



ROLE OF APAMARG KSHARSUTRA IN THE MANAGEMENT OF EAR PINNA KELOID : A CASE STUDY

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ABSTRACT

Keloid is a type of scar which result in an overgrowth of granulation tissue at the site of healed skin injury. The growth of keloid is as compare to other raised scars is more rapid and progressive. A keloid scar is benign and not contagious, but accompanied by severe itchiness, pain and changes in texture. Ear Pinna Keloid is a benign, dermal, fibro proliferative growth. It has much more psychological impact on the patient due to cosmetic and aesthetic reason. Removing the keloid by excision is one treatment option, however it may have a tendency of recurrence. Ksharsutra is the potential therapies mentioned in the ayurved text as it has dual mode of action like excision as well as healing property. The present study was taken up with the objective of evaluating the role of Apamarg Ksharsutra in the management of Ear Pinna Keloid.

KEYWORDS

Keloid, Ear Pinna, Ksharsutra, Vrangranthi, Apamarg

INTRODUCTION

Keloid is a benign, dermal, fibro proliferative growth, characterized by excessive formation of collagen mainly type 3 and type 1, without any malignant potential. The term 'keloid' means 'Crab Claw' was first coined by Alibert in 1817[1]. It expands claw-like growths over normal skin. Ear pinna keloids occur in about 5-15 % of humans from manual and blunt perichondrial trauma. Nowadays getting ear piercing done is very common in the name of fashion.

The other causes of developing keloid are piercing, pimple, acne, chickenpox, insect bite, repeated trauma, operated scar marks.

Both sexes are affected, but the incidence is higher in highly pigmented people[2]. The higher incidence is attributed to women wearing heavy ornaments, ear piercing over different areas of ear pinna. As a result of such trauma patient develops swelling which is painless, circular or irregular, hard in consistency with no sign of tenderness[3].

Treatment for keloid include pressure therapy, silicone gel sheeting, intra-lesional triamcinolone acetonide (TAC), cryosurgery (freezing), radiation, laser therapy (PDL) and surgical excision which is most common treatment for keloid lesions[4]. However when used as a solitary form of treatment, there is huge chance of recurrence rate.

According to Ayurveda ear pinna keloid can be correlated with vranagranthi of Karnapali. It is described under Mansadhatupradoshaj vyadhi. Sushrutacharya has describe shastrakarma treatment in Mansadhatupradoshak vhyadhi.[5]

As comparing to modern surgery Ksharsutra is the best para surgical method in such condition. Ksharsutra has controlled chemical cauterizing action on living tissue. It's action is a simultaneous combination of incision, excision, debridement, scrapping along with healing[6]. So in this case we'll see Ayurvedic management with an objective to avoid recurrence and provide complete cure.

Case Report

A 26 year female patient came to OPD with chief complaint of growth over Right ear lobe since last 3 years.

S/H/O excision of Right ear pinna keloid - Two year ago

No H/o DM / HTN / TB / BA

History of present illness

The patient was normal 3 years back. Patient has hobby of ear piercing. Ultimately its result in Right ear pinna keloid. As beauty precaution, she has undergone excision of ear pinna keloid. But recurrence has occurred again. Hence due to recurrence she came to our OPD, on examination all vitals were in normal range.

Local Examination

On local examination keloid was 2.5x3.1x2.1 in size present on right ear pinna, there was no tenderness, it is freely mobile in all direction but

slightly adherent to base, shape was oval with smooth surface and well defined edge, consistency was firm, fluctuation not present.

Routine blood investigation were done and they were in normal range. From above examination diagnosis was made as right ear pinna keloid and Ksharsutra ligation was planned under local anaesthesia.

MATERIAL AND METHOD

Material :-

Ksharsutra ligation (on every 3rd day)

Methodology :-

Preparation of Ksharsutra

Ksharsutra was prepared as per standard method[7].

The thread is given 21 coatings out of which the first 11 coating are given with fresh Snuhi Ksheer. The next 7 with Snuhi Ksheer and Apamarg Kshar and the last 3 with Snuhi Ksheer and Haridra.

A piece of gauze was taken and folded into a small square. It was then dipped in fresh Snuhi Ksheer (latex of Euphorbia neriifolia) and the thread was coated with the ksheer. The second coating was given only when the first one dries. In this way all 21 coatings were given to ksharsutra. After each coating the temperature inside the UV chamber increased by passing hot dry air with the help of a fan. The air inside the chamber should be kept circulating to facilitate quicker drying of the threads to maintain the sterility. This thread, now called as Ksharsutra.

Surgical Protocol

Under all aseptic precaution local anesthetic lignocaine 2% was administered by infiltration in superficial skin around the base of the keloid. A superficial skin incision was taken around the base of keloid and ksharsutra was ligated tightly on the incision site[8]. After ligation dressing was done. The patient was observed for pain, inflammation, discolouration, and necrosis.

The same Ksharsutra kept for three days[9] on the fourth day after removal of first Ksharsutra a fresh sterile Ksharsutra was ligated. The new Ksharsutra was kept for next three days. This cycle continues till keloid get fall off completely. Dressing with povidone-iodine was done after ligation of Ksharsutra. Patient was ask to visit till keloid fell off completely.

OBSERVATION AND RESULT :-

Day 1 : the previous bandaging and ksharsutra was removed and new ksharsutra was ligate, the distal part of the swelling shows mild sign of necrosis and site of incision was taken care with dressing.

Day 3 : Same procedure was done as above, cell debris and necrosed tissue had been wiped off.

Day 6 : Same procedure was done as above.

Day 9 : Previous bandaging has been removed, keloid had been shed off. Healthy granulation tissue seen. Wound was healthy, dressing done.

It required 4 settings of ksharsutra ligation to completely shed off the

keloid from ear pinna.

DISCUSSION :-

Application of ksharsutra is best in keloid (vranganthi) which prevents recurrence of keloid.

Mode Of Action :-

Shnuhi ksheer (latex of *Euphoria nerifolia*) is strong alkaline in nature which cause chemical cauterization. Its action on tissue begins with severe irritation and subsequent inflammation of local tissue causing local tissue necrosis. This debris of necroses tissue is cleared out giving way for fresh budding granulation tissue over the wound[10].

Apamarg kshar is alkaline which is important constituent in many ayurvedic formulations as it has chedana, pachana, Lekhana,dahana, tridoshaghna shodhana ropana properties.

Haridra (*curcuma longa*) is anti-inflammatory, antiseptic and antibacterial having wound healing activity which prevents infection and facilitates tissue growth thereby promoting healing.

CONCLUSION :-

Since even after surgery of ear pinna keloid there is chances of recurrence, Ayurvedic management with Ksharsutra can be effective therapy in recurrent ear pinna keloid. It is the best treatment modality in the management of ear pinna keloid which will be very effective for cosmetic purposes. It helps in reducing recurrence which is the most untreatable complication.



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