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Panniculectomy:
Implications for Care

**Postoperative
Care of The
Patient After
Nasal Surgery**



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Postoperative Care of The Patient After Nasal Surgery

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A person's face is first to be seen and last to be remembered. On the mid line is its most prominent feature: the nose. People seek nasal surgery (rhinoplasty) for nasal anomalies (irregularities) secondary to cranio/maxillo/orofacial congenital defects; trauma, often due to the nose's vulnerable positioning; and disease. Nose shape is related to a lack of protective adipose tissue, racial or ethnic grouping, or familial attributes. Many patients interpret their nasal features as "imperfect", based on societal rulings, and choose to have their nose surgically reshaped (cosmetic plastic surgery).

Several nasal anomalies interfere with the universal language of expression. When the nose is permanently "wrinkled" – the nose tip lower than the top lip – a person's overall expression is definitely changed. If the nasal spine is large and protruding, lip distortion may occur while smiling. Yet, removing the nasal spine may make the lip appear larger. Columella nasi (column shaped webbing) at the fleshy, distal margin of the nasal septum that lack a normal angle also distorts the face. Wide, long noses with flaccid nostrils may make a face look as if it is hanging on the nose instead of the nose hanging on the face.¹

Only two parts of the human body continue to grow throughout life. One is the earlobe; the other is the nose. Nasal anomalies tend to worsen as people age, especially hooked, long, or thick, bulboustipped noses. Despite this fact, nasal surgery is usually delayed until people are in their late teen or early adult years to verify proper nasal growth and to ensure that people play an active role in the decision for correction and realistically understand the surgical outcomes. There are exceptions. Breathing obstructions, trauma, and nasal growths can be corrected at an earlier age.

Often, it is the patient's decision to seek surgery to correct nasal problems or shape. This desire is the premise on which a plastic surgeon may suggest a rhinoplastic procedure. Usually considered as an elective, cosmetic procedure, rhinoplasty may not be covered by insurance. An occluded airway that has caused diminished airflow, snoring, etc., may require a septoplasty (reconstruction of the septum). Often the occlusion is secondary to a congenital disease or trauma related anomaly and will likely be covered by insurance. Two simultaneous procedures are often performed to correct both problems to prevent the patient from undergoing anesthesia twice and to combine postsurgical recuperations. With either procedure, the surgeon will often perform osteotomies (small bone incisions) to restructure the nasal bones at the bridge of the nose. As in most plastic surgery procedures, a good psychological evaluation is needed, along with in-depth discussions about realistic postoperative expectations.

Nasal anatomy

A pyramid-shaped structure, the nose consists of cartilage and bones. It can be divided into upper, middle, and lower thirds. The long, upper third is

