



Rhinoplasty

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Pimpri.

Case report

22 year old male presented with

- Nose deformity since birth
- Absent teeth in upper as well as lower jaw
- Known case of Bronchial Asthma

Clinical Features

- Patient had moderate saddle deformity of nose along with malar hypoplasia, absent upper and lower teeth with sparse scalp hair and eyebrow hair.

Family History

- Younger sister has similar features

Investigations

All Routine investigations were within normal limit

The features suggested the diagnosis of Hypohidrosis Ectodermal
Dysplasia

Surgery

- Rhinoplasty by Open Technique was done under general anaesthesia.
- Augmentation was achieved by Cartilagenous autograft harvested from 6,7,8 ribs on left side
- Lateral Osteotomy was done using 4 mm osteotome
- Tip reshaping was achieved by Interdomal, Transdomal and Tip-Septal sutures.
- Internal and External Nasal splintage was given after the surgery.

Pre-op Images



Post-op Images





Pre-operative



Post-operative

Discussion

Hypohidrosis Ectodermal Dysplasia

- Rare inherited multisystem disorder which typically affect hair, teeth, sweat glands and skin.
- Typical features include partial or complete absence of sweat glands causing lack of sweating, heat intolerance; abnormally sparse hair and absence and/or malformation of teeth.
- Features Also include facial abnormalities like prominent forehead, sunken nasal bridge, unusually thick lips, thin and dry hypopigmented skin over body but hyperpigmentation around eyes.
- Infants and children typically experience attacks of wheezing and breathlessness (asthma) and respiratory infections.

- X-linked and autosomal recessive trait.
- Usually fully expressed in males only.
- Incidence: 1 in 5000-10,000 newborns.

What is Rhinoplasty ?

- The term is greek in origin; Rhis : meaning Nose , Plassein : meaning to shape / to mould.
- It refers to a procedure in plastic surgery in which the structure of the nose is changed to correct the form and to restore the function of the nose.
- The change can be made by adding or removing bone or cartilage, grafting tissue from another part of the body, or implanting synthetic material to alter the shape of the nose.

Surface Landmarks



External Nasal Deformities

- Tip
 - Bulbous
 - Bifid
 - Overprojected
 - Underprojected
 - Tip ptosis
- Columella
 - Retracted
 - Deviated
 - Broadened
- Alar cartilage
 - Pinching/flaring
- Osseocartilagenous vault
 - Deviated
 - Bony/cartilagenous/both
 - Saddle
 - Bony/cartilagenous/both
 - Hump
 - Bony/cartilagenous/both
 - Tension nose

Classification of Saddle nose deformity

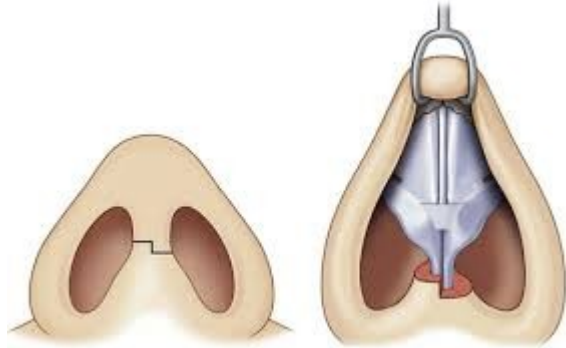
Type	Term	Description
0	pseudosaddle	There is a relative depression of the cartilaginous dorsum relative to the bony dorsum, but the septal support remains solid.
I	minor	A minor decrease in septal support occurs. There is some supratip depression and columella retraction.
II	moderate	Some collapse of the cartilaginous middle vault with columella retraction occurs. Loss of tip support results in reduced projection. Symptoms of nasal obstruction are common.
III	major	There is obvious depression and flattening of the middle vault. Damage to cartilaginous septal support causes a drop in the septal dorsum and roof. The nasal tip shows upward rotation.
IV	severe	There is a large septal deformity with the defect involving the bony vault, requiring structural reconstruction.
V	catastrophic	Massive defects requiring total reconstruction of the nasal structures

Common Deformities taken up for revision Rhinoplasty

- Polybeak
- Dropping tips
- Uncorrected broad nasal tip
- Irregularities on nasal dorsum

Types of Rhinoplasty

Open technique



Transcollumelar stairstep incision.

Closed / Endonasal technique:



Rhinoplasty was performed by Open Approach

Indications for Open Rhinoplasty :

- Extensive Revision
- Congenital deformity
- Severe nasal trauma
- Marked Tip Deformities
- Elaborate reduction and augmentation

Advantages of Open Approach

- Extensive exposure for both septal and rhinoplasty surgery
- Binocular vision
- Use of both hands
- Control of bleeding and diathermy
- precise placement and suturing of struts, battens and shield grafts
- Valve area preserved

Properties of Implant materials

- Noncarcinogenic and nonimmunogenic
- Not toxic
- Nondestructive , should not impede healing
- Physical properties match the local tissues
- Nonresorbable
- Easily available
- Cost effective easy to sterilize

Materials used as grafts for Rhinoplasty

1. Autografts - Septal cartilage, Auricular cartilage, Costal cartilage, Bone graft, dermis, deep temporal fascia
2. Homografts - Irradiated rib, pooled acellular dermis
3. Xenografts - Leather, duck's sternum, bovine cartilage
4. Precious metals - Titanium, gold, silver, metal alloys
5. Inert bioimplants - Coral, ivory
6. Synthetic compounds - Silicone • Teflon • Proplast • Gore-tex • Medpore • Mersiline

Complications of Rhinoplasty

- Hemorrhage
- Wound infection
- Septal haematoma.
- Septal abscess.
- Septal perforation
- Nasal obstruction
- Nasal deformity.

Thank You !

Case Report 1.

23 year old male presented with

- Complaints of difficulty in breathing since 2 years
 - More through the right nostril
- h/o RTA 2 years back
 - LOC +
 - Nasal Bleed +
 - CSF Rhinorrhea +
 - Diagnosed for nasal bone # and treated conservatively for the same 2 years back.

On Examination

- Patient had scar over radix with bony prominence on right side.
- Inner nasal valve narrowing +nt
- Rest of the findings

Investigations

All Routine investigations were within normal limits

Surgery

Patient underwent Rhinoplasty under GA

Sir , i could not find the name of the incision in “grabbs and smith” and the OT notes are not complete in the patient’s file . so i dont know how to describe the procedure.

Pre-op Images

Sir, i was able to trace the patient's phone no. and requested him to send his photographs. But he hasnt sent me the photos and isnt answering my calls anymore.

Post-op Images



