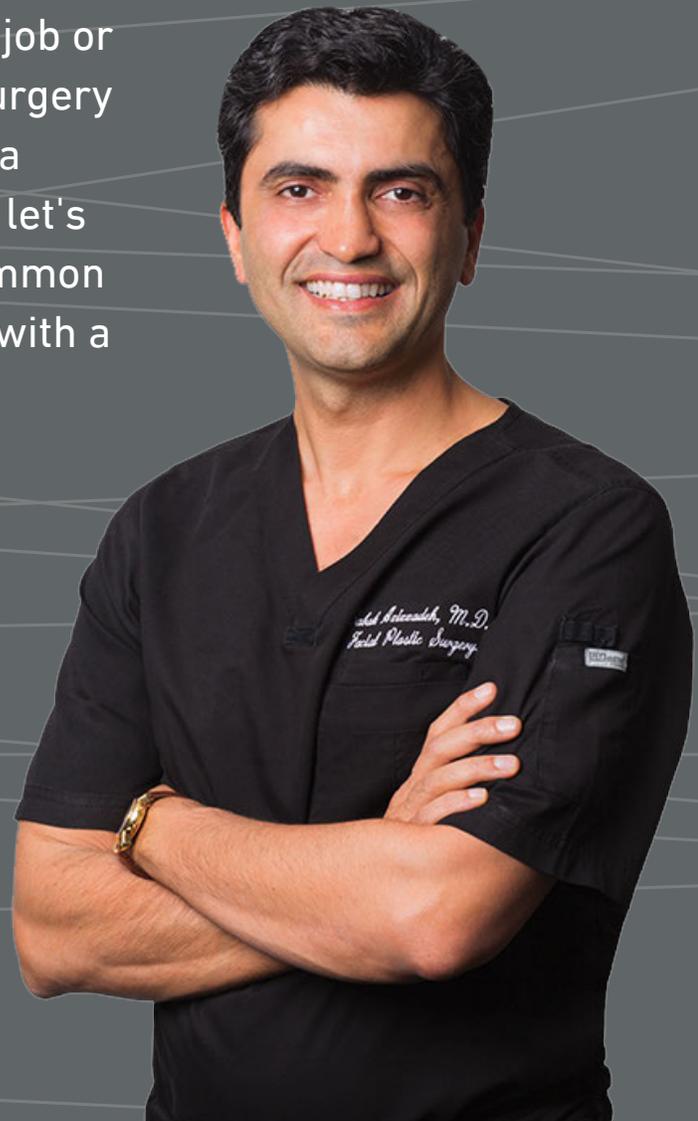
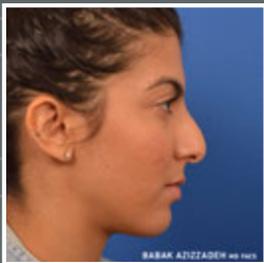


