

# RHINOPLASTY

### **INTRODUCTION**

The term "rhinoplasty" refers to surgery performed to alter the structure of the external nose. It is commonly referred to as a "nose job". When combined with surgery on the nasal septum – it is referred to as a "septorhinoplasty." This may be performed for purely cosmetic reasons (appearance), purely functional reasons (to breathe better), or both. Rhinoplasty also may be performed with turbinate surgery or endoscopic sinus surgery. It may also require harvesting cartilage or bone from various sites, such as the ear or rib, to graft to the nose.

The earliest recorded rhinoplasty was 1700 years ago. This is when Egyptian surgeons attempted to repair nasal fractures with plugs of linen in grease. The earliest recorded nasal reconstruction was in 600 BC. This is when Indian surgeons attempted to reconstruct noses amputated in punishment for alleged crimes.

## INDICATIONS

Common indications (reasons) for surgery include:

- Obstructed breathing (functional)
- Unsatisfactory appearance
- Birth defects such as cleft deformities causing visible malformation and impaired breathing
- Nasal trauma causing unsatisfactory breathing or appearance
- · Acquired deformities due to tumor removal or infection

# PROCEDURE

Rhinoplasty may be performed under different types of anesthesia depending on physician preference. This can include local, intravenous (i.e. "twilight"), or general anesthesia. Incisions are made to allow access to the underlying cartilage and bone. When these incisions are hidden completely inside the nostrils, it is referred to as a "closed" rhinoplasty. Often, a small incision may need to be performed at the base of the external nose to improve access. In this case it would be an "open" rhinoplasty.

Depending on the anatomy of the nose, cartilage and bone may need to be removed, rearranged, or added. It is not uncommon for a nose to require reduction in one area and augmentation in another. Suture techniques can alter the shape of the cartilage in a favorable manner.

For many years, extensive cartilage removal ("reduction rhinoplasty") was the norm. Unfortunately, this led to complications and high rates of nasal obstruction. In recent years, the trend has been towards cartilage augmentation (addition) as much as reduction. This results in a more natural appearance, improved airflow and higher satisfaction rates. Cartilage grafts to augment the nose are often taken from the nasal septum itself. This is true especially if the patient has not had a prior rhinoplasty ("primary rhinoplasty"). Patient with a previous rhinoplasty ("revision rhinoplasty") may need cartilage from another site. This can come from a patient's own ear or rib, or even from a cadaver. Moreover, further reshaping may need to be performed with sutures to the cartilage. "Osteotomies" are deliberate fracturing of the nasal bones. This is often performed to straighten or narrow the nasal bones themselves.

At the end of the procedure, the nose is typically taped and a cast may be applied. Plastic sheets and/or packing may also be temporarily placed inside the nose.

### RISKS

Studies have shown that most rhinoplasties heal without significant complication and patient satisfaction is high. However, there are potential complications that every rhinoplasty candidate should know. These include (but are not limited to):

- Complications of anesthesia
- Epistaxis (nosebleeds)
- Septal perforation (hole in the septum)
- Unsatisfactory appearance: over-resection, under-resection, asymmetry and abnormal scarring
- Need for revision surgery
- Infections
- Nasal obstruction

#### BENEFITS

The primary benefit of a cosmetic rhinoplasty is the improved appearance of the external nose. This may significantly help the patient's self-esteem. Improved nasal breathing is the primary benefit of a rhinoplasty performed for functional reasons (See Functional Septorhinoplasty).





Before

After

#### SUMMARY

Rhinoplasty is a procedure to improve the form and/or function of the external nose. It may entail a variety of techniques. This depends on the patient's goals, anatomic problems, and surgeon's preferences. The procedure may be done with the patient awake or under anesthesia. It can be a primary surgery or revision surgery. It may involve reducing or adding tissue (or both). It may be performed "closed" or "open." The length of recovery may vary depending on the extent of surgery. Patients should enter into discussions with their surgeon with specific goals in mind. They should understand the procedure itself, its risks and its benefits after consulting with their surgeon. It is helpful to have a surgeon with extensive training in both the appearance and function of the nose. This way one is not sacrificed to achieve the other.

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