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Case Study

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ROLE OF SNUHI-APAMARGA KSHAR SUTRA IN MANAGEMENT OF VRANGRANTHI (AURICULAR KELOID) – A CASE STUDY

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ABSTRACT

Auricular Keloid is a result of an overgrowth of granulation tissue. There is defect in maturation and stabilization of collagen fibrils. It is brownish black/pinkish black in colour, painful tender, spreads and cause itching. The common sites for Keloids, which occur after trauma or piercing of the ear for ornaments, are the lobule or helix. The incidence in young female patients has been higher than in young males, probably reflecting the greater frequency of ear lobe piercing among women. The frequency of occurrence is 15 times higher in highly pigmented people. The treatment of Auricular Keloid is surgical excision. This is the most challenging condition due to its higher recurrence rate. In Ayurveda, Keloid can be co related with *Vrangranthi* of *Karnpali*. *Ksharsutra* is considered best treatment as compare to modern surgery. Because it has property of cutting as well as healing and also after excision it prevents the reoccurrence. In the present study, *Kshar-sutra* therapy was conducted in a single patient, with the objective to evaluate the efficacy of *Snuhi-Apamarga Kshar Sutra* in the management of auricular keloid.

KEYWORDS: *Vrangranthi*, Auricular Keloid, *Kshar-sutra*.

INTRODUCTION

The term keloid was originally described in 1800 as "cheloid", derived from the Greek word "chele" means "crab claw", first coined by Alibert in 1817.[1,2] Auricular Keloids are proliferative scars characterized by excessive net collagen deposition. By definition, Keloid grow beyond the borders of the original wounds and rarely regress with time. Keloid is common in blacks, in females and genetically predisposed. There is a defect in maturation and stabilization of collagen fibrils. It is brownish black, or pinkish black in colour, painful, tender, spreads and causes itching.[3] Auricular keloid may follow trauma or piercing of the ear for ornaments. Usual sites are the lobule or helix. Surgical excision of the Keloid usually results in reoccurrence.

In *Ayurveda*, Keloid can be co-related with *vrangranthi* of *karnpali*. *Ksharsutra* is considered best treatment as compare to modern surgery. Because it has property of excision as well as healing and also after excision it prevents the reoccurrence.

The present study deals with a single case of Auricular Keloid not getting satisfactory result with modern treatment. *Kshar sutra* therapy was done in auricular keloid with the objective of minimizing the probability of recurrence rate.

AIMS AND OBJECTIVES

- ✓ To evaluate the efficacy of *Snuhi-Apamarga Kshar sutra* ligation in the management of *vrangranthi* of *karnpali* instead of doing surgical excision.
- ✓ To study the efficacy of *Kshar sutra* ligation in minimizing the recurrence rate of *vrangranthi* of *karnpali*.

CASE REPORT

Chief complain

A 22 year female patient with c/o swelling over left ear pinna since last three years

History of Present illness

The patient was asymptomatic three years back. After than she noticed slight elevation on her left pinna after piercing was done. Slowly it became nodular mass. She went to allopathic hospital and was diagnosed as having auricular keloid. Surgical excision was advised. She took conservative treatment for the same, and also some local injections for short duration but did not got much relief. Then she took homeopathic treatment for six months, but again did not get satisfactory result. Size of the swelling

was increasing gradually, along with mild pain on touch. With this complain, she came to Ayurvedic hospital for better management.

Past History
No h/o DM, HTN, RA or any other major illness.

On Examination
Nadi (pulse) = 70/min
Mala (stool) = Prakruta (Normal)
Mutra (urine) = Prakruta (Normal)
Jeeva (tounge) = Eshatha saam
Agni = Prakruta (Normal)
Shabda (speech) = Prakruta (Normal)
Sparsha (skin) = Prakruta (Normal)
Druka (eyes) = Prakruta (Normal)
Akruti = Madhyama
Bala = Madhyama
Raktadaaba (B.P) = 110/72 mm/Hg.

Examination of swelling
- ✓ The mass was freely mobile, non-tender, firm in consistency and oval in shape.
- ✓ Position of the Keloid was over left ear pinna.
- ✓ Surface – smooth
- ✓ Edge – well defined
- ✓ Fluctuation – not present
- ✓ Transillumination – negative.