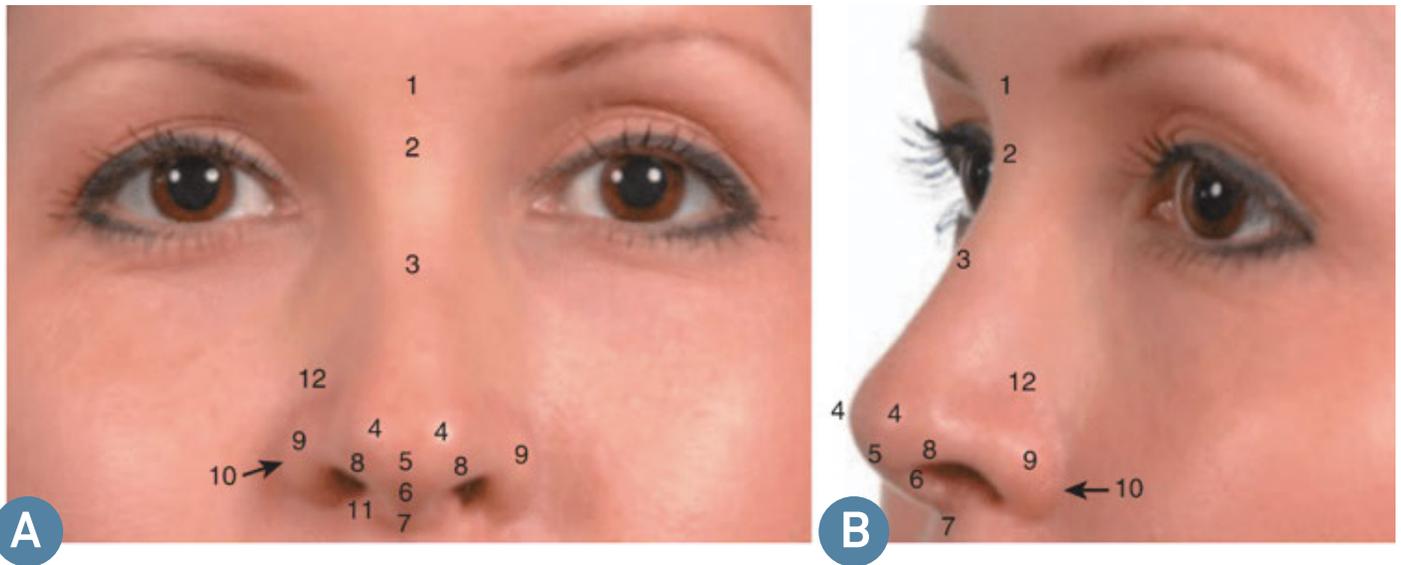
BABAK AZIZADEH MD FACS

Understanding Nose Irregularities Before Rhinoplasty Surgery

Rhinoplasty, also referred to as a nose job or nose surgery, is a common cosmetic surgery used to reshape the nose and address a wide range of nose irregularities. Now, let's take a look at some of the most common nose irregularities that can be treated with a rhinoplasty procedure.



Nasal Anatomy: Knowing The Parts of Your Nose Prior To Rhinoplasty



- 1. Glabella:** Skin between the eyebrows and above the nose and the area on the frontal bone between the eyebrow ridges.
- 2. Nasion:** Midline, bony depression between the eyes; the frontal and two nasal bones meet the nasion, and it is located just below the glabella.
- 3. Rhinion:** Anterior tip at the end of the nasal bones' suture.
- 4. Supratip Breaks:** Areas of the nasal bridge located just above the nasal tip; the tip moves slightly forward to create a "break" in the nasal profile, resulting in a profile that is generally viewed as attractive in women.
- 5. Infratip Lobule:** Lowest portion of the nasal tip; the infratip lobule is located above the nostril openings.
- 6. Columella:** Skin and cartilage bridge between the nostrils; the columella separates the left and right sides of the nostrils.
- 7. Nasolabial Angle:** Angle between the line drawn through the midpoint of the nostril aperture and a line drawn perpendicular to the Frankfurt horizontal plane while intersecting where the nasal septum and upper lip meet (subnasale).
- 8. Soft Tissue Triangles (Facets):** Small areas not supported by cartilage; soft tissue triangles provide a transition from the nostril and alar rim to the nasal tip.
- 9. Alar Lobules:** Side walls of the nasal base.
- 10. Alar Base – Facial Groove:** 3D shape that illustrates the relationship between the medial cheek, nostril, columella and upper lip.
- 11. Nasal Sill:** Floor of the nostril aperture.
- 12. Supraalar Crease:** Deep crease on the lateral surface of the external nose.

Nasal Analysis Prior to Rhinoplasty

Nasal analysis refers to the period when a rhinoplasty patient and facial plastic and reconstructive surgeon meet to discuss the procedure. At this point, both the patient and Dr. Azizzadeh can learn from one another, determine the best course of action and establish realistic outcomes for treatment.

As part of nasal analysis, Dr. Azizzadeh first analyzes a patient's history. He or she reviews a patient's health history, family history, medications, prior hospitalizations and information about any previous surgeries.



Next, the Dr. Azizzadeh analyzes the patient's nasal anatomy. The nasal anatomy is a crucial part of a rhinoplasty procedure. As such, Dr. Azizzadeh performs a deep analysis of the patient's nasal anatomy. This ensures that Dr. Azizzadeh can determine how to help the patient achieve a natural-looking and beautiful nose that complements his or her facial features.

Dr. Azizzadeh then evaluates the patient's nasal proportions. He will analyze the nasolabial, nasofrontal and nasomental angles of the patient's nose. This enables him to understand the relationship between the patient's nose and chin.

A physical examination is a requirement as part of nasal analysis, too. The examination begins with an assessment of the thickness of the skin on the patient's nose and the nose's soft tissue envelope. Furthermore, examination of the nasal septum involves both external and internal assessment. Intranasal examination with a headlight and nasal speculum may be used to assess the integrity of the patient's septum and the degree of septal deflection.

Photographic documentation also is an important part of nasal analysis. The use of photographs helps with surgical planning, counseling, patient self-assessment and documentation for insurance and medical reasons.

Digital photographs enable rhinoplasty surgeons and rhinoplasty patients to view the patient's nose together. The patient can use the photographs to identify undesirable nasal features and point them out to Dr. Azizzadeh.

