

Eleven Pearls for Cosmetic Earlobe Repair

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Earlobe repair is a common request in cosmetic facial surgery. Earlobe tears result from a variety of traumatic situations. A resurgence in body piercing and multiple facial and ear piercings is occurring in college-aged individuals. This increase in piercing will bring more piercing-related complications to the cos-

metic surgeon. The author has outlined 11 surgical pearls to provide improved cosmetic results in the repair of torn earlobes. Also described is immediate repiercing of the earlobe at the time of the surgical repair. Preventive practices to decrease earring and earlobe trauma are also reviewed.

THE REPAIR OF torn earlobes is a frequently requested procedure for cosmetic surgeons. Torn earlobes result from various forms of trauma, including babies pulling earrings, entanglement in telephone cords, hairbrushes, and clothing, spousal abuse, and heavy earrings. Many techniques have been published on the repair of earlobe tears.¹⁻¹³

Generation X (extreme) is the term given to those individuals who are currently 20–25 years old. This cross-section of youth has distinguished itself with extremes in music, sports, designer drugs, tattoos, and body piercing.

With the resurgence of piercing, more patients will present with complications from these procedures. In addition to piercing, earlobe dilation and mutilation are also common in some circles (Figure 1). Regardless of the source of the trauma, most earlobe tears can be categorized into partial, complete, or multiple tears (Figure 2).

Some tears occur over many years from the constant weight of heavy, pendulous earrings. In cases where the earlobe is acutely torn, many patients fail to seek immediate care. In both cases, the pathology of the tear concerns the torn edges of the lobe becoming epithelialized and thus forming a fistula or cleft. All methods of earlobe repair concern the removal of the scar epithelium and some type of approximation of the fresh edges.

Pearl 1: Control of the Earlobe Facilitates Precision Repair

The earlobe is one of the most fleshy and mobile areas on the body and for this reason, controlling the earlobe is of primary importance in the cosmetic repair.

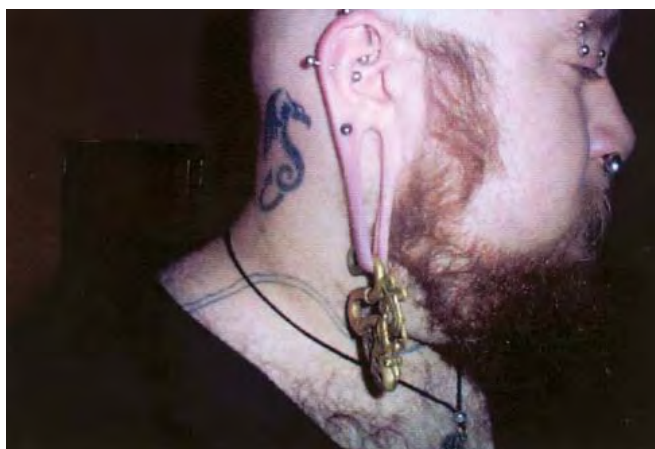


Figure 1. Multiple piercings and earlobe deformation are becoming popular with certain segments of society.



Figure 2. Most earlobe tears may be classified as partial, complete, or multiple.

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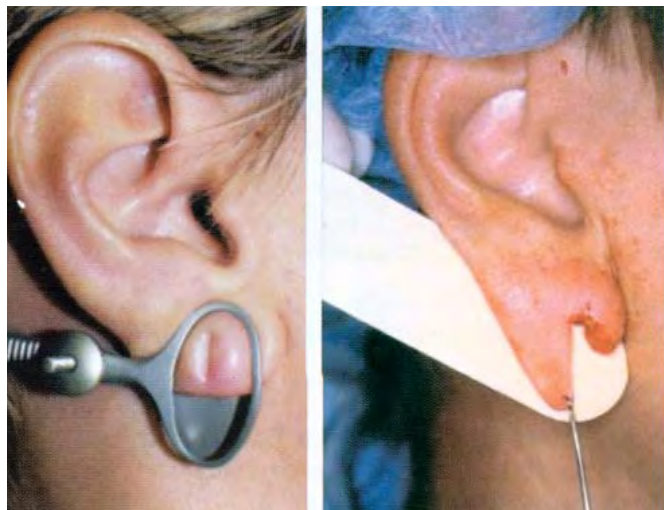


Figure 3. Chalazion clamps, skin hooks, and sterile tongue blades may be used to stabilize the mobile earlobe.

