

# Rhinoplasties A Study at ENT Department of, Shaikh Zayed Hospital, Lahore

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## INTRODUCTION

**R**hinoplasty is the surgical procedure designed to correct the external appearance of nose. This surgical procedure requires isolation of the bony and cartilaginous skeleton, its trimming and repositioning of the structures under controlled condition. In cases of deformities caused by loss of skeletal support cartilage, bone or synthetic material are implanted into the defect.

Nasal correction requires both a functional and a cosmetic evaluation. Nasal obstruction is just as important as deformity of the external appearance. A detailed examination of interior of nose and paranasal sinuses is essential so that the diseases of nose and paranasal sinuses may also be treated along with nasal deformities.

A careful pre-operative evaluation of nasal deformity along with overall proportion of the nose and general balance in relationship to the face should be considered. A high quality photograph will assist the surgeon in analyzing and planning the required amount of work to be done.

The study which we are presenting spans over the last 1½ years experience in Department of ENT in Shaikh Zayed Hospital, where we have done 35 Rhinoplasties.

### Purpose of study

This retrospective study was done to evaluate the etiology and incidence of nasal deformities, complications faced after surgery and to evaluate the different surgical techniques and grafting material used.

## PATIENTS AND METHODS

In our study we treated 35 patients surgically who presented to us with different variety of nasal deformities. Age and sex distribution is shown in Table 1, out of 35 only 5 were female, rest were males. All of them were from young adult age group between 16-28 years. Table 2 shows the etiology of

nasal deformities. In 27 out of 35 cases there was history of trauma or injury to nose. Four were post SMR. In 8 patients there was no history of trauma so we assumed their etiology as developmental.

**Table 1: Age and sex distribution.**

<b>Sex</b>	Male	30
	Female	5
	Total	35
<b>Age</b>	Range	16-28 years
	Mean	22

**Table 2: Etiology of nasal deformity.**

-	Tramatic	27
-	Developmental	8

Table 3 shows different types of nasal deformities presented to us. In 11 patients there was depression or saddle shaped deformity in bridge, out of these patients none presented with history of chronic nasal pathology but all presented with history of trauma. In 6 patients there was hump and in 9 patients along with hump there was deviation of bridge to either side. Seven patients had deviation of bridge along with tip deformities (Fig. 1). In 2 there was cartilaginous hump with tip deviation. Out of 35 in 26 there was DNS along with different external nasal deformities.

The different type of surgical procedures done in these patients are depicted in Table 4. We used both open and closed techniques in our patients. We did 5 open and 30 closed rhinoplasties. In 26 cases, septum was also centralized along with correction of nasal deformities. In 11 patients we have to put grafts to correct the depression or saddle. We used autologous bony grafts from iliac crest in six patients and silastic material in five.