Investigation
- Complete blood count and FNAC was done prior to the procedure
- Bleeding time, clotting time, RBS was done.
- Consent was taken from the patient

MATERIAL AND METHODS

Material: *Snuhi Apamarga Kshar sutra* on every 7th day was done.

Method

Day 1
- ✓ Area was cleaned with 5% betadine solution.
- ✓ Lignocaine 2% was administrated by infiltration in superficial skin around the base of the keloid (lignocaine sensitivity was done before)
- ✓ A superficial incision was made around the base of the keloid
- ✓ Than sterile *ksharsutra* was tied over the base of the keloid.
- ✓ Dressing was done

Day 7
- ✓ Previous bandage had been removed.
- ✓ Previous *Kshar sutra* had been cut off.
- ✓ Necrosed tissue and cell debris had been wiped off.
- ✓ Are around was cleaned with Povidone solution.
- ✓ New *Kshar sutra* had been ligated
- ✓ Dressing was done

Day 14
- ✓ Previous bandage had been removed.
- ✓ Keloid had been cut off completely.
- ✓ Healthy granulation tissue was seen
- ✓ Area was cleaned with betadine solution.
- ✓ Dressing done.

Fig. 1: Keloid before treatment Day - 0

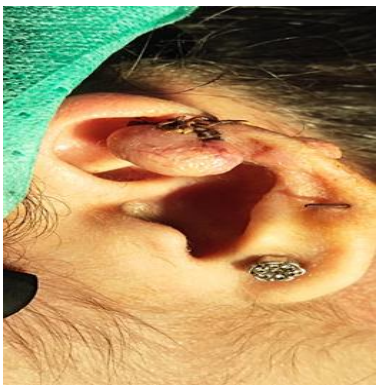

Fig. 2: During K/S Ligation procedure, Day - 1

Fig.3: Ligated Ksharsutra, Day - 7

Fig.4: Cut through, Day - 14

Fig. 5: Follow up after 7 Days

Fig.6: Follow up after 2 month

Fig.7: Follow up after 3 months.

FOLLOW UP – Follow up was done upto three months, no relapse or reoccurrence was reported.

DISCUSSION

In Ayurveda, Auricular keloid can be correlated with *vrangranthi*. *Kshar sutra* therepy is being used for the treatment of auricular keloid.

Probable Mode of action of Drugs

In the treatment of *vrangranthi* (Keloid) application of *Kshar Sutra*, the principle is to destruct and heal the track gradually.

Snuhi ksheer is strong alkaline in nature which causes chemical cauterization. It causes local tissue necrosis by producing severe irritation and subsequent inflammation of local tissue. This debris of necrosed tissue is cleared out giving way for fresh budding granulation tissue over the wound.[4]

Apamarga has *vedanasthapaka, vran ropaka, rakta shodhaka, shothahara, dahaprashmana*[5], antibacterial[6], anti-inflammatory[7], analgesic[8] and antioxidant property.[9]

According to *Acharya Sushruta*, *kshar* is *tridoshaghna*. Though it is *saumya*, its other characteristics like *dahana*, *pachana*, and *darana* are not opposite to this. *Kshar* is generally made up of *agneya aushadhi* and thus having the qualities like *katu rasa, ushna virya, teekshna*, *pachana, darana, vilayana*, *shodhana, lekhana*, etc.[10]

Haridra is anti-inflammatory[11,12], antiseptic and antibacterial[13] having wound healing activity[14] which prevents infection.

Probable Mode of action of Kshar sutra

Ksharsutra has simultaneous combination of incision, excision, debridement, scrapping along with haemostatic, antiseptic and healing action. This lead to removal of keloid mass without producing any other injury.

RESULT

Auricular keloid was completely cured with *Kshar sutra* ligation within 14 days with no complication and without reoccurrence.

CONCLUSION

Ayurvedic management with Kshar Sutra ligation is the best effective treatment for *Vrangranthi* (Auricular Keloid) as it has minimal reoccurrence rate and thus can be substituted for surgical excision.

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