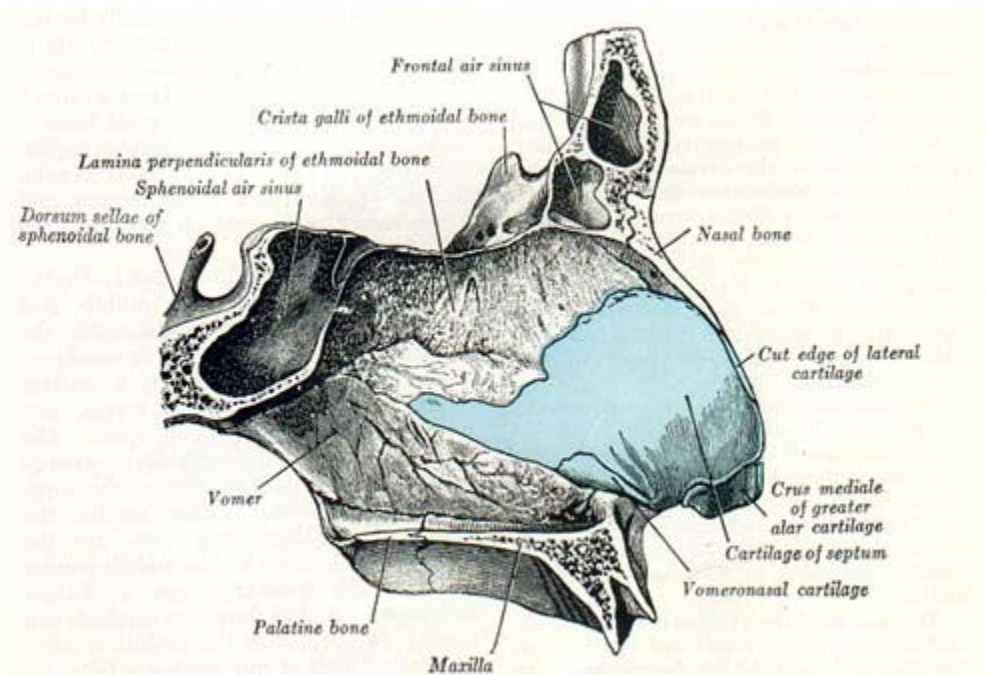


FIG. 15-6.—Bones and cartilages of septum of nose. Right side.

comprised of two nasal bones and nasal processes of the maxilla. Two upper lateral cartilages form the frame of the middle third. Two alar cartilages form the lower third. They are divided by the columella nasi, producing the two nares, which are used for air exchange. Supporting the entire structure is the nasal septum.

Septal deviation results in occluded nares, preventing the free flow of air. Loss of the septum causes the nose to collapse onto the face. Congenital anomalies, such as bilateral or facial clefting, can leave the septum fully exposed.

Anesthesia for plastic nasal procedures

Rhinoplasty is often done under local anesthesia or monitored anesthesia care (MAC) and is same-day surgery. Lidocaine with epinephrine (1:200,000 or 1:100,000) will be used for hemostasis and pain management. A cocaine 4% topical solution may be used for vasoconstriction, although many surgeons are now prescribing Afrin[®] or a comparable nasal spray 30 minutes before surgery, then once the patient is on the surgical table. As does cocaine, Afrin diminishes the chance of hypertension intraoperatively.

If the patient is particularly apprehensive or if it is the surgeon's preference, general anesthesia may be used. It may result in more bleeding and a greater chance of displacement post-anesthesia, but many find that it is the anesthesia of choice for patient comfort. When general anesthesia is used, cocaine (4% or 10%) is used as a topical anesthetic and a means of hemostasis, although, as stated, many are turning to Afrin or similar products for the same results. At the end of surgery, the surgeon or anesthesiologist will suction the patient's stomach to prevent vomiting due to blood in the stomach.

Surgical intervention

Rhinoplasty is often sought to minimize the size of the "hump" of a nose. To reduce the hump and size of the nose, four stages of surgery must be performed. The hump must be removed and the nose narrowed. Then, the nose must be shortened and the tip reconstructed.³ The goal of rhinoplasty is to improve overall appearance by reshaping the underlying framework of the nose. The overlying skin and subcutaneous tissues are then redraped over a new framework.⁴

This procedure may be done by a closed or open method. In the closed method, a small incision is made between the alar and lateral cartilages. The instruments are inserted through the incision and manipulated by feeling for the appropriate anatomical landmarks. A closed rhinoplasty results in less swelling and scarring than an open procedure. There are also fewer complications.

In open rhinoplasty, a small incision is made at the base of the columella nasi, degloving the tissue from the cartilage and bone. The benefit is to enable the surgeon to operate with a direct view. Open rhinoplasty was developed to correct the nasal tip, which is difficult to repair by the closed method. This procedure is often associated with increased swelling and internal scarring. The external nasal skin will often scar and not move naturally on the face. External and internal splinting can lessen many of these side effects.

People with thick, oily skin are not good candidates for certain types of rhinoplasty.² Thick skin may not shrink to fit the new nasal structure, making it is more difficult to obtain a good result.

Patients often come to a plastic surgeon complaining of a crooked nose and/or the inability to breathe through one or both nostrils. These problems are caused by a deviated septum. There are too many types of deviated septum to discuss, but most can be corrected by a septoplasty, the removal of cartilage that lies between the mucous membrane and perichondrium. In this procedure, the septum is incised and the tissue is separated. The cartilage is incised and the mucous membranes, elevated. The deviated cartilage and bone are removed. The mucous membranes are separated from the septal base. “The perpendicular plate of the ethmoidal sinus as well as the vomer may be removed.”⁵



Incised cartilage is often saved and used as a graft to help to produce a straighter alignment of the external nose. To improve the shape or air space above the innermost portion of the septum, the surgeon sometimes simply mobilizes the septum and moves it to the correct position. Often, the only thing holding the septum at this point is mucosa. Internares splints, such as the Doyle,TM or mucosal packing are used to maintain the new septal alignment, as cartilage maintains a memory.

