

CLEFT LIP REPAIR UNDER LOCAL ANAESTHESIA IN ADULTS

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ABSTRACT

Objectives To evaluate the experience of cleft lip repair under local anaesthesia as a day care surgery.

Study design Descriptive study.

Place & Duration of study Aesthetic Plastic Surgery Center, Rawalpindi, Pakistan.

Patients and Methods All adult patients presenting with cleft lip were included in the study. They were operated under local anaesthesia. For unilateral clefts, Millard's and Mohler's repairs were done whereas for bilateral clefts, Manchester's and Mulliken's repairs were performed. Stitches were removed on 5th postoperative day. Steristrips were applied for 1 week after stitch removal.

Results Thirty nine patients were operated for cleft lip. Female to male ratio was 1:1.8. Unilateral clefts with no cleft palate were the commonest (43.6%). Revision surgery was performed in 17.9% patients. No case of dehiscence or wound infection was observed. There was slight oedema of upper lip in 2 patients which subsided within 48 hours. No case of local bleeding was seen.

Conclusions This study provides the experience of cleft lip repair under local anaesthesia. This option should be considered wherever possible.

Key words Cleft lip, Rotation-advancement flap, Millard's repair, Mohler's repair.

INTRODUCTION:

The first cleft lip repair reportedly was performed by an unidentified Chinese physician in 390 A.D. The Flemish surgeon, Yperman (1295-1350), is credited with incising the cleft edges and suturing the margins with needle and twisted waxed thread, securing a figure-of-8 tie. Early techniques of cleft lip repair involved a straight-line closure, e.g., by Rose¹ and Thompson.² Malgaigne

introduced the concept of local flaps further modified by Mirault.^{3,4} In 1881, Hagedorn applied Z-plasty technique.⁵ Le Mesurier and Tennison modified the technique of lateral flap tissue in 1950's and 1960's.^{6,7}

In 1955 Millard revolutionized the cleft lip repair with the rotation-advancement flap technique preserving the Cupid's bow.⁸ Later Noordhoff⁹ Mulliken¹⁰ and Cutting¹¹ added to the surgical and anatomical details. To evaluate the experience of cleft lip repair under local anaesthesia as a day care surgery, the following study was carried out.

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PATIENTS AND METHODS:

All the adult patients presenting with cleft lip were included in the study. All cases were evaluated and operated under local anaesthesia using lignocaine 1% with adrenaline 1:200,000 dilution. For unilateral cases, Millard’s and Mohler’s repairs were performed. For bilateral cases, Manchester and Mulliken’s repairs were performed.

A proper history excluded any associated congenital deformity, bleeding disorder and drug allergy. Only blood complete picture was done preoperatively. The mucosa and muscle layers were closed using the absorbable suture whereas the skin was closed using fine non-absorbable suture. Care was taken to align the white roll and red line. After the operation, patients were sent home with a very small dressing covering upper lip only which was removed after 24 hours. Antibiotic skin ointment was applied daily. Oral antibiotics were given for first six days. Stitches were removed on 5th postoperative day. Steristrips were applied for 1 week after stitch removal.

RESULTS:

Cleft lip repair was performed in 39 patients of 17 – 40 years age (mean: 25.1 years in males; 22.2 years in females) with a female to male ratio of 1:1.8. Unilateral cleft lip with no cleft palate was the most common finding (n 30 - 43.6%) followed by bilateral cleft lip with no cleft palate (table 1). 17.9% of the patients had revision surgery earlier done by other surgeons. Millard’s and Mohler’s repair were done in 10 and 12 patients respectively. Mulliken’s technique was used in 13 patients. 35.9% patients had some sort of nasal deformity which was also corrected with the lip repair.



Fig.1: Cleft Lip Repair (Pre & Post Operative)

Table 1: Patients’ Characteristics (n=39)			
Characteristic		Males	Females
Unilateral cleft lip only	Right	8	2
	Left	5	2
Bilateral cleft lip only		10	3
Unilateral with cleft palate		4	1
Bilateral with cleft palate		2	2

The results were excellent in all the patients (Fig. 1). No case of dehiscence or wound infection was observed. There was slight oedema of upper lip in 2 patients which subsided within 48 hours. No case of local bleeding was seen. Majority of the patients were satisfied. Only two patients had wide philtral column who underwent Manchester’s repair. Two patients had visible scar of Millard’s repair.

DISCUSSION:

Cleft lip has been recognized as a major source of disability, preventing people from realizing their potential and contributing fully to the society. In the developed world, many of these challenges are redressed through the institution of a multidisciplinary approach to the child identified with an orofacial cleft.¹² Rigorous attempts to maximize impaired speech, hearing, dental, nutritional, and intellectual functions have revolutionized cleft lip and palate patient care. Surgical techniques have been refined such that a high level of aesthetic restoration is the rule rather than exception. Unfortunately, in developing countries, access to rehabilitative and supportive treatment programmes is limited or non-existent.¹²

Social attitudes towards cleft individuals seems to be influenced by the acceptance of these deformities as manifestations of God’s Will. As a result, many of the cleft patients and families did not appear to have guilt about their circumstances. This is probably the single most important observation noted in the present study as the mean age was 25.1 years in males and 22.2 years in female. Cleft lip repair can easily be done under local anaesthesia provided the nasal deformity is not severe as in the present study where 37.5% patients had mild

to moderate nasal deformity. For more severe cases of nasal deformity, general anaesthesia is recommended. In the study by Naushad, 13 adult males with cleft lip were operated under local anaesthesia.¹³ Out of this 12 had no cleft palate. All the patients did not have nasal deformity, making the surgery simple.

Three types of surgical repairs were performed in the present study. For unilateral cleft lip, Millard's rotation-advancement technique and Mohler's modification of Millard's technique were performed whereas for bilateral cleft lip, Mulliken's and Manchester's repairs were performed. The correction of nasal deformity along with lip repair had an added advantage as it resulted in more close to normal facial looks. The patients requiring nasal reconstruction with costochondral grafts etc were operated using general anaesthesia. Similarly patients requiring alveolar bone grafting were also operated under general anaesthesia.

The only difficulty felt during the operations was the fact that the patients were awake and apprehensive. Their apprehension was however overcome by giving them mild sedative pre-operatively. The post operative results were excellent and all the patients were satisfied with their postoperative profiles.

CONCLUSIONS:

This study provides the experience of cleft lip repair under local anaesthesia. This option should be considered wherever possible.

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