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Case Report

Keloid over ear: Recurrent & persistent multiple mushrooms which are incompletely expunged

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ABSTRACT

Keloids over ear are benign, fibrous proliferations that have high recurrence. Trauma to ear or any surgical intervention form the main aetiology for these out-pouchings. Treating keloids has become a challenge to the surgeons. Here are 2 cases presented at our tertiary care set up which have undergone surgical excision twice elsewhere and the demonstration now is worse than presentation before.

1. Introduction

Keloids over ear are usually benign, fibrous proliferations that have high recurrence. Any kind of trauma to the ear as a result of ear piercing, assault or hit over the ear either playful or professional (kick-boxing etc) or any kind of surgical interventions are the various aetiological factors. Keloids always pose a challenge in treatment with substantial psychosocial impact.[1] Here are 2 such cases with multiple mushrooms over the ear.

2. Case Report

In both the cases, there is a long history of keloid formation with multiple times of surgical excision. 5 doses of Intralesional combo steroid injection (Hyalase+ Kenacort) was given on weekly basis. On regression following injection, the keloid was surgically excised with part of cartilage 4 months back under local anaesthesia. In both the patients, there was no hampering and affecting the size and shape of the ear. On follow up, patients were doing fine with no traces of recurrence after removal till date.

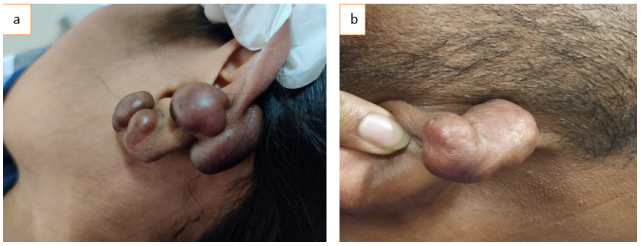

Fig. 1: a,b: Keloid seen in young girl as a result of multiple ear piercings excised twice before elsewhere & adult male who had also underwent excision twice elsewhere outside with no specific etiology.

3. Discussion

Keloid is defined as a benign growth of dense fibrous tissue developing from an abnormal healing response to cutaneous injury which may be surgery that extends beyond original borders of inflammatory response. It is one of the most annoying clinical issues in wound healing. Keloids, when compared to normal scars usually increase in dimension over time, creating a deformity that can cause numbness, tingling and itching. In other words, keloids are termed

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as 'a scar that does not know when to stop'.[1,2] Keloids over pinna show a high rate of recurrence of upto 80% following surgical excision. They usually appear as shiny, smooth, globular growth on one or both sides of the earlobe with cosmetic embarrassment. It is more common in dark-shinned individuals than in whites. Higher incidence is seen during puberty, pregnancy and periods with hyperactivity of pituitary gland.[3]

Its etiology is still unknown despite many theories about keloid formation. According to Osman et al., due to an autoimmune response to sebum trapped deep in dermis leads to keloid formation. A disorder of the hormone that stimulates melanocyte is one of the factors that is accused of causing keloid formation. In a recent study, it is said that cycloxygenase (COX-2) enzyme gene expression is absent in abnormal scar derived fibroblasts and contribute to development of fibrotic scars, and this gene expression is modulated by hexose sugars and sucrose, especially in normal granulation tissue fibroblasts and hypertrophic scar fibroblasts.[4] It has been shown that sucrose type 1 and type 3 collagen metabolism in granulation tissue fibroblast cultures are derived from fibrotic skin lesions differently, changing the collagen metabolism toward normal genesis. Experimental study suggests the importance of transforming growth factor beta (TGF-b) in cutaneous scarring as well as scarring in other body parts. Although TGF-b is needed for wound healing, overproduction can result in excessive deposition of scar tissue and fibrosis. Aberrations in the different cytokines like interleukins 6, 13 and 15 also have role in keloid formation.[1,2]

Keloid scars are nodular skin lesion that in severe form resemble neoplasms and cause much physical and mental distress. Attempts for treatment may make them worse and presently there is also no single therapeutic modality available. The location, size, depth and duration of the earlobe keloid influence the choice of therapy. Excision can also be used for large keloids, for debulking or removal of infected regions.[3] Surgical excision alone leads to high chance of recurrence rate. Therefore, it is rarely used as monotherapy and so postoperative recurrence can be reduced by adjunctive therapies such as intralesional corticosteroid injections, radiotherapy, pressure therapy and immunomodulators. The treatment modality for keloid is generally a culmination and combination of multitherapy from steroid injections to simple laser therapy which is beneficial to the patient and preventive with regards to cosmetic purposes.[1,4]

4. Conclusion

The aetiopathogenesis of keloid remains a conundrum which is characterized by excessive deposition of collagen in the dermis and subcutaneous tissues secondary to traumatic or surgical injury. The larger its size and its rapid growth with excessive itching which are few of its unique presentation causing substantial psychosocial and cosmesis impact on the patient well-being. It is usually the multiple therapy rather than monotherapy which gives the best results for ear lobe keloids. Though there are tremendous advancement in the treatment protocols for keloids over the ear, but in the end for best results surgical excision has to be undergone despite of exclusive and elusive tools for its size regression.

5. Source of Funding

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6. Conflict of Interest

None.

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