

Clinical Evaluation of Ksharsutra Ligation in Recurrent Case of Aural Keloid (Vranagranthi) – A Case Study

Dr. Pratibha Vishnu Bochare.

BAMS MS (Assistant professor Shalyatantra
Department)
C.S.M.S.S. college of Ayurveda and Hospital
Kanchanwadi, Aurangabad.
E- Mail Id- dr.pratibhavayahare01@gmail.com

Dr. Sulkekar Ankita Ashokrao.

BAMS, MS, Ph.D.(scholar),
(Assistant professor Shalyatantra department)
C.S.M.S.S. college of Ayurveda and hospital
Kanchanwadi, Aurangabad.
E- Mail Id- drankitasulkekar9766@gmail.com

Abstract

Aural keloid (Vranagranthi) is a rare benign, dermal, fibro-proliferative growth characterized by excessive formation of collagen, without any malignant potential. It is one of the most challenging conditions to treat due to high recurrence rate. Surgery is one of the treatments but it's not last and best because even after surgery there are chances of recurrence. The most effective treatment is superficial external beam radiotherapy (SRT), but it's economically costly. On other hand Ksharsutra is the potential therapy mentioned in Ayurveda for such conditions. Ksharsutra is used simultaneously for excision and healing of wound. After excision Ksharsutra is considered to be effective in avoiding the recurrence in conditions of benign outgrowths such as aural keloid. So comparative to all these treatment modalities Ksharasutra is cheap and has best result with minimum wound, very less chances of recurrence.

In Ayurvedic samhita it is described as Arbuda of Karna Pali. Ksharasutra do dual work excision as well as healing. It has property of incision, excision, debridement, scrapping along with aerostatic, antiseptic and healing. Present case is successful management of recurrent ear pinna keloid by Ksharasutra with the less relative risk of recurrence of keloid. In the present study one patient was subjected to ksharasutra to excise Ear pinna keloid with the less relative risk of recurrence of keloid.

Keywords - Recurrent Aural keloid, Vranagranthi, Ksharasutra

Introduction

Aural keloid is a benign, dermal, fibro proliferative growth, characterized by excessive formation of collagen, without any malignant potential. It has much more psychological impact on the patient due to cosmetic and aesthetic reasons. The term 'keloid' means 'Crab Claw' was first coined by Alibert in 1817.^{1,2} Ear pinna keloids occur in about 5-15 % of humans from manual trauma and blunt perichondrial trauma. Both sexes are affected, but the incidence is higher in women.³ the higher incidence is attributed to wearing of 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 and devoid of tenderness. Keloids are known to occur more frequently in black skin individuals. They show strong positive familial association and are seen more often in young age group patients. The incidence of keloids is about 15 times greater in dark skin individuals than in whites. According to Ayurveda ear Pinna keloid can be correlated with vranagranthi

of Karnapali. It is described under Mansadhathu pradoshaj vyadhi.

Aims and Objectives

- To study the efficacy of Ksharsutra ligation for removal of ear pinna keloid instead of surgical excision so as to minimize the recurrence of keloid which is very common after surgical intervention.

Criteria of assessment

- 1) Keloid condition.
- 2) Itching around the keloid.
- 3) Postoperative complications
- 4) Recurrence of keloid

Case Report Open ACC

A case report as follow - A 32-year-old Female patient came to us with chief complaint of –Over growth of the fibrous tissue on Right ear lobe: -since last 3 years. H/O surgery of Right ear pinna keloid – Two year ago
No H/o Dm / HTN, Asthma

History of personal illness

The patient was normal 3 years back. Patient has hobby of ear piercings. Ultimately it results in Right ear pinna keloid. After that she went under excision of ear pinna keloid from ENT surgeon. But after 1yr it reoccurred. Then after she visited to our shalyatantra department OPD, CSMSS ayurved mahavidyalaya and Rugnalaya, Kanchanwadi, Aurangabad, for further management.

Personal History

Occupation: House wife.

O/E:

Nadi (pulse) = 74/min

Mala (stool) = Prakruta (Normal)

Mutra (urine) = Prakruta (Normal)

Jeeva (tounge) = Eshatha saam

Shabda (speech) = Prakruta (Normal)

Sparsha (skin) = Prakruta (Normal)

Druka (eyes) = Prakruta (Normal)

Akruti = Madhyama

Bala = Madhyama

Raktadaaba (B.P) = 100/70 mm/Hg.

Examination of swelling

- Inspection-
 - Position- over left ear pinna
 - overlying skin-mild redness
- Initial Palpation-
 - Pulsation -not present
 - Tenderness- not present
- Palpation-
 - Mobility-freely mobile
 - Shape-oval
- Surface -smooth
- Edge- well defined
- Consistency-uniform all over
- Fluctuation-not present
- Temperature-same as whole body/ (tenderness)
- Transillumination-negative

Investigations

- Blood sugar level, Bleeding Time, Clotting Time, (mention readings also)urine examination routine and microscopic had been done prior to the procedure.
- Written informed consent had been taken from the patient.