Imaging tools often are used to help the patient visualize his or her facial appearance after rhinoplasty surgery. The tools allow Dr. Azizzadeh to take a patient photograph and modify the image to show the patient what he or she will look like following surgery. Thus, imaging helps the Dr. Azizzadeh and patient determine which nasal irregularities to correct during a nose job.

The ultimate goal of nasal analysis is to help a rhinoplasty surgeon understand what a rhinoplasty patient wants to get out of surgery. Nasal analysis enables Dr. Azizzadeh to assess a patient's nose, as well as his or her eyes, cheeks, chin and other facial features.

Following nasal analysis, Dr. Azizzadeh crafts a personalized rhinoplasty treatment plan. He provides full details about what the patient should expect from rhinoplasty surgery and responds to his or her concerns. By doing so, the Dr. Azizzadeh helps the patient make an informed rhinoplasty treatment decision.

Functional Nasal Abnormalities

A functional nasal abnormality causes nasal blockage, noisy breathing or snoring, decreased smell or taste, nosebleeds and/or recurrent sinusitis (inflammation of the nasal passages). Here are some of the most common types of functional nasal deformities.

- **Deviated Nasal Bones:** Occur when the bones and cartilage that divide the nasal cavity of the nose in half are off-center or crooked.
- **Fractured Nasal Bones:** Occur due to direct blows to the nose in contact sports or as a result of falls.
- **C-Shaped Deformity:** Refers to a severe deformity of the nasal septum that causes the nose to appear C-shaped.
- **Irregular Nasal Bones:** Occur when one side of the nasal bone is wider than the other, resulting in a crooked nose.
- **Nasal Bones Holding Septum Off-Center:** May occur due to broken nasal bones, broken septal cartilage or a congenital deviated nasal septum.
- **Traumatic Dorsal Hump:** Occurs due to trauma that causes the dorsal hump on the nose to appear more prominent than ever before.
- **Dorsal Saddling (On Cartilage, Bone or Both):** Occurs due to excess cartilage or bone that is inadvertently removed from the nose.
- **Angulated Dorsal Ridge:** Causes the top of the cartilaginous ridge to lean to the left or right.
- **Septum Deviated:** Refers to sideways displacement of the wall between the nostrils.
- **Spurs:** Refers to abnormal bone growths on the nose that develop due to repetitive stress.
- **Caudal End Deflected Blocking Vestibule:** Refers to a blockage of the caudal septum and may cause both an aesthetic distortion of the nasal base and nasal obstruction.
- **Floor Obstruction:** Impacts an individual's ability to breathe through the nose.
- **Nasal Valve Collapse (Internal or Alar):** Refers to any weakness or narrowing of the nasal valve.
- **Middle Vault Narrowing or Collapse:** Occurs when the middle vault of the nose becomes too narrow or collapses.
- **Loss of Tip Support:** Occurs due to damage to the nasal tip, one of the nose's most prominent features.
- **Collapsed Lobule with Valve Collapse:** Occurs due to a congenital malformation within the nose, aging or injury.
- **Avulsed/Depressed ULCs:** Refers to upper lateral cartilage (ULC) that has been pulled away from the nose or causes a visual depression of the midvault on one side of the nose.
- **Soft Lobular Cartilage:** Occurs due to a traumatic injury that damages the soft lobular tip of the nose.
- **Intranasal Synechia(e):** Refers to a nasal adhesion that usually is a minor complication of nasal or sinus surgery and nasal packing.
- **Inferior Turbinate Hypertrophy:** Refers to enlargement of the inferior turbinate.
- **Middle Turbinate Hypertrophy or Concha Bullosa:** Refers to enlargement of the middle turbinate or the development of a pneumatized (air-filled) cavity within the middle turbinate.
- **Septal Ulcer:** Refers to an ulcer that develops due to nasal surgery, repeated nasal trauma, toxic exposures, chronic cocaine use or chronic nasal spray use.
- **Septal Perforation:** Refers to a hole or fissure in the nasal septum.
- **Nasal Polyposis:** Refers to the development of nasal polyps, non-cancerous growths that fill the lining of the nasal passages or sinuses.
- **Retraction of Columella:** Occurs when the nasal tip appears to be "pulled-in" when viewed from the front of a person's face.

- **Acute Nasolabial Angle:** Occurs when the nasolabial angle appears narrow; this often takes place due to aging.
- **Premaxillary Deficiency:** Refers to a deficiency that affects the nasal base, upper lip and nasolabial angle.
- **Cleft Lip Nasal Deformity:** Refers to a cleft lip that affects the nasal cartilage.
- **Airway Obstruction:** Refers to any nasal airway obstruction caused by a deviated septum, enlarged turbinates, nasal polyps, tumors, nasal congestion or enlarged adenoids.

