

RHINOPLASTY (FUNCTIONAL)

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INTRODUCTION

The term “rhinoplasty” refers to plastic surgery that involves making changes to the internal and external structures of the nose. While this may be performed for purely cosmetic reasons to improve the appearance, often the primary or concomitant goal is to restore adequate nasal breathing, and is then referred to as a “functional rhinoplasty”. This is separate from a septoplasty, which involves only repair of the internal wall that divides the nasal cavities, or from a “cosmetic rhinoplasty”, which is only concerned about the appearance. A “functional rhinoplasty” typically involves repair of the “nasal valves”, which are the internal nostrils, and can be congenitally narrow, collapsed, or scarred from prior surgery.

INDICATIONS

The indications for a functional rhinoplasty include, but are not limited to:

- Obstructed nasal breathing (functional)
- Nasal injury (trauma) causing unsatisfactory breathing
- Nasal birth defect impairing function
- Acquired deformity due to trauma, tumor or infection
- Narrowing, collapse or stenosis of the nasal valves (nostrils)



PROCEDURE

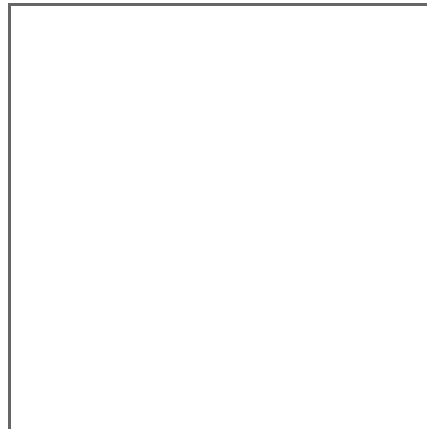
A functional rhinoplasty may be performed under different types of anesthesia depending on patient and physician preference, including local, intravenous sedation (i.e. “twilight”) or general anesthesia. Incisions are made to allow access to the underlying cartilage and bone. When these incisions are hidden completely inside the nostrils, the procedure is referred to as “closed”. Often, a small incision may need to be performed at the base of the nose to improve exposure, in which case it would be an “open” functional rhinoplasty.

Depending on the needs of the patient, cartilage and bone may need to be grafted to help gain support. These cartilage grafts are often taken from the nasal septum itself during the “septoplasty” portion of the procedure, although sometimes ear or even rib cartilage may need to be harvested. Further reshaping or grafting may need to be performed with sutures to the cartilage.

“Osteotomies” – or deliberate fracturing of the nasal bones – may often be performed to straighten the nasal bones themselves.

Although cartilage grafting remains the most common type of functional rhinoplasty, procedures to reshape the nostrils (ex: a “z-plasty”) or use sutures to suspend the nostrils upward have grown in popularity.

At the conclusion of the procedure, the outside of the nose is often taped and some form of external cast may be applied. Plastic sheets and/or packing may also be temporarily placed inside the nose depending on the procedure and the surgeon’s preference.



RISKS

Studies have shown that most functional rhinoplasties heal without adverse sequelae and the vast majority of patients are able to breathe better. However, there are potential complications that every surgical candidate should be aware of before proceeding with the procedure, and these include (but are not limited to):

- Complications of anesthesia
- Epistaxis (nosebleed)
- Septal perforation (hole in internal wall of the nose)
- Unsatisfactory appearance
- Revision surgery
- Infections
- Worsening (rather than improvement) in the nasal breathing.

BENEFITS

An improvement in nasal breathing is the primary benefit of a rhinoplasty performed for functional reasons. The procedure may also straighten the nose, repair post-traumatic or congenital deformities, and improve the appearance.

SUMMARY

A functional rhinoplasty is a procedure to improve the function of the external nose, and may entail a great range of techniques depending on the patient's goals, the anatomic problems, and the surgeon's preferences. The procedure may be done with the patient awake or under anesthesia, as a primary surgery or revision surgery, may involve cartilage grafting, may be performed "closed" or "open", and may involve a brief or protracted recovery. Patients should enter into discussions with their surgeon with specific goals in mind, and should understand the procedure itself, its risks and its benefits after consulting with their surgeon.



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