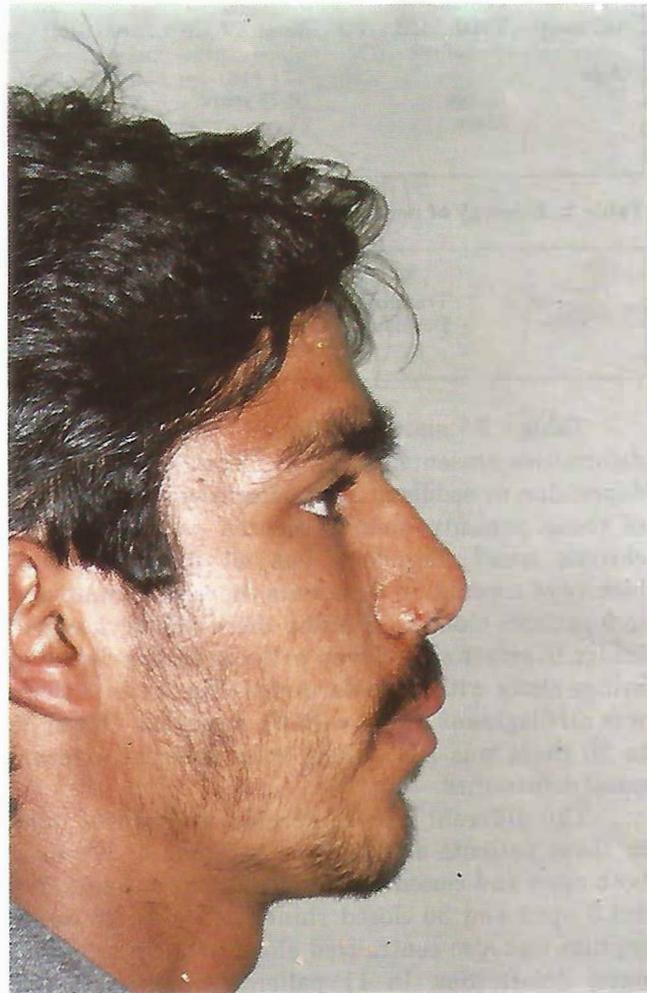
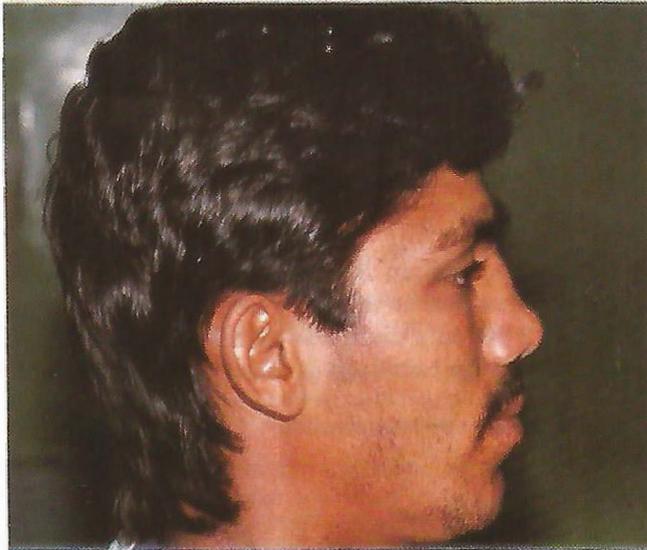


Fig. 1: Pre-operative lateral view, saddle in bridge and Post-operative lateral view, saddle reduced with bony graft.

Table 3: Type of deformity found.

- Depression in bridge	11
- Hump in bridge	6
- Hump with deviated bridge	9
- Tip + bridge deformity	7
- Cartilaginous dorsum with tip deviation	2
Out of 35 we found D N S in 26 cases besides external nasal deformity.	

Table 4: Procedures performed.

- Total number of Rhinoplasties done	35
Open	5
Closed	30
- Septo-Rhinoplasty	26
Grafts put in	11
Bone	6
Silastic	5

Incidence of complications was low as given in Table 5. There was columellar retraction in one. In 2 patients deformity was not corrected completely so we had to revise the surgery. There was edema in 4 patients which settled down with time. There was no septal haematoma.

Table 5: Complications.

- Periorbital edema	4
- Columellar retraction	1
- Deformity still present	2

## DISCUSSION

Rhinoplasty is one of the most commonly performed aesthetic procedures. The results of this surgery can be gratifying to both the patient and the surgeon. A careful pre-operative evaluation of external nose requires a concept of beauty<sup>1</sup>. Besides the type of nasal deformity, due consideration should also be given to septal deformities.

Patients with nasal deformities, present to ENT as well as plastic surgeon. ENT surgeons are in better position than plastic surgeons regarding this procedure as they can correct the septal and the external deformity in one sitting. The careful

planning and conservative approach to correction has helped in reducing the number of post-op complications and misadventures. Whatever surgical procedure is planned, two techniques are used to correct the nasal deformities, i.e. open or external and closed. External or open rhinoplasty offers definite advantage of excellent exposure of the total nasal septal pyramid and allows the surgeon to see directly what he is sculpturing<sup>2</sup>. Various deformities of the nasal bones, septum and cartilage can be analyzed and corrected with ease, it is particularly useful in revision cases, difficult tip operations and crooked nose corrections. Closed techniques is easier of two but it is blind and nasal deformity is corrected by palpation.

