RHINOPLASTY - OUR EXPERIENCE

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The increasing awareness of rhinoplasty as a cosmetic surgery and the increasing number of patients seeking rhinoplastic surgery motivated us to do this study. 30 cases in whom rhinoplasty was done were monitored with regard to the various deformities present, the different surgical steps undertaken for their correction, the complications encountered and the results achieved. Though the basic surgical steps remain more or less same, modifications according to individual need and surgical acumen, a proper preoperative counselling and a realistic level of expectation in both the surgeon and the patient can give a satisfactory result in a great majority of cases.

Key Words: Rhinoplasty, Augmentation, Hump Removal

INTRODUCTION:

The nose being the most prominent feature of face contributes more than any other feature to the characteristics of the face. In addition to the aesthetic aspects of nose it is also an essential organ. Over and above the functional and aesthetic aspects the patient’s reaction to his or her own nose as well as the reaction of the public to its contributes to the psychic aspects.

The increasing awareness of Rhinoplasty as a cosmetic surgery and the increasing number of patients seeking rhinoplastic surgery motivated us to do this study with an aim to get an overview about the indications for rhinoplasty, the various surgical techniques used and the complications and results of surgery.

MATERIALS AND METHODS:

30 patients who underwent rhinoplasty in our institute were included in this study. At the first visit, anatomical defects resulting in the deformity were assessed and the patients were given a realistic scenario of what could be achieved by surgery. A detailed case history was taken to find out any history of trauma or any other nasal disease, which may alter the functional capacity of the nose or its postoperative course. A psychiatric assessment was also done and the patients were counselled accordingly. Clinical photographs from three angles- full face, profile, and base view were taken. Post operative photographs were taken after the oedema subsided. Then patients were then asked to assess the results of surgery in terms of satisfaction. This was combined with the surgeon’s clinical assessment and a final result was arrived at. The observations and results were documented, tabulated and analysed.

OBSERVATION AND DISCUSSION

Out of total 30 patients, 14 were male and 16 were female. As can be expected, the age distribution showed a majority of patients in the teenage and early middle ages as this is the period of maximum peer pressure and when social stigma has its deepest impact on a person. There were 10 cases in the 10 to 20 year age group, 14 cases in the third decade of life and 6 cases less than 40 years.

The major anatomical deformities encountered include hump in 33% of the cases, Broadened nose in 33%, external deviation in 28% cases, saddle nose and septal deviation in 26% cases each & alar flaring in 16% cases. This more or less compares to the basic deformities reported by Constantin MB in his series of 50 cases of rhinoplastic surgery. Though the major motivational factor for surgery was cosmetic deformity in all cases, there was significant nasal obstruction, unilateral or bilateral in 60%(18) cases as confirmed by history and hygrometric plate method. Whereas no specific cause for deformity was present in 13 cases, 2 cases had cleft deformity and septal abscess and trauma was responsible in 5 and 10 cases respectively. The four major anatomical variants that are present in rhinoplastic patients in a study of 50 cases by Constantin are (a) Low Dorsum 32%, (b) Narrow middle vault 38%, (c) Excessive tip projection 30%, (d) Alar cartilage malposition 18%. The study of anatomical deformities are comparable to our findings.

Rhinoplasty is a highly individualised problem specific operation that combines augmentation with reduction. The proportion of the so called ideal nasal shape and the operation to achieve this have been the subject of innumerable papers, majority of the patients desires a more refined version of nose. The most significant changes in rhinoplasty techniques since the operation was designed is emphasis on attention to details of soft tissue as well as meticulous attention to details of repositioning and alignment of structures. In our study we used the intra cartilaginous incision on 56% of cases, inter cartilaginous on 20% cases, rim incision 6% cases and external incision in 9% cases. In Adamson’s JE study of constriction of internal nasal valve in rhinoplasty, the importance of intra cartilaginous incision in preventing nasal obstruction is emphasised. The major procedures that were done in our study includes

(a) Augmentation in 40%,
(b) Hump removal in 30%
(c) Lateral osteotomy in 43%
(d) Intra-crural sutures in 33%
(e) Midline excision of upper lateral cartilage in 23%
(f) Subcutaneous tissue debulking in 20%

In augmentation, we have used iliac crest bone in 25%, conchal...
cartilage in 58% and septal cartilage in 16%. It is very difficult to emphasize the advantages of septal cartilage over conchal cartilage particularly for the restitution of the nose. Lateral osteotomy was done in 43% of our cases specially low lateral osteotomy. In a study by Conrod and Gillman they affirmed that low curved osteotomy combined with transverse osteotomy increased the predictability of functional and aesthetic results in rhinoplasty. We preferentially used the 2.5 mm. osteotome in majority of our cases.

In intra-crural sutures we have used the double dome suture advocated by Walter Herman through the medial ala of both the lower lateral cartilages after removing the subcutaneous tissue in between the medial crura. The matteress suture is placed near the septal angle buried in the cartilage and then buried at a tower angle deep into the medial crura and in some cases we have kept a cartilage on the medial ala for increased tip projection.

In our study we had postoperative over projection of tip in one case due to excessive removal of hump, ala flaring in one case due to decreased tip projection, narrowing of the dorsum in one case due to infracturing of the nasal bone and bilateral nasal obstruction in one case due to scarring at the internal valve area. Lawson and Kersten in their study of complication of rhinoplasty have classified the complication into infection, traumatic, hemorrhagic, systemic and miscellaneous group. The pertinent literature includes inclusion cyst formation, disturbance of eye closure, and fatalities from intracranial injuries with brain laceration and pneumocephalus. Fortunately we did not have any major complications other than haemorrhage in two cases on pack removal which were treated with re-packing.

The postoperative result of surgery was assessed by the Glasgow benefit inventory which includes the patient’s perception of success of surgery, the influence of surgery on patient’s physical health, psychosocial function and social interaction. We have also taken into account the objective improvement (Surgeon’s rating) and objective post surgical nasal deformity. In our study we had a good result in 56% of cases, moderately satisfactory result in 36% cases and had bad result in 6% of cases. In a retrospective analysis of 218 rhinoplasty Dziewalske and Dijon had a revisional rate of 10-19% whereas in our study we had a revision rate of 9% mainly due to malposition of the graft.

CONCLUSION:
The increasing interest in rhinoplasty in the general populace will grossly increase the number of surgeries being done. Though the basic surgical steps remain the same, the surgery should be suitable modified and individualized according to the expectations of the patient and the limitations of the surgeon. Majority of the patients are females due to the prevailing greater aesthetic sense among the females. Majority are in the adolescent age group due to the self identity crisis during this period. Major motivational factor for surgery is cosmetic deformity though functional deformity also plays a significant part. A significant number of patients have an abnormal psychological state pre-operatively that is reduced significantly by a good individualized surgery. Gross cosmetic deformities are present in a great number of patients. Thus an individualized surgery with proper pre-operative work up and realistic level of expectation in both the surgeon and the patient can give very satisfactory results in a great majority of the patients.