



NASAL SURGERY
SEPTORHINOPLASTY/SEPTOPLASTY/INFERIOR TURBINATE REDUCTION SURGERY
General Information and Post Operative Instructions

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This information sheet is providing you with general information which may or may not pertain to your case. Each patient is different and you are encouraged to seek advice from Dr. Chow about any concerns. Every aspect of the surgery cannot be covered in this sheet.

Septorhinoplasty

Surgery to reshape the nose (septorhinoplasty) is a common plastic surgery procedure and is performed to improve the external appearance and/or internal breathing, which may have been a result of birth deformity, trauma, genetic influences, infection, aging, tumours or other diseases. Nothing has a greater impact on how a person looks than the size and shape of the nose. Because the nose is the most defining characteristic of the face, a slight alteration can greatly improve one's appearance.

Changing the size or shape of your nose includes

- Removing an unwanted hump
- Altering the shape of the tip or bridge of your nose
- Narrowing or expanding the width of your nostrils.
- Improving symmetry, correction crooked nose
- Changing the angle between your nose and upper lip
- Improving breathing
- Improving the profile or augmentation of the dorsum of the nose – augmentation rhinoplasty /nasal implant /nasal augmentation.

Results following rhinoplasty vary depending on each person's facial shape, facial asymmetry, ethnicity, gender, skin, age and shape/structure of the nose (bone/cartilage). It may take years for the final appearance to be appreciated so please be patient and accept it will be a long journey. Asymmetries in the final appearance of the nose may occur as it is difficult to predict how your body will heal after surgery. Therefore, it is important to be realistic about what can be achieved with surgery and the complications and limitations of surgery before proceeding. Open communication about what results you want with your surgeon prior to the surgery is important and generating mutually agreeable/reasonable goals is the first step in obtaining a satisfying result. You must feel comfortable and trust your surgeon. A second opinion is advised if you have doubts.

Cosmetic surgery is not a guarantee of happiness and you need realistic expectations before embarking on surgery. If you are experiencing life problems and other stressors, you may require psychological help rather than cosmetic surgery.

Rhinoplasty is a very complex operation and the aim is to improve the nose cosmetically as well as functionally. There is no point making the nose look 'beautiful' without being able to breathe well afterwards. It is important to remember there is no such thing as a 'perfect nose' and the aim of rhinoplasty is to make the nose blend into your face. My philosophy in approaching rhinoplasty surgery is to create a natural and balanced appearance – subtle changes can achieve dramatic results.

Techniques

Rhinoplasty takes between 2-3 hours depending on the complexity of surgery. There are two basic techniques for surgery – closed or open. The only difference is the extra external incision at the skin of columella between the nostrils for added exposure. The remainder of the incisions are made on the inside of the nose. The majority of my rhinoplasties are open as this allows direct visualization of the cartilage and bone. The columellar incision heals well with a small scar that is difficult to detect months after surgery.

Rhinoplasty can improve the nasal tip, nasal hump and width of the nose. Sometimes, chisels are required to make a cut into the nasal bone. Certain amounts of underlying bone and cartilage are removed, added to, or rearranged to provide a newly shaped structure. For example, when the tip of the nose is too large, the surgeon can sculpt the cartilage in this area to reduce it in size. Sometimes, rhinoplasty is performed for functional reasons to achieve the best possible airway and reduce collapse of the sidewalls of the nose. Surgery for improving breathing and airway are not always adequately addressed with straightening the septum and removing inferior turbinates alone. The tissues are then redraped over the new frame and the incisions are closed.

I may take grafts from ear cartilage, rib cartilage and/or temporalis fascia (under the scalp above the ear). There is no change to form or function of the ear. The incisions heal up very well.

Nasal operations are performed under general anaesthesia. A pack may be placed inside the nose and removed 1 day after or plastic splints are left for a week. A small plastic cast will be applied to the external nose for the first week and most of the swelling will be gone by the time the cast is removed. 80% of the swelling should be improved at 6 weeks, 90% at 3 months and 95% at 6 months. The final cosmetic result is not achieved until 12 months to two years after the operation when the skin has reformed to its new framework.

Rhinoplasty in Teenagers: Skin type, ethnic background, and age are important factors to be considered in discussions prior to surgery. Before your nose is altered, you must have reached full growth, which is usually 16 years for females and 17 years for males. Exceptions are made in cases where breathing is severely impaired.

