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DECISION MAKING IN INDIAN RHINOPLASTY :A CASE SERIES

Otolaryngology

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ABSTRACT

Introduction : Rhinoplasty is one of the most challenging proceduers in facial plastic surgery and consideration must be given to facial aesthetics and nasal function. Meticulous planning is essential to ensure the best surgical outcome. We tried to analyze few factors of Indian Rhinoplsty in ESIC Kalaburagi from january 2016 to September 2018 .Our aim is analyze patients profile who has undergone rhinoplasty in ESIC kalaburagi, the corrective surgeries and the results were discussed.**Materials and methods :** 30 patients who had rhinoplasty January 2016 to September 2018 at ESIC, Kalaburagi clinic underwent current study. Our study included 20 male patients and 10 females with age ranging from 18 to 45 years. Etiology, surgical methods, graft material, and result of surgery were analyzed.. Results: All the patients included in the study underwent Functional rhinoplasty with septal reconstruction. Ill defined nose was observed in 2 cases, Contour deformity is seen in one case. We noticed Deviated nose 18 patients. Tip deformities was seen in majority of cases and Cleft lip nose was seen only in 2 patients. Septal reconstruction was done by extra corporeal septoplasty in 18 cases. Augmentation Rhinoplasty was done in 5 patients. We noticed congenital deformity in 2 cases and Rhinoplasty was done for cosmetic purpose in 3 patients. We used Septal cartilage in one patient. Conchal cartilage is taken in 4 patients and Rib was used in one patient. Plastipore implant was used in single patient. Complications like infection, resorption, warping of graft were not noticed in our study **Conclusion:** Our surgical methods have shown satisfactory results both functionally and aesthetically with low complication rates. Though Rhinoplasty is a cosmetic surgery, most of the Indian population are not aware of the procedure and they are ready to undergo surgery only if they have associated functional problem of the nose .

KEYWORDS

Rhinoplasty, functional rhinoplasty, cartilage grafts

Introduction :
Rhinoplasty is one of the most challenging procedure in facial plastic surgery and consideration must be given to facial aesthetics and nasal function. Meticulous planning is essential to ensure the best surgical outcome.[1] These days, people are becoming concerned cosmetically and so it is difficult to achieve consistently excellent results as the surgery is on the most prominent part of the face and the aesthetic outcome is visible to all. Additionally rhinoplasty is an operation of judgement rather than technique and has a long learning curve.[2]

In the current article, the spectrum of patients seeking rhinoplasty at our institute, the corrective surgeries and the results were discussed.

Materials and methods :
This Study is carried out in ESIC medical college hospital Kalaburagi from January 2016 to September 2018. Total 30 patients who underwent rhinoplasty were included in study.

Assessment:[1]
1) Consideration of patients, motivations, anxieties and expectations
2) Analysis of the face
3) Analysis of the nose
4) Examination
5) Photography

Clear history of patient complaint and symptoms was taken. Structural, congenital, traumatic,cosmetic and functional issues were addressed. The past history of nasal surgery, sino-nasal disease, diabetes, anticoagulant medication, smoking was taken.

Analysis of nose
External nose
1) Skin quality
2) Deviation
3) Length of the nose
4) Tip projection
5) Lip chin relationship
6) Dorsum
7) Tip configuration
8) Tip rotation
9) Columellar show

INTERNAL NOSE
Examination of internal nasal cavity is essential component of assessment of rhinoplasty in the identification of abnormalities and assessment of donor cartilage sites. Anterior rhinoscopy and nasal endoscopy was performed. Inspection and palpation of nose was done for all patients.

Inspection
1) Nasal septum
2) Lateral nasal wall and turbinates
3) Internal nasal valve
4) Cottles maneuver

Palpation
1) Skin
2) Irregularities
3) Nasal bones
4) Tip recoil
5) Alar cartilage
6) Spine and septum

The study was done in accordance with ethical guidelines and informed consent of patients was taken. Our study included 20 male patients and 10 females with age ranging from 18 to 45 years.

The photograph views taken were frontal, left and right lateral, left and right oblique and basal views.

CT scan paranasal sinuses was done for all patients.

Surgical plan was decided after preoperative assessment in accordance with above guidelines.

RESULTS
Our study included 20 male patients and 10 females with age ranging from 18 to 45 years. Functional rhinoplasty was done in all cases that is we restored the normal function of nose and cosmetic appearance.

INDICATIONS
Ill defined nose was observed in 2 cases.
Contour deformity is seen in one case.
Deviated nose was seen in 18 patients.
Tip deformities were seen in majority of cases
Cleft lip nose was seen in 2 patients.

TYPE OF SURGERY
- Extracorporeal septoplasty was done in 18 cases

- Augmentation Rhinoplasty was done in 5 patients.
- We noticed congenital deformity in 2 cases
- Rhinoplasty was done for cosmetic purpose in 3 patients

TYPE OF GRAFT

Cartilage : Septal cartilage was harvested in one patient. Conchal cartilage is taken in 4 patients. Rib was used in one patient.