To straighten deviated nasal bones, the bones are cut loose from the septum, the septum is shortened, and the nasal bones are fractured and reshaped (an osteotomy) to form a straight dorsum in the midline of the face.⁶ To hold the bones in place, they are splinted externally and internally. Bruising under the eyes is common after osteotomy.

Postoperative care

The nose is packed with gauze coated with an antibiotic cream. One of several types of external splint is applied. One type is heated and custom fit to the patient’s nose. A hand-molded splint can be shaped by the surgeon and taped onto the patient’s face.

Ice can be applied to the nose in the operating room to decrease swelling and diminish bruising. A drip pad is placed under the nose. To prevent further trauma to the nose, a nasal dressing holder is recommended, e.g., holders manufactured by Dale Medical Products, (Plainville, MA). The holders are an alternative to adhesive tape which may cause skin irritation, allergic reactions or excoriation of sensitive facial tissue. These holders use ear loops to secure the holder that secures “mustache” dressing comfortable to the face and allows for more facial movement.

The patient is discharged with pain medication and the following instructions:

1. Keep the head elevated, sleeping on a minimum of two pillows
2. Place ice on the face (20 minutes on and 20 minutes off) for the first 48 hours Teach the patient that bruising and swelling will occur for 72 hours and that their face will reach the peak of edema and discoloration during that time and to expect to look worse tomorrow and the next day. Some surgeons recommend a homeopathic remedy called Arnica to diminish bruising. Arnica cream can be applied to the lower eye areas postoperatively, but PO Arnica has been associated with toxicity, hypertension, and other side effects. It is not recommended for use by this author.
3. Use a humidifier to keep the mouth and nasal passages moist. Explain that the packing will cause them to breath through the mouth and that swallowing will be difficult, because the nasal passage is blocked. Advise them to enforce good oral hygiene while the packing is in.
4. Change the mustache dressing PRN and expect slight bleeding for the first 48 to 72 hours. Notify the surgeon of excessive bleeding, indicated by the streaming of blood.
5. Their sense of smell will be diminished but will return, once the packing is removed.
6. Do not bend over. Patients must wash their hair by bending backwards (as in a beauty salon).
7. Do not lift, strain, or pursue activities that could result in trauma to the nose.
8. Do not blow or rub the nose.
9. Since blood was swallowed during surgery, do not to panic if vomiting old blood or have dark stools for a day or two.

At the first postoperative visit (24 to 48 hours postoperatively or as directed by the surgeon), the packing is removed and the bones are checked for alignment. Once the packing is removed, saline nasal sprays, such as Ocean, TM may be used to moisten nasal passages. The use of humidifiers should continue for several weeks. Encourage the patient to use pain medication and to take it before coming to the surgeon's office to have the packing removed.

After the packing is removed, the patient may clean the entrances of nares with Q-tips TM dipped either in an antibiotic ointment or a mixture of H₂O and hydrogen peroxide.

Splints are left on for three to five days and gently removed by the surgeon. Dermal breakouts and clogged pores may be found under the external splint. Inform the patient to purchase a granulated skin cleanser preoperatively to clean the nose after this splint is removed. Teach the patient to cleanse the area gently with this scrub until normal skin appearance has returned. Emphasize to the patient that, although acute swelling is gone, the nose will remain swollen for 6 weeks, gradually subsiding to normal over the next year. The nose can be gently blown about two weeks after surgery.

At the 6 week checkup, the patient is instructed to massage the skin on the bridge of the nose gently to keep the area from scarring. The surgeon will determine if the patient can participate in strenuous or potentially traumatic activities at this time. At the 6 month checkup, pictures are taken. Often patients will want to see their “before” photos, so they can compare the results to their presurgical nose.

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