Nasal Augmentation / Augmentation Rhinoplasty /Nasal Implant

In certain ethnic background (such as East Asian) or due to genetic, developmental or acquired conditions the nasal dorsum or profile is under developed or low. This may be associated with a small round nasal tip and wide nasal base or ala. The nose can be augmented or enhanced to improve the nose aesthetically, by harmonising it with other facial features. This is performed by using

1. Autologous material (from your own body) - cartilage (septal or nasal, conchal or ear,

costal or rib), bone (rib, calvarial) or fascia (temporalis), or combination
2. Alloplastic or synthetic material– Gortex, Silicone, Silastic or Medpor

Each material has its advantages and disadvantages. Dr Chow usually prefers to use autologous material first and synthetic material as an addition if required. Patients from East Asian background commonly request nasal augmentation with double eyelid surgery and blepharoplasty together.

Additional Surgery

Before deciding on rhinoplasty, Dr Chow may advise if any additional surgery is recommended to enhance the appearance of your face. Many patients have Chin Surgery – Chin implant, Genioplasty/ Mentoplasty in conjunction with rhinoplasty to create better balanced features. Rhinoplasty can be combined with other types of rejuvenation surgery such as blepharoplasty, brow lift / forehead lift or facelift / mini face lift .

Initial Consultation

Some of the questions you may wish to ask are :

- Am I a good candidate for this procedure?
- What is a realistic outcome for me after surgery?
- How long will the operation take?
- What is the recovery time?
- What are the risks involved?
- Is post-operative medication necessary?
- What is the charge for the procedure?

It is a good idea to write down the answers Dr Chow provides so that you can review these carefully later. The consultation also provides you with an opportunity to meet Dr Chow to determine whether your personality and hers are compatible and that you feel comfortable with her as your surgeon.

Medical History

It is important that you are candid with Dr Chow and her staff regarding your medical history so that she can plan the best possible treatment. This information is strictly confidential. Please inform her of any:

- Previous facial and/or cosmetic surgery (nose, eyelids, breast etc.)
- Past and current medical conditions such as heart, lung and kidney disease, prolonged bleeding or excessive bruising, blood clots in the legs or lungs, or gastric reflux.
- Current medications especially Aspirin, Anti-inflammatories, Warfarin, Plavix / Iscover, Xarelto or Rivaroxaban, blood thinners, Insulin, and oral contraceptive pills. Over the counter products such as vitamins and herbal medications may also be important.
- Allergies or adverse reactions to antibiotics, anaesthetic drugs or other medications.
- Psychological and psychiatric illnesses
- Past keloid scarring or poor healing
- Connective tissue disorders such rheumatoid arthritis, lupus erythematosus, scleroderma or similar
- Previous radiotherapy to the head, neck or chest areas.

MAKING A DECISION TO PROCEED WITH SURGERY

Whether your surgery is desired for functional or cosmetic reasons, your choice of a qualified facial plastic surgeon is of paramount importance. As a Facial Plastic and Reconstructive Surgeon, Dr Chow is trained in both Otolaryngology Head & Neck Surgery and Facial Plastic surgery, which provides you, the patient, with the highest level of training and expertise. You should be informed as much as possible before making a decision to proceed with plastic surgery. Plastic surgery is an elective procedure, which means that it is a personal choice and not necessary for maintenance of good health. A good rapport between you and Dr Chow and **realistic** expectations are prerequisites for successful outcome. You are most likely to be pleased with the results if you have a realistic idea of what surgery can and cannot do.

The goal is for a natural, aesthetically pleasing and balanced look.

Please do not hesitate to seek another doctor's opinion if you are uncertain about Dr Chow's advice.

Possible Complications

Modern surgery is safe but does have risks. Complications can occur despite the highest standards and world's best practice principles used by Dr Chow. It is not possible to list all the risks but you should be informed of the common side effects and benefits so that you can make an informed consent. Dr Chow will discuss these in greater detail at the consultation. You should write down any particular questions or specific concerns.

The potential risks are

General risk of surgery

- Wound infection – may require antibiotics
- Bleeding, blood clots or seroma
- Chest infection
- Sore throat from the breathing tube
- Scars that become raised (hypertrophic or keloid)

Specific Risks

- Bruising and bleeding for first 7-10 days
- Return to hospital or operating theatre to control post operative bleeding (less than 1%)
- Donor graft (ear or rib) harvest site complications if applicable. Pneumothorax (punctured lung) is a rare complication of rib (costal) cartilage harvest.
- Swelling and numbness for up to twelve months
- **Asymmetry** or crooked nose
- Painful or unattractive scarring
- **Subjective dissatisfaction** with the final outcome
- Numbness of the tip for 3-6 months
 - Nerve damage - Numbness in the tip of the nose, upper front teeth, or roof of the mouth following surgery is to be expected because the intranasal surgery has caused a temporary disruption of some of the nerves in this area
- **Recurrence** of the original problem
- **Worsening** of the deformity or nasal obstruction
- **Persistent** deformity or nasal obstruction
- Septal perforation, whistling, crusting and ongoing bleeding

