

Pearls in Dermatology

How I perform intralesional excision of a small keloid

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Keloid is a common condition encountered in dermatologic practice. Other than cosmetic concern, it can be very symptomatic and causes significant disturbance to the patient. Intralesional excision for small keloids can be effective and performed as an office procedure. The incisions are made within the confine of a keloid, followed by "evacuation" of keloidal tissue and simple suturing. To enhance efficacy, postoperative adjunct treatments can be given.

Keywords: Intralesional excision, keloid

Introduction

Keloid is prevalent in Asians and Black and commonly seen in local dermatologic practices. In addition to cosmetic disfigurement, the lesion can be symptomatic with pain, itch and distending discomfort. Conservative treatment for keloid includes silicone gel sheet application and topical and intralesional steroid.¹ While they offer symptomatic relief in many cases, some patients just fail to give a satisfactory response even with repeated treatment. For small keloids of a few centimetres in size, intralesional excision can be safely performed as an office procedure and is effective.

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Method

The keloid can be an isolated dome-shaped nodule or dumbbell nodular plaque. Intralesional excision can be done as a single treatment but efficacy will be enhanced if combined with postoperative adjunct treatments such as intralesional steroid or adjunct radiotherapy. In the latter case, before contemplating surgery, an appointment for superficial radiotherapy should be made so that low-dose fractionated radiotherapy can be given soon after surgery and preferably within 24 hours.² For intralesional excision to be done alone, the local anaesthetic should be given within the boundary of the lesion. Any needle that punches through normal surrounding skin should be avoided because it may potentially create a new scar or keloid. Stop injecting when the lesion starts to blanch and bulge a little.

For a round lesion, a linear incision is made passing through the centre and as far towards but not reaching the circumference (Figure 1a).

Alternatively, an elliptical incision (not shown in the figure) can be made if eventual trimming of redundant epithelium is expected. Now, this epithelial cover is carefully dissected to free from the underlying tissue. An additional incisional line can also be made perpendicular to the first incisional line if the operator finds further exposure needed (Figure 1a). After adequate exposure of the keloidal tissue, it is then carefully dissected and evacuated. A pair of straight or curved fine scissors with an assistant retracting the epithelial cover for dissecting the keloidal tissue is used. Bleeding is usually insignificant and can be controlled by light cautery or suturing with an absorbable stitch. Trimming away of any excessive epithelium can be made and is followed by epithelial suturing using 4-0 nonabsorbable stitch material which is to be removed at Day 10 to Day 14. Again, suturing should be done within the boundary of the keloid. An alternative

approach to a round keloid is an incomplete circular incision which allows freeing most part of the epithelial cover (Figure 1b). For dumbbell lesion, incision along the long axis of the individual main mass is preferred depending on the actual geometry of the lesion (Figures 2 and 3).

Comments

Dressing with sulfatulle and plain gauze with pressure is appropriate. Analgesics can be given for post-operative pain but the latter is usually mild. Change of dressing is made for wound oozing if this occurs. In my experience on a few patients, aside from immediate flattening of the keloid, symptom relief is also prompt and remarkable. (Figures 4a and 4b). For patients who received adjunct radiotherapy, mild radiation dermatitis, pigmentation and textural changes

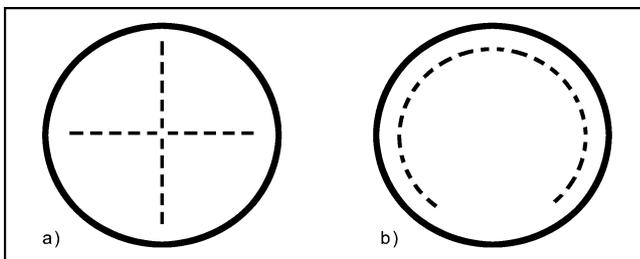


Figure 1. Approach to a solitary round keloid. a) Linear incision through centre. b) Incomplete circumferential incision.

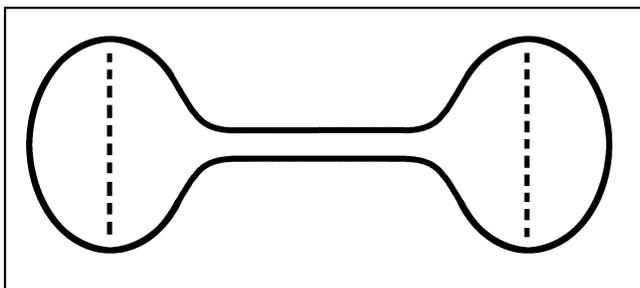


Figure 2. Incision along the long axis of nodule but perpendicular to axis of the system.

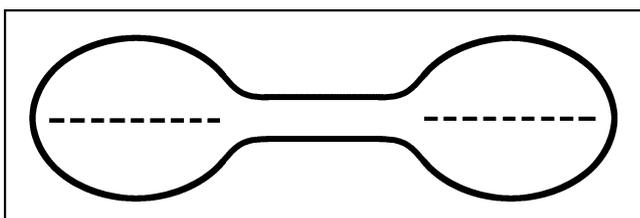


Figure 3. Longitudinal incision along the system.

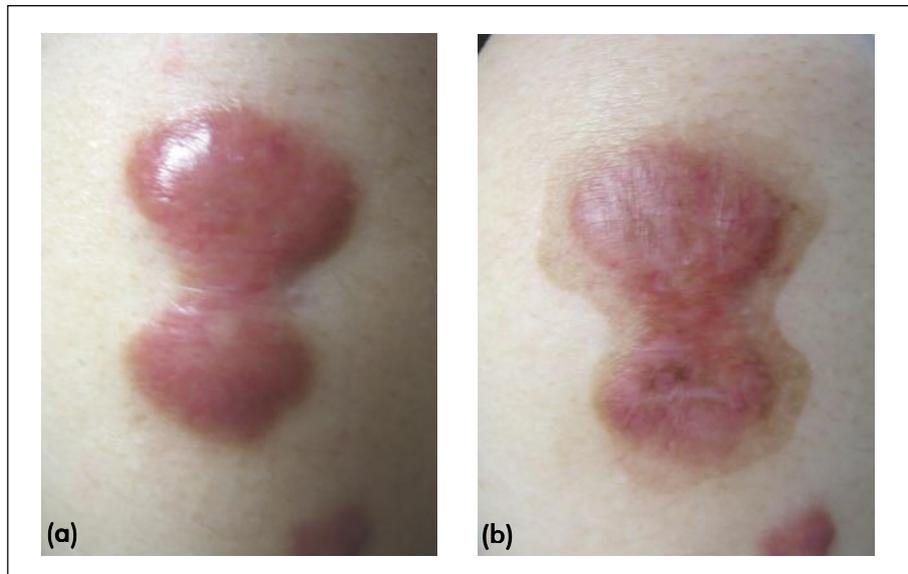


Figure 4. Painful dumbbell keloid on the deltoid region of a young lady. a) Before surgery. b) 3 months after surgery and radiotherapy. Note the 2 faint incision lines and surrounding hyperpigmentation.

may occur. But this is a small price to pay for the very symptomatic patients. The long-term risk of radiation-induced malignancy is very small. Finally, a note to dermatology trainee, excised tissue should be sent for histopathology confirmation.

References

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