Common modalities to stabilize the earlobe for incision and suturing include chalazion clamps, skin hooks, and sterile tongue blades (Figure 3).

Pearl 2: Precision Cutting of the Mobile Earlobe is Best Performed with a Pressureless Incisional Modality

Most earlobe tears are repaired by local anesthesia with a vasoconstrictor. Common incisional modalities include scar excision with scissors, scalpel, elliptical biopsy punch, radiowave surgery, and CO₂ laser.

The author prefers the use of 4.0 MHz high-frequency radiowave surgery (Figure 4, left). This modality allows for a relatively pressureless incision because the fine radiowave electrode does not heat up or cut by pressure. The radiowaves use the tissue as electrical resistance and cause the intracellular water to boil. The active surgical electrode merely serves as a means of directing the high-frequency radiowaves. Simulta-



Figure 4. Left) Radiofrequency and Right) CO₂ laser provide pressureless cutting with excellent coagulation.



Figure 5. Incomplete tears in the upper two-thirds of the earlobe can usually be treated with simple excision and closure, thus leaving the inferior border intact.

neous cutting and coagulation is produced which also facilitates the repair in this vascular region. The ultra-pulsed CO₂ laser with a 0.2 mm cutting handpiece is a true pressureless incisional method and also offers coagulation by defocusing the beam (Figure 4, right).

Regardless of the incisional modality used, the procedure is basically the same for most tears.

Pearl 3: Small Tears in the Upper Two-Thirds of the Earlobe may be Simply Excised

Incomplete tears are adequately repaired by excising the enlarged fistula on the lateral and medial surfaces and reapproximating the wound edges (Figure 5). Tears at this position on the earlobe do not need to be converted to a full tear. Radiowave surgical electrode or an elliptical biopsy punch are frequently used by the author to remove the fistula in incomplete tears (Figure 6). Simple skin closure is performed with a 6-0 fast-absorbing gut suture.

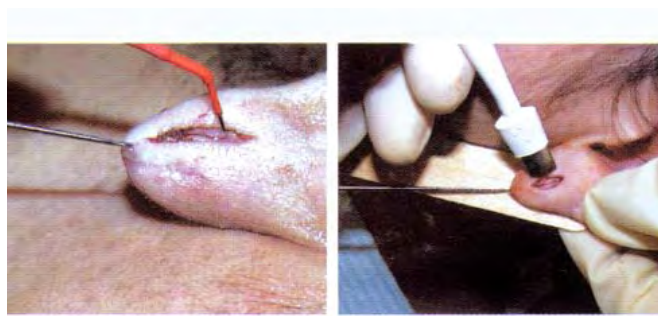


Figure 6. Radiofrequency microneedle or elliptical biopsy punch work well with incomplete tears.



Figure 7. Tears occurring in the lower one-third of the earlobe should be converted into full tears by violating the inferior border of the lobe. This provides for better closure with less distortion.

Pearl 4: Incomplete Tears that are at or Below the Junction of the Lower One-Third of the Earlobe Should be Converted to a Full Tear

An important consideration in repairing incomplete tears is the position on the lobe. Tears that are in the upper two-thirds of the lobe may be excised and reapproximated. Those tears in the lower one-third of the lobe are best converted to a full tear (Figure 7) as they are more easily managed and approximated. Failure to include the inferior border of the lobe margin can result in bunching and elongation of the earlobe.

Cosmetic Repair of Full Tears

Full tears are the most common seen by the author. The surgical technique begins with local anesthetic infiltration of the torn lobe. If the tear is linear, the cleft is excised in a V shape. Some clefts are rounded, and the author uses a C-type incision for this configuration. The cleft is separated and the scar epithelium is removed to subcutaneous tissue with a radiofrequency electrode (Figure 8).