- Revision surgery 5-10%
- Saddle deformity – flattening of nose

PREOPERATIVE (Before surgery) Instructions

- Please cease Aspirin, Aspirin-containing products, Plavix, Iscover and non-steroidal anti-inflammatories (such as Ibuprofen) for 10 days prior to and two weeks following your surgery. If you are on any medications that affect bleeding (such as Warfarin, Xarelto or Rivaroxaban) please notify Dr Chow.
- Smoking tobacco and alcohol increase anaesthetic and surgical risks. Please cease them for one to two weeks prior to and three weeks following surgery. They cause delayed wound healing, infection, skin redness and other complications.
- Please notify us of all your routine medications and significant health history. You can remain on your daily medications, except for blood thinners unless instructed otherwise.
- Arnica, a natural herb that significantly decreases bruising, can be taken before and after surgery along with Vitamin C (ascorbic acid), which helps promote healing.
- If you are having a morning procedure you must not eat or drink after midnight the evening before. If you are having an afternoon procedure you must not eat or drink after 6.00am on the morning of surgery. You may, however, take your normal medications and brush your teeth.
- Please shower and remove any make-up and nail polish before arriving for your procedure.
- Unless you are remaining in hospital someone will need to drive you home after surgery and stay with you that evening.
- If you have any concerns please call the office. Remember, we are all here to give you the best possible care.

POSTOPERATIVE Instructions and Expectations

Immediately after surgery, a small plastic splint will be placed on the surface of your nose to protect it and to keep the structures stable for at least 7 days. Clear plastic splints stitched in your nose internally are removed 1-2 weeks later in the office. Your face will feel puffy, especially the first day after surgery. Pain medication will be required. Overnight some blood will ooze out of your nose. This is normal. It does not represent active bleeding. The nose may bleed after the packs are removed but we will make sure you are not bleeding excessively before you are discharged. A nasal bolster under the nose will assist in catching any blood/mucus so that you are not tempted to rub the nose.

If you had cartilage removed from your ear, you will have a dressing stitched on your ear. Change the gauze under your nose, but don't remove any other dressings.

Dr. Chow will advise you to cleanse your nose the day after surgery with nasal irrigation or douches for 4 weeks and gently blow your nose once the packing is removed. After you have filled the wash bottle with water that has been boiled, add the salt powder sachet, let the solution cool, then insert the bottle into your nostril and apply pressure to the bottle. Do this with your head over the sink. A lot of the wash will come out of your nostril, which is normal. The aim is to clean the nostrils to remove any residual clots/blood/mucus. You will find the wash will not be able to flow to the back part of the nose, especially if you have plastic splints stitched in. Use half of the bottle on one side of the nose and half on the other side. Irrigate the nose at least 4x/day.

Absorbable sutures are usually used so they do not have to be removed. After you have cleaned your nose, use the antibiotic ointment prescribed at least 3x/day on the incision line under the tip and nostrils – this will improve the scar. Continue this for 2 weeks. Sutures that have been kept lubricated with ointment are less painful.

You may shower on the second day. The incisions and sutures may get wet with water to gently trickle over them. The dressings/incisions should not be directly scrubbed or irritated.

In the immediate days following surgery, you may experience bruising and swelling in the eye/cheek area. The swelling is worse at day 3-5 after surgery and then gets better. Cold compresses often reduce the bruising and any discomfort. You may also notice some numbness over the tip of your nose and upper lip which may last several months – this is normal.

When you go to bed, lie on 2 pillows with a towel over the pillows and put the gauze or nasal bolster under your nose. The function of the gauze is to catch any fluid coming out of your nose, which can be very irritating to your upper lip.

At the first follow up, splints and dressings are removed. You will notice an immediate improvement in your breathing and the feeling of congestion will abate.

It is important to understand the nose will be swollen when the dressings are removed and the swelling will gradually reduce, with 80-90% of the swelling gone by 3 months. The tip is the last place for all the swelling to go and may take up to one year to settle – BE PATIENT!

It is crucial that you follow Dr Chow's directions, especially those regarding head elevation for a certain period after surgery. Some activities will be prohibited in the weeks after your procedure. Avoid contact sport or sleeping directly on your nose for 6 weeks after surgery. You can fly on aeroplane after 10-14 days. You should be able to be back at work after 7-10 days.

- No heavy lifting – 3 weeks
- No strenuous exercise – 3 weeks
- No blood thinning medication – 2 weeks
- No sexual intercourse – 2 weeks
- No very hot showers or baths – 2 weeks

If you wear glasses, special precautions must be made to ensure that the glasses do not rest on the bridge of the nose for about 6 weeks. Tape and other devices are sometimes used to permit wearing glasses without stressing the area where surgery was performed.