Cosmetic Nose Abnormalities

A cosmetic abnormality of the nose impacts the look of the nose, but it does not affect the nose's overall functionality. Here are some of the most prevalent cosmetic nasal abnormalities.

- **Dorsal Hump:** Refers to a convexity to the bridge of the nose that results in a bump or hump on the nose.
- **Angulated Dorsal Hump:** Refers to a convexity to the bridge of the nose that results in an angled bump or hump on the nose.
- **Dorsal Curved Septum:** Refers to a deviated dorsal septum that appears curved.
- **Dorsal Ridge:** Refers to a ridge that affects the midline prominence of the nose, extending from the nasal root to the tip.
- **Acute/Deep Nasofacial Angle:** Occurs when the nasofacial angle is too narrow.
- **Obtuse Nasofacial Angle:** Occurs when the nasofacial angle is too wide.
- **Poor Tip Support:** Occurs due to nasal tip damage.

Nasal Tip Abnormalities

A nasal tip abnormality refers to any deformity that affects the overall appearance of the nasal tip. Here are some of the most common nasal tip abnormalities.

- **Supratip Fullness:** Refers to any deformity that affects the nasal region where the inferior region of the nasal dorsum meets the tip of the nose; a supratip fullness deformity may occur due to a botched rhinoplasty.
- **Bulbous Tip:** Refers to a condition that causes the tip of the nose to appear wide and round.
- **Asymmetric Tip:** Occurs due to the presence of congenital asymmetrical cartilages in the nasal tip.
- **Broad Tip:** Refers to a condition that causes the tip of the nose to appear narrow.
- **Bifid Tip:** Refers to a malformation that causes the nasal tip to appear divided into two parts.
- **Amorphous Tip:** Refers to a nasal tip with a wide, dome-like arch of the lower lateral cartilage.
- **Infantile Tip:** Occurs due to lesions on the nasal dorsum.
- **LLCs Asymmetric:** Refers to lower lateral cartilages (LLCs) that appear too wide, long or thick.
- **Concave LLC:** Occurs due to an LLC that appears to curve inward.
- **Bossa:** Refers to nasal cartilage that is weakened and curls.
- **Retracted Ala:** Occurs when the ala retracts after a previous rhinoplasty.
- **Nostrils Wide:** Refers to nostrils that appear asymmetrical or too wide.
- **Wide Alae:** Occurs when the alae become too wide.
- **Alar Base Flare:** Occurs when the ala has a significant curve.
- **Unusual Cartilage Bump:** Refers to a cartilage bump or hump on the side of the nose.



Columella Abnormalities

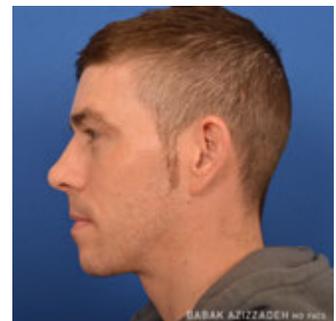
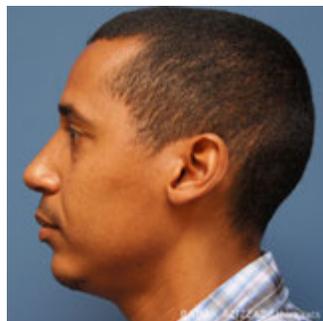
The columella is a column of tissue that sits between the two nostril openings. Here's a closer look at some of the most common columella defects.

- **Crooked:** Causes the columella to appear slanted.
- **Elongated Septum:** Refers to a defect that causes the septum to appear elongated.
- **Hanging:** Refers to an overly prominent columella.
- **Retracted:** Occurs when the nasal tip appears "pulled-in," causing only a small portion of the columella to be visible from a frontal perspective.
- **Short:** Refers to a condition that causes the columella to appear too short for the face.
- **Long:** Refers to a condition that causes the columella to appear too long for the face.
- **Twisted:** Causes the columella to appear asymmetrical.
- **Short Infratip Lobule:** Occurs when the infratip midline of the nose appears too short.
- **Medial Crural Buckle:** Occur when the medial crural buckle, which impacts nasal tip projection.
- **Medial Crural Shift Caudally:** Occur when the medial crural shift onto the caudal septum.
- **Acute Nasolabial Angle:** Occurs when the nasolabial angle appears too narrow.
- **Bifid:** Affects the caudal septum and causes two separate columellae to form.