Figure 8. Basic technique for earlobe repair includes outlining the cleft (left) and incising the epithelialized surface of the scar (center) and reapproximating the defect (right). The excised tissue scar is shown.

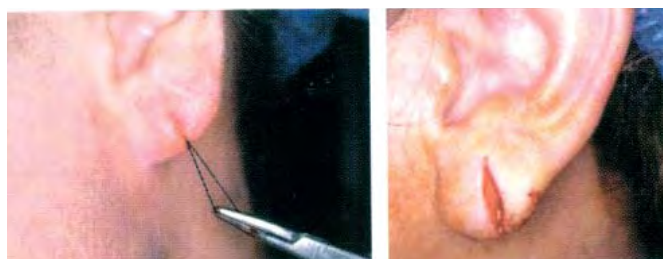


Figure 9. A single deep suture will assist in alignment as well as to decreasing the tension on the skin sutures.

Pearl 5: When Repairing a Full-Thickness Earlobe Tear, Utilize One or Two Resorbable Deep Sutures

The incised lobe is then reapproximated with a single, buried 5-0 gut suture (Figure 9). This suture decreases dead space, diminishes the tension on the skin sutures, and decreases hematoma formation.

Pearl 6: Before Final Closure, Place a Key Suture on the Most Inferior Portion of the Earlobe

The author feels that the single most important aspect of aesthetic repair is the placement of a key suture at the inferior lobe (Figure 10). As in facelifts and vermilion lip repair, this suture allows precise approximation of the wound edges and serves to line up the remainder of the repair. After placing one or two deep sutures and a single key suture, the wound should be basically approximated.

Pearl 7: Close the Lateral Surface of the Incision First

As with any full-thickness soft tissue reconstruction, puckering, misalignment, and dog ears can occur due



Figure 10. The inferior lobe key suture is critical in aligning the inferior border and ensuring symmetrical closure.



Figure 11. This image shows the final skin sutures on the front and back of the earlobe.

to minor asymmetries. If the medial surface is closed first, it is possible that the lateral surface may harbor a soft tissue irregularity. Closing the lateral surface first will hide any minor irregularity behind the earlobe.

After the subcutaneous and key suture, the anterior and posterior skin is closed with either 6-0 nylon suture or 6-0 fast-absorbing gut suture (Figure 11).

Pearl 8: Immediate Repiercing is a Simple Procedure that Provides Increased Patient Satisfaction

Many patients feel “naked” without any earrings and are dissatisfied with extended healing times where they cannot wear any earrings. Immediate repiercing is a viable technique that allows the patient to leave the office



Figure 12. Special piercing studs are used to immediately place the earring between the sutures.



Figure 13. The piercing stud is coated with triple antibiotic ointment and inserted between skin sutures at the proper level.

with an earring and wear it throughout their healing period.

The author described a technique for earlobe repair with immediate repiercing.^{1,2} The basic technique consists of having the patient purchase a piercing stud from a jewelry store. These studs have a sharp point, are gold plated, and have an extra large earring back (Figure 12). The stud is sterilized, coated with triple antibiotic ointment, and placed at the proper level between the skin sutures (Figure 13).

The patient is given a mirror and the contralateral earring hole is observed to achieve symmetry. The patient is asked to rotate the earring several times a day after the first 24 hours. The earring is left in place for 2–3 weeks and then is removed, cleaned, and reinserted each day until the fistula is formed.

Pearl 9: All Ear Piercings must be Perpendicular to the Long Axis of the Earlobe

Care must be taken to insert the earring post in a perpendicular manner or the earring will be slanted, which is very obvious and bothersome to the patient (Figure 14). After earlobe repair with immediate repiercing, rou-



Figure 14. Left) Failure to place the piercing stud in a perpendicular plane will cause the earring to be permanently tilted, which is aggravating to the patient. Right) The correct angulation of the piercing.



