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EARLOBE KELOID: A REVIEW OF TREATMENT OPTIONS

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ABSTRACT

Earlobe keloids are fibrous proliferations that show high recurrence. Therefore, these benign lesions become one of the challenging and frustrating problems in wound healing. This affects people worldwide of a different race. The treatment of earlobe keloid is still challenging. Many different treatment options have been used to reduce the recurrency of earlobe keloid with various results, such as surgical excision, injection of intralesional corticosteroid, and cryotherapy. However, no single treatment modalities have been given satisfying results. In this article, we reviewed various treatment options of earlobe keloid from many different countries.

Keyword : earlobe keloid, treatment

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1. INTRODUCTION

Keloid is a dermal fibroproliferative disorder that is characterized by excess deposition of collagen in the dermis and subcutaneous tissue.[1] The term keloid was first described in the 1800s from the Greek word “chele” which means crab claw.[2,3] Keloid is different from hypertrophic scar for its extension beyond the borders of the original wound. Keloid occurs in all races but tends to be more frequently found in the darkly pigmented individuals, with 6-16% incidence in Africans.[4,5]

Keloid has multiple etiological factors such as physical, chemical, and biological disorders. Genetic predisposition related to exacerbated immune response reported being correlated with the formation of keloid. Growth factors that are found to be high in keloids such as transforming growth factor β (TGF β 1).[6,7,8]

2. METHOD

We aim to describe earlobe keloid treatment modalities and results based on the literature review in this article. We conducted a systematic review of the literature using google scholar, Pubmed,, Research gate to identify the main treatment of earlobe keloid.

3. RESULTS

There were many journals included in our searching that reviewed earlobe keloid modality of treatments and we summarized the results below. **Full-thickness excision with pulsed CO2 laser combined with intralesional corticosteroid injection.** Yanche and Oberman reported six cases of recurrent earlobe keloids that used a combination approach at their institution. They have used pulsed Co2 laser to excise earlobe keloid with full- thickness excision a method and sutured with low tension sutured.[9]

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Injection of 0,5-1 ml triamcinolone acetonide subcutaneously has been done immediately after excision and then repeated every 2 weeks with a total of 4 injections. They reported a favorable result and no recurrency to date the article was published.[9] **Surgical excision followed by intraoperative corticosteroid injection and pressure wound dressing.**

4. Discussions

A study in Nigeria reported twelve cases of earlobe keloids that had been treated with surgical excision followed by intraoperative corticosteroid injection. They did a low tension wound closure and pressure wound dressings in every case. Six weeks of post-operative corticosteroid injections have been done with the 6 monthly following up period. The recurrence rate is 83% within the follow-up period of the cases.[10]

A retrospective study in 21 Iranian people representing 31 ear keloids was conducted to evaluate earlobe keloids that enrolled in surgical excision followed by triamcinolone acetonide injection.[11] They used 4-10 mg intralesional injection of triamcinolone acetonide (diluted in 2% lidocaine solution) that was administered once per month for several months based on the size of the lesions. This study reported no sign of recurrency after the follow-up period for several months.[10]

A prospective study was conducted to evaluate 81 earlobe keloids from 46 consecutive patients. Patients of this study underwent three monthly intralesional triamcinolone acetonide injections before surgery, excision of keloid lesions in the fourth month, and perioperative infiltration, followed by two more leaks of triamcinolone acetonide within two months. Earring pressure on the scar after operations were used for four months. This study concluded that the combination of infiltration 0f 20 mg/dl triamcinolone acetonide, surgical excision, and earring pressure is effective in treating earlobe keloids.

Figure 1. Surgical excision followed by corticosteroid injections as a treatment in earlobe keloid.

Cryotherapy

A retrospective analysis of seven earlobe keloid patients was conducted to evaluate the effectiveness of cryosurgery as monotherapy. The result showed that scar volume was reduced in all cases in the study. Five patients underwent complete flattening and another achieved a maximum 25% pronounced thickness reduction.[13]

Surgical excision followed by cryotherapy

A ten years retrospective study from 2001 to 2011 have evaluated the treatment of earlobe keloid in 97 keloids of 66 patients with surgical excision followed by immediate freezing using cryosurgery of the postoperative wound. The result found that “major flattening” was observed in 69 keloids (71%). This study concluded that a combination of surgical excision and cryosurgery could be considered as a modality of treatment for earlobe keloids.[14]

Many different treatment options have been used to reduce the recurrency of earlobe keloid with various results, such as surgical excision, injection of intralesional corticosteroid, and cryotherapy. However, no single treatment modalities have been given satisfying results.

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