Getting a Good Handle on Ear Keloid Surgery

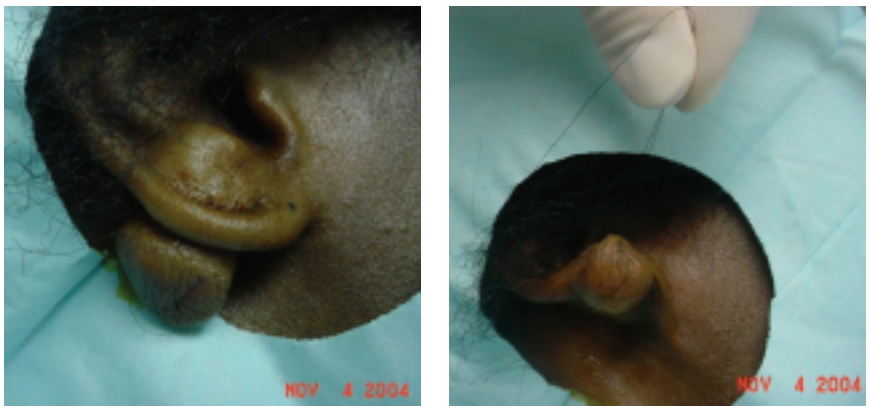
Simple steps can help you overcome the technical challenges of keloid excision.

By Dee Anna Glaser, MD

Keloidal scarring is a common problem that can affect patients of all skin types, although dark-skinned individuals are more susceptible to keloid formation, especially on the face.[1] Keloids are firm scars that occur at sites of trauma and extend beyond the border of the original wound. Histologically, there are thick eosinophilic bands of collagen, and elastin is usually absent.[2] Keloids can become functionally problematic; be symptomatic with pruritus, hyperesthesia, and pain; and are typically cosmetically unsightly.

Keloids of the ear are especially common, and patients frequently seek treatment. (Figure 1) Most commonly they result from ear piercing. Keloids can be located on the posterior lobe, anterior lobe, both aspects, or through and through in a dumbbell fashion.

Among the several therapies for keloid scars that have been tried over the years are compression therapy, intralesional corticosteroid injection, and radiation therapy. Surgical excision remains a first-line option for most patients and can result in effective removal of the keloid with excellent preservation of the earlobe shape, color, and function. The ears can be re-pierced after the healing phase has been completed. Recurrence is common post-operatively. Surgery can be combined with post-operative compression, radiation, steroid injection, or other therapies in efforts to reduce recurrence.



Posterior lobe keloid prepped and draped for excision (left). The keloid is anchored with 3-0 nylon, allowing the assistant to provide traction while keeping away from the surgical field and blade (right).

Yet, as with other surgeries of the earlobe, keloid correction presents technical challenges for the physician and assistant. How can you overcome these challenges? A few simple strategies can ease the procedure and improve patient satisfaction.

Small Steps

Like other surgeries on the earlobe, adequate stabilization of the lobe can be difficult, and access to the posterior lobe can be limited. I have found that a couple small steps can help me overcome these obstacles. First, if keloids are present on both sides of the earlobe or a keloid extends through the entire thickness of the earlobe, I start my procedure on the posterior aspect since this is more difficult from an access point of view. The intact skin and lack of blood on the anterior lobe allow for better traction and manipulation with one's finger. When the anterior surface is free of blood, it is less slippery, permitting the use of a chalazion clamp. Frequently the large size of ear keloids prevents the use of a chalazion clamp.

I also prefer to use a suture anchored through the keloid to help lift and stabilize the keloid during surgery. Any suture material can be used, such as nylon, vicryl, or prolene. A deep, wide bite is taken through the keloid with the needle. The needle can be removed, and the two free ends of the suture material are held by an assistant or with the surgeon's non-dominant hand. (Figure 2) Maintaining light traction on the thread lifts the tumor up as the surgeon excises under it. This technique allows for a clearer view of the surgical field, plus fingers are kept away from the site and the scalpel.

The excised tissue can easily be dropped into a pathology specimen jar by holding onto the suture and dropping it en bloc into the container.

Another "trick" to improve patient satisfaction is to place cotton in the external auditory canal to prevent blood from entering and clogging the canal. If enough blood enters the canal, it may produce temporary loss of hearing, leading to unnecessary distress to the patient.

Closure

Once the keloid has been removed, allow the wound to heal by primary or secondary intention. When the excised area is small and not located near the helical or lobule rim, closure is not always needed and the wound can be left to heal by secondary intention.

In some instances, closure will aid in preservation of the contour of the ear. When this occurs and the keloid is very large, part of the epidermis and dermis overlying the keloid can be dissected off the keloid and used as an autograft.[3]

Overcoming Technical Challenges

Surgical excision of earlobe keloids can provide excellent outcomes despite the high rate of recurrence. There are technical challenges to the surgeon and assistant because of the size and location of the lesions. Keeping the anterior lobe surface dry and using a suture to anchor to the keloid can provide the surgeon good visibility and traction and helps keep fingers away from the plane of the scalpel.

1. Alhedy SMA, SivanantharajahK. Keloids in various races. Plast Reconstr Surg 44:564, 1969.
2. Blackburn WR, Cosman B. Histologic basis of keloid and hypertrophic scar differentiation: Clinicopathologic correlation. Arch pathol 82:65, 1966
3. Kelly AP. Keloid Surgery in Atlas of Cutaneous Surgery. Robinson JK, Arndt KA, LeBoit PE, and Wintroub BU, ed. W.B. Saunders Company. Philadelphia 1996.

New in Your Practice

Caps Off. Another dermal filler joined the aesthetic ranks last month. Captique Injectable gel (Inamed/Genzyme) is based on Genzyme's non-animal stabilized hyaluronic acid (HA) technology and is Inamed's first HA-based dermal filler to receive FDA-approval. Captique is indicated for the correction of moderate to severe facial wrinkles. Inamed says it complements Genzyme's Hylaform and Hylaform Plus product line.

A Neutral Approach. For patients looking to minimize dark circles and puffiness around their eyes, consider Neutraderm's NeutralEyes Eye Complex. According to Neutraderm, NeutralEyes works by promoting collagen synthesis, increasing the strength and flexibility of the fragile capillaries, and normalizing drainage and circulation around the eye. Ingredients in NeutralEyes, such as vitamins C and K and palmitoyl pentapeptide, target hyperpigmentation and dry, flaky skin and reduce inflammation, the company says.

False Alarm. In case you haven't yet heard, you can assure your patients that Botox (botulinum toxin type A, Allergan) remains a safe treatment for aesthetic and medical needs and was not responsible for the four recent cases of botulism that occurred at a Florida facility. Rather, the FDA's Center for Drug Evaluation and Research reports massive doses of an unregulated, unlicensed, and unapproved raw toxin distributed by a California manufacturer are to blame for the botulism cases. Allergan is reminding physicians that 15 years of data show Botox is safe and that the company has rigorous measures in place to ensure the quality and safety of its product.