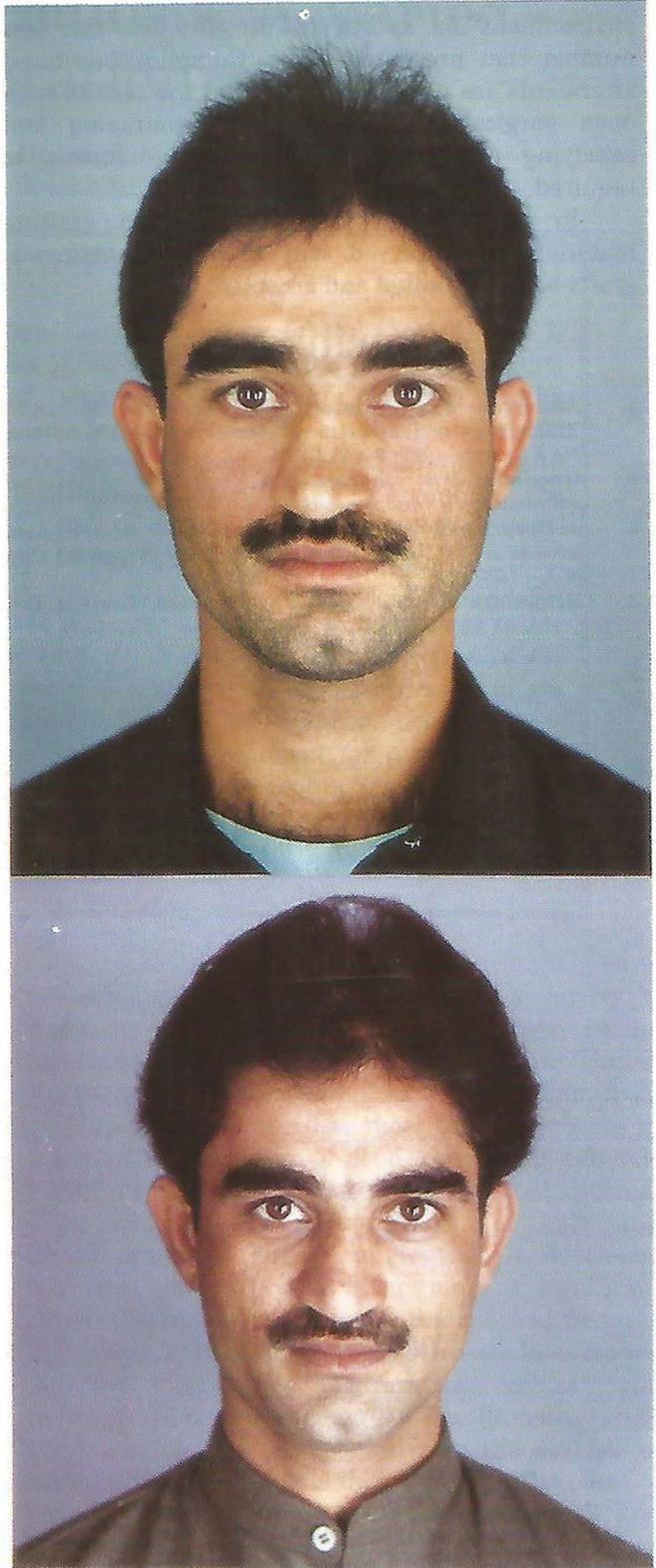
In correction of the saddle or depression of bridge, grafting material has to be put in (Fig. 1). It may be autologous bony/cartilagenous graft or synthetic i.e. silastic. Autologous cartilaginous grafts from nasal septal cartilage, costal cartilage, bone from vault of skull and illiac crest can be used. These are best for repair as they do not invoke any reaction and there is no danger of extrusion<sup>3</sup>. Silastic is used in those who refuse to have second incision and wish for this material to be inserted. During the healing process the nose is immobilized and protected with external and internal splints.

Though our experience is limited but our initial results are encouraging. We feel the incidence of complications following rhinoplasties are low. Tropical coloured skin is known to have higher incidence of hypertrophic scar<sup>4</sup>. But in our study scarring was remarkably absent. If proper care is taken to accurately approximate the wound edges at columella, resulting scar is of no aesthetic consequence. The incidence of post-operative periorbital odema is almost negligible and if it occurred it subsided without any problem.

Post operative photograph is very important for both, the surgeon and the patients. The surgeon can evaluate his successes and his mistakes. The patient can also see the difference between pre-operative and post-operative photograph.

## CONCLUSION

In the end we would conclude our study with the observation that in our society females are either reluctant to present with there cosmetic problems or not much due regard is given to their feelings or may be that they are less exposed to external



**Fig. 2:** Pre-operative anterior view, deviation of bridge to right and Post-operative anterior view, deviation corrected.

environment or sports to account for the less number that presented to us. Complications faced afterwards are negligible. We found the results with open surgical technique more encouraging and satisfying especially when the tip correction is required.

In those cases in which we used grafting materials we observed that the bony autologous grafts better tolerated and accepted.

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