Our Surgical Approach and Results for Protruding Ear Deformity

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INTRODUCTION

Cartilage cutting and cartilage sparing techniques are described as two main surgical approaches in modern otoplasty. The best technique is a simple, reversible, safe and aesthetically pleasing. Surgery may be performed for the protruding ear since age 5, because of the auricular cartilage growth is almost completed. At this age, the auricular cartilage is characteristically pliable; but, it becomes, less elastic, more calcified and brittle with age. Because of that reason, more aggressive cartilage surgery is required for reconstruction in adults. Meanwhile, the early performed surgery prevents the child from any emotional upset due to the deformity.

METHODS AND MATERIALS

Surgery was applied to 14 ears of 7 patients. 3 of the patients were female and 4 were male. The average age was 18.1. Deformation in 6 cases were bilateral and unilateral in one. Horizontal mattress and concha mastoid sutures were used in all ears (Figure 1a,1b). Additional fixation suture was required between the helix and temporal bone periosteum in three ears. No complications were encountered in the early postoperative period. In one ear, due to suture failure in late period, partial asymmetry occurred. The problem was solved with limited revision surgery.

DISCUSSION

Anatomic features of the protruding ear should be meticulously analyzed by the surgeon to achieve a satisfactory result(3). Ely described the first stepwise technique consisted of a full thickness skin and cartilage excision in 1881. Many surgical techniques have been described to correct the protruding ear later(4). Cartilage cutting and cartilage sparing techniques are described as two main surgical approaches in modern otoplasty. The best technique is a simple, reversible, safe and aesthetically pleasing. Surgery may be performed for the protruding ear since age 5, because of the auricular cartilage growth is almost completed. At this age, the auricular cartilage is characteristically pliable; but, it becomes, less elastic, more calcified and brittle with age. Because of that reason, more aggressive cartilage surgery is required for reconstruction in adults. Meanwhile, the early performed surgery prevents the child from any emotional upset due to the deformity.

RESULTS

The average age was 18.1. Deformation in 6 cases were bilateral and unilateral in one. Horizontal mattress and concha mastoid sutures were used in all ears (Figure 1a,1b). Additional fixation suture was required between the helix and temporal bone periosteum in three ears. No complications were encountered in the early postoperative period. In one ear, due to suture failure in late period, partial asymmetry occurred. The problem was solved with limited revision surgery.

CONCLUSIONS

We observed that in the cases with protruding ear deformity who operated with Mustarde technique, it was possible to obtain satisfactory results by performing only suture techniques without additional work on the cartilage, if careful preoperative evaluation was carried out.