SIALASTIC – Plastipore was used in single patient

Complications like infection, resorption, warping of graft were not noticed in our study.

REPRESENTATIVE CASES

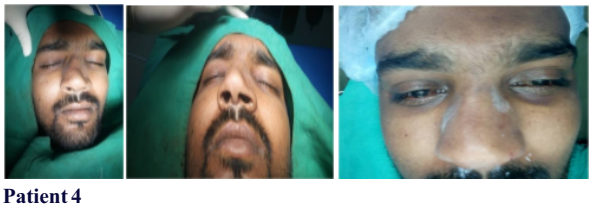
Patient 1: This patient had significant deviation of dorsum of nose to left. We did median and lateral osteotomies to correct deformity. Septoplasty is done for septal deviation.

Patient 2 :

This boy underwent septoplasty with osteotomies. Nasal deformity was corrected.

Patient 3 :

This patient presented to us with significant depression on the left side of nose. On examination there was absence of supralateral cartilage and weak lower lateral cartilage. Open rhinoplasty with osteotomies was done. After supraperichondrial subperiosteal flap elevation septum approached extracorporeally and septal flap was elevated on both sides. For augmentation, we harvested septal cartilage and ear cartilage.



Patient 4

This 30 year old patient presented with cleft nose deformity. Septal correction was done and osteotomy was performed, then ala support graft was placed and deformity is corrected.

Patient 5

In this patient augmentation rhinoplasty was done using plastipore

Patient 6:

This lady has history of nasal deviation corrected by septoplasty. The deformity noticed was depressed supratip and dorsum. Supratip depression was corrected using septal cartilage graft and ear graft.

Patient 7:

This patient presented to ENT OPD with depression of fracture of root of nose with forehead. Patient also had nasal obstruction. Augmentation rhinoplasty was performed using septal cartilage over root of nose and forehead. Septoplasty was done deviated nasal septum.

Patient 8:

This 24 year female patient had broad nose and tip. Open rhinoplasty was done with median and lateral oteotomy. We corrected tip deformity with resection of lower lateral cartilage and purse string suture was applied. The limitation of the surgery was too much narrowing can cause nasal block.

DISCUSSION

Rhinoplasty is technically difficult to achieve consistently excellent results and as the surgery is on the most prominent part of face and aesthetic outcome is visible .Meticulous planning is therefore essential for best surgical outcome[1]. In our study we analyzed the patients profile in ESI kalaburagi for 2 years and preoperative assessment was done accordingly.

The spectrum of indications for Rhinoplasty in Indian patients is very wide. Ill defined nose with lack of projection and broad cartilaginous framework is the commonest problem. In our study functional aspects were considered in majority of patients apart from cosmetic reasons. Majority of patients in our study required narrowing of framework by osteotomies, augmentation by suitable implant preferably cartilage graft. We did functional rhinoplasty in all 20 cases, where, nasal obstruction because of nasal valve involvement and deviated nasal septum was corrected. We performed extracorporeal septoplasty in majority of cases. Usually extra-corporeal septoplasty[3,11] means that the septum can be harvested as a single piece, rotated by 90 or 180 degree so that straight pieces can form the needed frame, with resection of deviated portions. Some people may categorize it under septoplasty surgery. But, when septal deviation is severe and further support is needed than just septal cartilage cut pieces, costal cartilage can be used. We can classify this method as septal reconstruction.

In all cases the type of surgery performed is related to cosmetic appearance of nose and nasal deformity.The typical Indian nose lacks projection and requires augmentation more than reduction[2]. We performed Augmentation rhinoplasty in 5 patients. Some cases may even need reduction at one place and augmentation at the other. Hence cartilage grafting is an integral part of Indian Rhinoplasty and surgeon in present days must be well versed with the techniques and use of cartilage grafts. We used septal cartilage and conchal cartilage grafts in 4 patients. Problems of infection, resorption and warping of grafts are almost nonexistent. Curved conchal cartilage can be straightened by scoring on concave side. Costal cartilage graft provides the abundant volume required in cleft lip nose deformity. We did alar wedge resection in single case in contrast to other studies where it was common manever.

CONCLUSIONS

The approach to rhinoplasty in Indian patient should be based on an

appreciation of subtle nasal variations encountered in this population. Well established Rhinoplasty techniques ranging from dorsal augmentation to tip refinement with cartilage suturing techniques have been shown to be effective. Cartilage grafting and osteotomies are frequently performed manevers to achieve good results. Our surgical methods have shown satisfactory results both functionally and esthetically with low complication rates.

Though Rhinoplasty is cosmetic surgery ,most of the Indian population are not aware of proceeduer and they are ready to undergo surgery only if they have associated functional problem of the nose .

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