Dorsum Abnormalities

Dorsum abnormalities refer to any deformities of the nasal bones or ULCs of the dorsum. Here are some of the most common dorsum abnormalities.

- **Dorsal Irregularities:** Refer to any irregularities that affect the nasal dorsum.
- **Dorsal Saddle:** Occurs if excess cartilage is removed from the nose during a prior rhinoplasty procedure.
- **Dorsum Wide:** Refers to a nasal dorsum that appears too wide.
- **Open Roof Deformity (Central, Right, Left):** Refers to a nasal dorsum that is wide nasal and not fully closed.
- **Thick Skin:** Causes the nose to appear wide from a frontal perspective.
- **Thin Skin:** Causes the nose to appear narrow from a frontal perspective.
- **Skin Irregularities:** Refer to lesions and inflammation of skin of the nasal tip and dorsum.
- **Weak Chin:** May cause the nose to appear large.



Nose Abnormalities and How To Correct Them



No two nose abnormalities are exactly alike. Much in the same vein, how nose abnormalities are treated varies based on their severity, the areas of the nose that are affected and other factors.

Here are some of the most common nose abnormalities, along with procedures designed to correct these issues.

Acute Nasal Fracture

Acute nasal fractures may cause nasal deformities or airway obstructions. They may occur due to blunt trauma to the nasal bones. Or, previous nasal surgery may lead to acute nasal fractures.

Closed reduction is one option to treat an acute nasal fracture. This involves the use of a Boies nasal elevator to restore the nasal length. To repair a septal fracture, Asch forceps or a Boies elevator may be used as well.

Asymmetric Nose

An asymmetric nose is used to describe all conditions that cause a deviation of the nasal pyramid from the median line. It may be genetically inherited or the result of traumatic injury to the nasal bone or cartilage. In some instances, an asymmetric nose may develop following a prior nose procedure.

An asymmetric nose appears crooked. The nasal tip is caved in, and the nasal septum also may be affected.

Surgery is commonly used to address an asymmetric nose. With surgery, an individual can correct a crooked nose or repair one side of the nose.

Bulbous Tip

A bulbous tip occurs when the nasal tip is too round or too wide. It may occur due to poorly defined hypertrophic lower lateral cartilages, a round dome shape, heavy soft-tissue coverage or limited cartilage strength.

Bulbous tip rhinoplasty enables an individual to refine and reconfigure the small cartilage edges on the nasal tip. It involves the use of various suturing techniques, resulting in a natural-looking nasal tip.

Dorsal Humps

A dorsal hump refers to an unwanted bump on the nasal bridge. It may be unnoticeable from a frontal view. However, some individuals want to have a dorsal hump removed for a straighter, smoother bridge as seen from a lateral perspective.

Surgery to correct a dorsal hump commonly is referred to as "reductive" rhinoplasty. It involves reducing cartilage and/or bone in the nose. As a result, a patient can use this procedure to correct a dorsal hump and reduce the size of the nose.

Hanging Columella

A hanging columella refers to a condition that affects the bridge of tissue that separates the nostrils at the nasal base. It occurs when the more than 4 mm of the nostril is visible as soon from a profile view. Meanwhile, a hanging columella may occur due to genetics or an overly long septum that pushes the columella downward.

Columelloplasty surgery is used to address a hanging columella. It involves adjusting a hanging columella by trimming the membranous columella and cartilaginous columella. Then, the columella is tucked inward to ensure it will no longer hang.

Common Nose Procedures

There are many different types of nose procedures. These include:

- **Primary Rhinoplasty:** Reshapes the nose to improve an individual's facial appearance.



- **Reconstructive Rhinoplasty:** Treats skin cancer, accidents, nasal collapse or trauma to the nose.
- **Revision Rhinoplasty:** Restores the nasal function or corrects the results of a prior rhinoplasty.
- **Osteotomy Rhinoplasty:** Involves cutting excess bone to treat a nasal deformity.
- **Septoplasty:** Straightens and repositions the septum in the middle of the nose.

Conclusion

For those who want to correct nose irregularities, rhinoplasty surgery may prove to be a viable option. Rhinoplasty is safe and effective, and to date, has helped many people correct nasal irregularities.

Dr. Babak Azizzadeh of the CENTER for Advanced Facial Plastic Surgery in Los Angeles is a globally recognized facial plastic and reconstructive surgeon. He possesses dual certification in head and neck surgery and facial and plastic reconstructive surgery, and his unique expertise helps him effectively treat nose irregularities. To find out more, please contact the **CENTER today at 310-657-2203** to schedule a rhinoplasty consultation with Dr. Azizzadeh.