Figure 15. Before and after repair of earlobe tear with immediate repiercing.

tine suture line care is utilized and the sutures are removed at 1 week. Figure 15 shows the results achievable with attention to the pearls described.

Pearl 10: Common Complications are Easy to Correct or Prevent

Complications are infrequent with earlobe repair. The most common complications seen by the author are a depressed linear scar and inferior notching of the lobe (Figure 16). Inferior notching (Figure 16, left) results from improper alignment of the inferior lobe or from scar retraction. Everting the closure (as shown in Figure 16, right) and using the previously described inferior key suture will decrease the incidence of inferior notching.

A depressed linear scar will usually spontaneously improve over several months and patients are encouraged to wait. If the linear scar is persistent or bothers the patient, it may be treated by resurfacing with CO₂



Figure 16. Left) Inferior lobe notching is a common complication of simple earlobe repair and may be prevented with Right) slight eversion of the inferior earlobe margin.

laser (Figure 17). Two to three passes with a moderate fluence will blend the area and decrease the visible incision line.

Pearl 11: Earlobe Tears are Easier to Prevent than to Treat

Most earlobe trauma is related to a small number of causes that are easily preventable if the patient is made aware of the risk factors. Our office provides patients with an instruction sheet of precautions against earlobe trauma (Table 1).



Figure 17. CO₂ laser resurfacing can improve a depressed linear scar on the earlobe.

Table 1. Prevention of Earlobe Tears

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- Avoid wearing heavy earrings for long time periods.
 - Remove earrings when using the telephone.
 - Remove earrings at the hair salon.
 - Be aware that small children and babies are attracted to earrings.
 - Remove your earrings before removing upper clothing, like sweaters.
 - Do not allow children to wear small loop or dangling earrings.
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Conclusion

Earlobe trauma from pierced ears is a common presentation in cosmetic facial practices. The increased popularity of multiple facial piercings will most likely increase the number of patients presenting for cosmetic earlobe repair. Eleven surgical pearls are outlined based on the experience of the author. These topics include the diagnosis and surgical repair of earlobe tears and their prevention. The presented pearls can serve as a guide for the improved handling of earlobe tears as well as to facilitate improved cosmetic surgical results.

References

1. Niamtu J. Surgical repair of cleft earlobe. *J Oral Maxillofac Surg* 1997;55:886-90.
2. Niamtu J. Oral and maxillofacial surgery clinics of North America, vol 12. Philadelphia: WB Saunders, 2000:781-9.
3. Boo-Chai K. The cleft ear lobe. *Plast Reconstr Surg* 1961;28:681-8.
4. Bianco-Davila F, Vasconez HC. The cleft earlobe: a review of methods of treatment. *Ann Plast Surg* 1994;33:677-80.
5. Hamilton R, LaRossa D. Method for repair of cleft earlobes. *Plast Reconstr Surg* 1975;55:99-101.
6. Argamaso RV. The lap-joint principle in the repair of the cleft earlobe. *Br J Plast Surg* 1978;31:337-8.
7. Kalimuthu R, Larson BJ, Lewis N. Earlobe repair: a new technique. *Plast Reconstr Surg* 1984;74:299-300.
8. Fearon J, Cuadros CL. Cleft earlobe repair. *Ann Plast Surg* 1990;24:252-7.
9. Zoltie N. Split earlobes: a method of repair preserving the hole. *Plast Reconstr Surg* 1987;80:619-21.
10. Buchan NG. The cleft ear lobe: a method of repair with preservation of the earring canal. *Br J Plast Surg* 1975;28:296-8.
11. Pardue AM. Repair of torn earlobe with preservation of the perforation for an earring. *Plast Reconstr Surg* 1973;51:472-3.
12. Attalla MF. Congenital earlobe cleft: a new technique for repair. *Br J Plast Surg* 1990;43:223-5.
13. Effendi SH. Reconstruction of the middle-aged torn earlobe: a new method. *Br J Plast Surg* 1988;41:174-6.