Medications

A rhinoplasty is not an overly painful operation. Most people have a feeling of fullness post operatively but don't feel they are in significant pain. Often the part of the procedure that is the most painful is the taking of the cartilage from the ear or rib.

Take what Dr Chow prescribes. You can take painkillers such as Panadol /Paracetamol, Panadiene forte, Nurofen/ibuprofen, Tramadol or Oxycodone, Dexamethasone for swelling and antibiotics. Avoid Aspirin, Aspirin-containing products, Plavix for two weeks following your surgery. If you are on any medications that affect bleeding (such as Warfarin) please

notify Dr Chow.

Nasal irrigation and douches

It is essential that you keep the internal mucosa of the nose clean and moist by regularly irrigating the nose with buffered salt water 3-4 times / day.

Please be gentle when irrigating. A saline mist spray can be used as a supplement to keep the nose clean and moist. Please remove old scabs and crusts which are easily visible at the nostrils and without applying excessive force. You can clean the nose and incisions with a moist cloth or cotton bud – avoid excessively rubbing the wound.

You can buy the solution FESS/Flo/NeilMed or similar at the chemist or use Dr Chow's formula

- 500 ml of boiled water, let it cool
- 1 teaspoon of sea salt
- 1 teaspoon of baking soda
- mixed them together and use a 5ml syringe or irrigation bottle (Flo or FESS)
- If you have a FESS bottle than keep it and fill the bottle with the solution above for reuse

Bend over the sink and irrigate each nostril and allow the solution to drain through the nostril. Do not inhale or attempt to swallow the solution. DO THIS 4 times each nostril, 4 times/day for 4 weeks.

Nasal Blowing / Sneezing: For first week do not blow your nose. In the second week you can gently blow. If you sneeze than sneeze with your mouth open to reduce the risk of bleeding. You can be more vigorous after 2 weeks and by 3 weeks you can resume your normal activity. Definitely no contact sports until instructed by doctor. Do not rub nose for minimum of 8 weeks.

- Nasal stuffiness is the most annoying problem you will encounter. It is most distressful the first week after surgery. Significant improvement can be expected when the nasal dressings are removed one week after surgery, and further gradual improvement can be expected several weeks thereafter. Elevating the head on a few pillows will help for the first 2 days.

Sometimes, internal non dissolvable dressings/splints are inserted which will make the nose stuffy and blocked. These dressings may be sutured into the nose so do not pull them out as it will disrupt the wound and cause excessive bleeding. The internal dressings will be removed at the first post operative visit.

- Mild nasal or facial pain is expected after surgery and is well managed with oral pain medication except in the most unusual circumstances. Some bloody discharge is expected after surgery. During the first 24 hours after surgery, you may need to change the nasal absorbent dressing multiple times. This is typical. The nurses will instruct you on how to change these absorbent dressings and this can be easily accomplished at home. Some oozing is expected because we avoid packing the nose, which causes considerable discomfort. If there is an unexpected amount of bleeding, please seek medical advice.

- Some decrease in the sense of smell and alterations of taste is typical after surgery as the nerve fibers that are responsible for your sense of smell are present high in the nose and the nasal congestion blocks the flow of air to this area. This will improve within the first one to two weeks following surgery.
- Swelling from the surgery will give some **distorted appearance** to the nose and should not be a cause for alarm. The nose will appear excessively broad and the tip turned up more than is desirable. This is due to the swelling and will improve following surgery. It will take several months before the vast majority of swelling is gone and up to a year for the final result to be fully seen.
- Sun avoidance for several months is important following surgery so as to avoid any excess sun damage to the nasal skin. If you anticipate outdoor activity, sunscreen is mandatory. A sun protection factor (SPF) of 15 or greater is advisable.

Grafts

- Temporalis fascia – wound closed with dissolvable stitch and ok to wash hair
- Ear cartilage – graft taken from either inside bowl of ear or behind, there will be a pressure dressing stitched to ear which is removed at your first post op visit
- Rib cartilage – initially there will be a drain which will be removed the next day before you leave hospital. It is ok to wash over the wound and dissolvable stitches are used to close the wound

Follow-up care is vital for this procedure so that healing can be monitored. Obviously, anything unusual should be reported immediately. It is essential that you keep your follow-up appointments.

Please Inform Dr Chow's office if you have the following:

- High fever, chills or a temperature of more than 38 degrees
- Heavy bleeding from the wound

Use a wash in your nose if you have bleeding. Sit with you head forward, mouth open, ice pack around face, suck on ice and apply pressure at the opening to your nose for 10 minutes. If this is unsuccessful after 10 minutes then give yourself another wash and if the bleeding continues then make your way to the Austin hospital where there is an ENT surgeon on call 24 hours per day.

- Severe pain or tenderness
- Significant redness, or discharge around the incision
- Significant swelling