period of two to four weeks is usually required for fixation of the teeth following most surgeries. We would like to remove the fixation as early as our judgment will permit, but the first priority is a stable result.

Your fixation may limit your participating in active sports or over-exerting yourself (e.g. running up stairs). If you will hold your teeth together, you will see how it might be difficult to breathe deeply should you become winded by exercise.

When the fixation is removed, you may initially experience jaw muscle stiffness and limited jaw movement. This will resolve with exercise of these muscles. During the next one to four weeks, you will be asked to wear training elastics (rubber bands) to help guide the jaws.

DENTAL HYGIENE

During the dental fixation, oral hygiene will be more difficult. You will be unable to clear the tongue side of your teeth. It is therefore essential for you to make an effort in applying the following recommendations. You must brush your teeth as thoroughly as possible. A **child's size soft toothbrush** is more efficient. Since your cheeks may become swollen, the smaller the toothbrush head permits easier access.

A toothpick device called the Perio-Aide is a helpful adjunct to tooth brushing since flossing your teeth will be impossible. Perio-Aides facilitate cleaning along the gum line. These come with instructions and can be found in most drug stores. Stimudents, made of soft balsa wood are also good for cleaning and are used similarly to Perio-Aides.

If you keep your teeth relatively free of food debris, you will feel more tolerant of the wires and elastics. We recommend the use of a Water-Pik™. It is a good idea to fill the water bath with mouthwash diluted with water for a fresher taste. Also, diluting hydrogen peroxide in the water bath can be very helpful to clear the mouth of debris with its foaming action. (Caution: Do **not** use the Water-Pik™ on high pressure for the first five to seven days after surgery. Food debris could be forced through the incision sites).

TOOTH VITALITY

There is always a slim possibility that a tooth can become devitalized after some types of surgery. This is uncommon. It does not mean that you will necessarily lose the tooth. It can most likely be resolved by endodontic (root canal) treatment.

FAMILY SUPPORT

Prior to your surgery, you should review this information with your family to inform them of the natural course of your surgery. You might also consider reviewing this with close friends, such as people at work or teachers at school so they might develop appropriate expectations. You will need their understanding and support throughout the weeks following the surgery. This will help you to make a quick and easy adjustment to your surgical experience.

If you have any unanswered question, we will be happy to clarify any of this information for you. We want to make your hospital stay and the subsequent weeks as pleasant as possible. Please let us know what we can do.

**If you have any questions, do not hesitate to call during office hours
(8 am – 4 pm, Monday – Friday) at 454-6565 or 1-800-379-9474**

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