Surgical Repair Of The Torn Ear Lobe
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Citation

Abstract
The technique of repair of a torn ear lobe is described. This can easily be adapted to both elective and emergency situations.

INTRODUCTION
Physicians and physician extenders are increasingly expected to perform a variety of minor surgical procedures in both elective and emergency situations. Surgical repair of the torn ear lobe, hitherto the realm of plastic surgeons, is a procedure that can be performed both at the office and the emergency room, thereby sparing patients the inconvenience and cost of referral to a sub-specialist.

The increasing practice of ear piercing by both females and, of late, males as well, has resulted in more and more requests for ear lobe repairs, either for inadvertent tears of the lobule produced by a tug on the ear ring or for traction deformities occasioned by the long-standing use of heavy jewelry on the ear, as is commonly seen in the African and Asian sub-continents. Furthermore, over the past decade the United States has seen an unprecedented influx of immigrants, making a practitioner's patient profile more cosmopolitan. Ear lobe repairs are an outpatient procedure, and, provided the basic surgical principle of asepsis is adhered to, an excellent cosmetic result can be achieved. The time taken for the procedure, averages 30 minutes.

METHOD
PRE-OPERATIVE COUNSELING
Patients should be cautioned about the risks of bleeding and hematoma formation, sepsis and an unacceptable cosmetic result. African Americans should also be warned about the possibility of scar hypertrophy, which would detract from a satisfactory appearance. Aspirin is best avoided a week before the procedure. It is also suggested that the earrings be removed a few days before the intended repair to allow small abrasions to heal. In men, long tufts of hair will need to be clipped to avoid interference with the procedure and their incorporation in the suture line.

Prior to undertaking the procedure, the ear lobe is examined to look for any abrasions or ulcerations that might contribute to infection and scar hypertrophy. A frank discussion of the procedure, the expected end result, accompanied by hand drawn illustrations and possible problems, prior to obtaining the consent from the patient helps to resolve any subsequent misunderstandings and minimizes the potential of a lawsuit.

EQUIPMENT FOR THE PROCEDURE
Mosquito hemostat (1)
Adson forceps
No. 7 scalpel handle
No. 15 scalpel blade
Needle holder
Iris scissors
Skin Hook
Disposable thermal cautery
6-0 Proline suture
3-mL syringe with 27-gauge needle
1% lidocaine (Xylocaine) without epinephrine
Sterile gauze
Fenestrated drape
Sterile gloves

PROCEDURE
The area is prepared with chlorhexidine and saline. I avoid iodine-containing solutions such as Betadine over the face because the skin retains the stain for a few days.

The procedure is conducted under a regional block, using 1% plain lidocaine (1-2 ml). The Greater auricular nerve innervates most of the pinna and may be blocked by depositing the solution sub-cutaneously between the mastoid
process and the descending ramus of the mandible, using a 27 or a 30gauge needle. Raising a subcutaneous wheal at the junction of the lobule, where it meets the skin over the mandible and depositing the rest of the solution just posterior and anterior to the ear lobe ensures adequate anesthesia. It is advisable to avoid the use of Epinephrine containing solutions, as necrosis of the lobule of the ear or the pinna is a possibility.

The tear of the ear lobe, if incomplete, is extended downwards to complete it. The edges of the tear are then freshened (denuded of any tags or overlying epithelium if partial healing has occurred in an old tear) with either a number 15 blade or iris scissors. (Figure 1)

A Guy suture (apical stay suture) is applied to the apex of the tear and held with a hemostat (Figure 2).

This approximates the edges of the raw area and can be held up, facilitating the placement of subsequent sutures. I use 6/0 Proline or Ethilon on a fine needle, either of which is non-reactive and easy to handle. The anterior layer of simple interrupted sutures is next applied (Figure 3).

A maximum of 3 or 4 sutures will be required for appropriate approximation. A skin hook, used judiciously to keep the skin edges everted, prevents any inversion of the skin edges, which may subtract from a good cosmetic result. Minimal undermining of the skin edges (1 mm) also helps with accurate approximation without invagination of the skin. The apical suture is then flipped over and a posterior layer of simple interrupted sutures is applied. The tension of the ties needs to be adjusted to allow for the post-operative edema. Tying the apical stay suture last enables minor adjustments to be made and prevents the development of any
acute angle at the apex. (Figure 3) Frequent comparisons with the opposite (more normal) ear will enable the physician to obtain a close approximation. A loose dressing is applied, which can be removed an hour later and the incision left open. The patient is advised against wearing earrings for 3 months to allow adequate scar maturity, as earlier attempts will result in stretching of the non-resilient scar.

A minor modification of the described method consists of raising a flap of skin that remains attached superiorly (Figure 4).

**Figure 4**

This is done as part of the first step of the procedure. In the process of freshening the edges of the tear, a tag of skin is left attached above. The length of this can be adjusted subsequently. This is then rolled up and sutured to itself, to form a ready-made, skin-lined opening (Figure 5).

**Figure 5**

The remainder of the repair is completed as above. This avoids subsequent boring of the ear, is more resilient and a light ring can be worn as early as 3 weeks after the procedure.

**AFTERCARE**

Patients are encouraged to keep the wound exposed. The wound should be kept dry for 24 hours after the procedure. The patients are asked to call back if they notice increasing swelling, bruising or bleeding from the suture line suggesting inadequate hemostasis, spreading redness or throbbing pain, suggesting infection. Sutures are removed after 3-5 days.

**CONCLUSION**

The described procedure is easily mastered by a physician or physician extender, requires minimal instrumentation and other ancillary support and can be offered to any deserving patient in both elective and emergency situations.

**RELEVANT CODES**

ICD9 code- 872.00
CPT code- 12011

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**References**
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