Case Study

Otoplasty: Correction of Prominent Ears Without Scar

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Abstract:

One of the most popular techniques for the management of prominent ears is the Mustarde technique. Although many modifications had been published all these started with a retro-auricular incision. Correction of prominent ears by Polypropylene thread is now gaining popularity as it is less invasive with minimum complication rate and can also be done as day-case surgery. In this article, we have discussed a case of the prominent ear of a young adult which was done by using the threading technique to correct the deformity. The result was good as there is a minimum scar with an aesthetically pleasing outcome.

Keywords: Prominent Ears, Thread left

Introduction:

Reconstruction of soft tissue defects in and around the elbow is of great concern for Plastic surgeons since it is a difficult region to reconstruct from a functional point of view. The elbow is also particularly prone to trauma due to its position and high mobility. A multitude of reasons can lead to elbow soft tissue defects including trauma, contracture release, tumor excision, burn, infection, and congenital anomalies¹⁻³.

Case Report

An 18-year-old male patient presented with a bilateral prominent ear, (Fig 1). The procedure was done under general anesthesia. A thread - Polypropylene, USP 4/0, EP 1.5, 800mm,

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Mohammad Abdul Mabin , Consultant, Eden Multi-care Hospital Pvt. Ltd. & United Hospital Ltd. Dhaka. Email: cangocave@gmail.com diamond cut Trocar, double pointed, 3/4 curved 50mm DRT 50,120 was used to do the procedure.



Fig: 1: preop Left ear with marking

This unique Otoplasty Needle and Thread is easy to maneuver in any desired direction, turning and twisting on both sharp ends, in a single point of entry and exit. The inventor is Dr. Marlen Sulamanidze from Georgia (Photograph Ref. D).

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The assessment and marking are very important (Fig-2).





The needle is inserted in the middle of the mastoid area opposite the external ear. From this point, the needle is advanced subcutaneously to the upper part and never brought out completely at any point to the surface of the skin. When the second tip remains under the skin, the needle is turned and the second tip runs ahead to continue passing the thread farther in the line of marking. From the mastoid side, the needle is passed underneath the sulcus to the upper and posterior aspect of the helix of the external ear. At this point, the needle pierces the cartilage of the helix and runs downwards along the anterior surface of the cartilage, between the skin and the cartilage, to a point where it again pierces the cartilage back again. Then the needle passes through the sulcus underneath the skin to the lower mastoid area and travels up to the middle of the mastoid area to unite with the other end of the thread. Now the

needle is completely brought out to the surface and the two ends are pulled to bring the scapha and helix close to the mastoid area as desired and so tied underneath the skin and buried. The procedure is completed in 30 minutes time on each side.



Fig: 3: before and after "Thread otoplasty"

Result:

The result was quite acceptable after 3 months postoperative follow-up period. There was no sign of infection or skin necrosis. Although there was edema at the operative site in the early postoperative days it eventually subsided in 3-5 days.

Discussion

External ears, a beautiful masterpiece of creation, are an aesthetically and distinctly visible part of human face. Both ears must seem natural, soft, harmonic, and free of any surgical scars following any surgical and non-surgical procedures.After the treatment is finished, the helical rim should be clearly seen when viewed from the side, and when viewed from the back, it should seem straight and not have a "C" or telephone malformation.

There is no guideline about the timing unless it is extremely prominent and/or associated with Macrotia. I think the best time to go for the procedure will be when the patient starts complaining about the deformity

Other surgical procedures available for the correction of prominent ears require a long

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incision to expose the cartilage. The surgery involves 1. suturing the anti-helical fold (Mustarde, Photograph Ref-A), and 2. using the Stenstrom technique of anterior cartilage abrasion (Gibson, Photograph Ref-B), 3. To create the required fold by cutting through the cartilage's whole thickness following the anti-curve. helix's (Luckett, Photograph Ref- 3).

Conclusion:

This technique is also applicable to correct another deformity of the ear unless excess cartilage or excess skin resection is needed. It can be done as a day case procedure. The chance of complication is also lesser than with the open technique as it is a minimally invasive technique. Aesthetically superior to open technique as there is minimum or no scar.

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