Original Article

Surgical Correction of Congenital Cleft Earlobe - Study of 20 Cases

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Abstract:

Background: Earlobes play a vital role in the overall aesthetics of the ear and face. There are several forms of congenital auricular abnormalities. Multiple procedures for repairing the cleft earlobe have been proposed. These procedures aim to restore the ear's natural look and shape for aesthetic and social purposes.

Objective: The aim of the study is to discuss the technique used in the department of Plastic and Aesthetic Surgery at Bangladesh Specialized Hospital, Dhaka, for the repair of cleft earlobe.

Methods: A prospective study was carried out on the procedure used to repair cleft ear lobe in our hospital. We present 20 patients with congenital left earlobes.

Result: Gross disparity of the two sides of the cleft was minimised while restoring the anatomical curve of the earlobe. Skin grafts were not used. Visible scar was minimal and almost imperceptible.

Conclusion: This simple technique has the advantage of being easy to perform and at the same time provide good aesthetic results.

Keywords: congenital, earlobe, cleft

Introduction:

Earlobes have a significant role in the aesthetics of the external auricle and face. Earlobes are naturally rounded and tapered to make wearing earrings easier for women. The ear lobule is considered a soft structure. It is composed of loose areola tissue and fat, and the ear lobes are pierced for social, religious, and cosmetic reasons. Congenital auricular anomalies are rather common and frequently affect the superior part of the auricle. The presence of an earlobe cleft causes visible cosmetic deformity. The cleft lobe is caused by a cleft between Hillock 6 and 1 during the embryonic phase, according to Hillock's hypothesis.

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The soft-tissue deficit, and circular cleft edges are all frequent characteristics. We present our technique to correct simple longitudinal cleft earlobe.

Material & Methods

Twenty patients with cleft earlobes were admitted to Plastic & Aesthetic Surgery department at Bangladesh Specialized Hospital, during the period between 2016 and 2020. In cases that were eligible for surgery, an informed consent was obtained before surgery. In this study, we included 20 cases of cleft earlobes, 14 with unilateral clefts and 06 with bilateral clefts. Their ages ranged from 6 months to 15 years. All of them were females.

Operative technique

Our method is based on the Randall-Tennison triangle flap repair reported for cleft lip. The primary idea of this therapy is tissue

rearrangement, which aids in the correction of soft tissue deficit. The technique is depicted diagrammatically in [Fig 1].

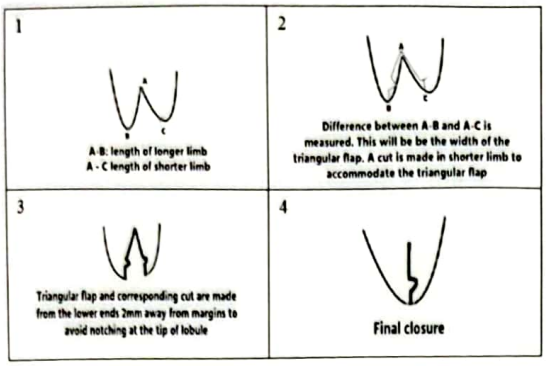

Fig 1: Diagrammatic representations of triangular flap

After preoperative marking we administered local anesthesia to the earlobe (lidocaine 1% and 0.3 ml of adrenaline with a concentration of 1 : 100 000); general anesthesia was used in 12 cases and local anesthesia in 8 cases. The length of the each limb of cleft is measured and the difference between the two cleft is noted. The difference equals the base of the triangular flap to be created on the longer limb. With minor tissue excision on the tip of the lobule, incisions are made to refresh the cleft edge. The triangular flap measured 2 mm from the lobule tip. A similar incision is done on the shorter limb. Full-thickness incisions are made in accordance with the markings. Sutures were given with proline 6-0 for both anterior and posterior skin surfaces and dressing applied.

The patients returned after 7 – 10 days for stitch removal and after 30 and 60 days for post operative follow-up. Cosmetic outcome and post operative complications we reassessed on the basis of clinical findings and photo/graphic documentation.

Fig 2: Pre operative & immediate post operative pictures of unilateral cleft ear lobe

Fig 3: Follow up pictures of another case before and after 3 months

Results

Of the 20 cases of cleft earlobes, 14 cases had unilateral clefts, 06 cases had bilateral clefts. There was no postoperative notching or scar contracture of the earlobes. There were no complications at 3 months follow-up. All the patients results were assessed by simple self-scoring system by patients and their parents. And all of them were happy with the outcome.

Conclusion

This simple technique of earlobe reconstruction can give consistent and aesthetically pleasing results.

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