

CASE REPORT

TREATMENT OF POSTAURAL KELOID - A CASE REPORT

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ABSTRACT: Many times keloid swelling present in the post aural region following ear surgery. Here we present 56 year old male, with huge keloid swelling in the postaural region who undergone right ear surgery previously by post aural approach. The swelling was completely excised under microscopic guidance along with post operative steroid injection. Reasonable cosmetic outcome was obtained in long term follow up. There was no recurrence of the swelling during 1 year of follow up. Treatment of keloid with the combination of surgical excision and post operative steroid administration gives a reasonable out come in terms of cosmetic appearance and low occurrence rate.

KEYWORDS: Keloid, Steroid, Excision.

CASE REPORT: A 56 year old male presented with huge swelling behind the Right Postaural region of 9 year duration. He underwent Right Mastoidectomy with Tympanoplasty 11 years back. No abnormality was found in general and systemic examination. Local examination of swelling revealed 7×4×2 cm in dimensions, oval, non tender, firm, brownish in colour and the swelling is seen along the post aural surgical scar line (fig 1). The swelling was slow growing over the past 9 years and reached the present dimensions. The swelling was excised fully under microscopic guidance and sent for histopathological examination. The histopathological report came as Keloid.

In the post-operative period, steroid injection was given along the scar line 5 times at an interval of 1 week apart (fig 2). The steroid injection used was injection triamcinolone 10mg/ml. Patient was followed up regularly and there was no recurrence and the patient was satisfied in terms of cosmetic appearance (fig 3).

DISCUSSION: Keloid is an abnormal proliferation of scar tissue that forms at the site of cutaneous injury (e.g.: on the site of surgical incision or trauma), it does not regress and grows beyond the original margins of the scar keloid should not be confused with hypertrophic scars which are raised scars that do not grow beyond the boundaries of original wound and may reduce over time (8).

Keloids are benign dermal fibro proliferative tumours with no malignant potential. The first description of abnormal scar formation in the form of keloid was recorded in the Smith papyrus regarding surgical techniques in Egypt around 1700BC. The keloid meaning "Crab Claw" was first coined by Alibert in 1806 in an attempt to illustrate the way the lesions expand laterally from the original scars into normal tissue.

Microscopic examination of keloid show dense interlacing collagen bundles and long trabeculae of hyalinization and small blood vessels. The surface is covered by skin with dermal appendages.

The action of corticosteroids is based on the supposed release of a hormonally enhanced cellular protease in the extracellular connective tissue, inducing the proteolytic activation of

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collagenase and digestion of collagen. The mechanism by which corticosteroid administration causes a reduction of scarring is related to increased activity of collagenase (7).

It was demonstrated that injection of triamcinolone is highly effective in 90% of cases in volume reduction of injuries and their symptoms(1), but the combination if injections and surgical excision appears to be a most successful method (4) The recurrence was kept below 50% instead of just excising the lesion, where the rate ranges from 45 – 100%.

Adult: maximum dose: 120mg
Repeated once monthly for 6 months
1 to 2cm ² of injury : 20 to 40 mg
2 to 6 cm ² of injury : 40 to 80 mg
6 to 10 cm ² of injury : 80 to 100 mg
Table 1: Use of Triamcinolone filed for adults according to the size of lesion

KETCHUN, L. D.; MASTERS, F. W.; ROBINSON, D. W. Follow-up on treatment of hypertrophic scars and keloids with triamcinolone. *Plast. reconstr. Surg.*, v. 48, n. 1, p. 89-91, 1967.

Child: maximum dose for each session
1 – 2 years : 20 mg
3 – 5 years : 40 mg
6 – 10 years : 80 mg
Table 2: Use of Triamcinolone filed for children according to their age

KETCHUN, L. D.; MASTERS, F. W.; ROBINSON, D. W. Follow-up on treatment of hypertrophic scars and keloids with triamcinolone. *Plast. reconstr. Surg.*, v. 48, n. 1, p. 89-91, 1967.

CONCLUSION: This case shows a post aural keloid can be reasonably treated with surgical excision and post operative injection of triamcinolone acetonide. It gave the patient a satisfactory outcome in terms of cosmetic appearance. New modalities of treatment for keloid are still in progress. Recurrence of keloid can be reduced to a significant level by meticulous combination of surgery, local steroids, intralesional radio therapy, splint application. Individual patient has to be assessed properly to determine which modality of treatment suits them. Then the outcome of treatment will be good.

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Fig. 1: Post aural keloid before surgery



Fig. 2: Post aural region 1 week following surgery



Fig. 3: Post aural region 3 months following surgery

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