Material and Method

Material: *Ksharasutra* (mention which) (add other material)

Method

Center of study: shalyatantra department OPD, CSMSS ayurved mahavidyalaya and Rugnalaya, Kanchanwadi, Aurangabad

Mode of study: Simple random single case study.

Preparation of Ksharasutra (no need)

Ksharasutra was prepared as per classical method. Surgical Barbour thread no 20 was used for preparation of *Ksharasutra*. 11 layers of *Shuhi ksheer* (latex of Euphoria) and 7 layer *Haridara* (*curcuma longa*) powders were applied on the thread and were allowed to get dry. Another 3 layers of the combination was applied, similarly and was dried. This procedure containing total 21 alternate coating. This thread, now called as *Ksharasutra*. This *Ksharasutra* is kept in UV chamber for maintain its sterility

Surgical protocol

Under all aseptic precaution local anesthetic lignocaine 2% with adrenaline (1:1000) was administered by infiltration in superficial skin around the base of the keloid.

A superficial skin incision was taken around the base of keloid. A sterile *Ksharasutra* was applied and ligated tightly on the incision site. After ligation dressing with povidone iodine was done. The patient was observed for pain, inflammation, discoloration, and necrosis. The same *Ksharasutra* kept for three days.on the fourth day after removal of first *Ksharasutra* a fresh sterile *Ksharasutra* was ligated. The new *Ksharasutra* was kept for next three days. This cycle continues till keloid get fall off completely. Dressing with povidone-iodine was done after ligation of *Ksharasutra*. Patient was asked to visit on day the keloid fell off completely.

Discussion:

According to Ayurvedic literature, keloid of ear pinna can be correlated with *vrangranthi*. *vrangranthi* is *Mansa dhatupradoshak vhyadhi*. Application of *Ksharasutra* is best in such disease. (change needed)

Action of drug

- *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.

- Haridra (curcuma longa) is anti-inflammatory, antiseptic and antibacterial having wound healing activity which prevents infection and facilitates tissue growth thereby promoting healing.
- Ksharasutra (which kshar) has controlled chemical cauterizing action on living tissue. Its action is a simultaneous combination of incision, excision, debridement, scraping along with haemostatic, antiseptic and healing¹⁰.

This lead to removal keloid mass without producing any other injury

SANPRAPTI GHATAK Dosh: Vata, kapha

Dushya: Rakta, Mansa.

Adhishtana: Left ear pinna.

Hetu: Ear piercing.

Result

The study shows that ear pinna keloid can be successfully removed by Ksharasutra and there is significant reduction in recurrence of ear pinna

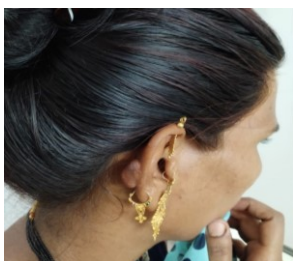
Conclusion

Since the even after surgery of ear pinna keloid there are chances of recurrence, Ayurvedic management with Ksharsutra can be effective therapy in recurrent ear pinna keloid.



References

1. S.Das, A manual on clinical surgery published by Dr.S.Das, Calcutta; 2010, 5th edition, chapter 1; p.1, 2, 13, 15.
2. Atiyeh BS, costagliola M, Hayek SN. Keloid or hypertrophic scar: the controversy; review literature. Ann platssurge 2005;54(6); 67680. <http://dx.doi.org/10.1097/01.sap.0000164538.72375.93>
3. Susruta, sushrut samhita sutra Stan, 11/3, 7; edited Dr. Anant ram Sharma, chaukhamba oriental Varanasi India, reprint 2010; p-79.
4. Charaka-Agnivesha charaka samhita, sutra Stan, adhya 28/25, 26; edited by vaidya yadavji trikamji; sanskaran publication; chukhmba publication, Varanasi; 2005.p-180.
5. Charaka-Agnivesha charaka samhita, sutra stan, adhya 28/13,14,15; edited by vaidya yadavji trikamji; sanskaran publication; chukhmba publication, Varanasi; 2005.p-179.
6. Shrama SK, Sharma KR, Singh K. ksharasutra therapy in fistula in ano and other anorectal disorder: Rashtriya Ayurveda vidyapitha; 1994-95.p-43,59
7. Bhashag Ratna mishropah Brahmadata shastri (bhavartha sandipani commentary): chkradatta: arshya chikitsa, adhya 5(10,148,151): haridas sansrit granthamala; chukhamba publication: first edition; 1949.p-41-50.



Day 1



Day 7th

8. Bhashag Ratna mishropah Brahmadata shastri (bhavartha sandipani commentary): chkradatta: nadivrana chikitsa, adhya 44 /13: Haridas Sanskrit granthamala; chukhamba publication: first edition; 1949.p-184.
9. Salunkhe Amrut.A clinical study for the management of ear pinna keloid by ksharasutra and agnikarama, int.J.Res.Ayurveda phrama; 5 (3), may-June 2014: p-262
10. Sushruta, sushrut samhita sutra Stan,11/3, 7; edited Dr.Anant ram shrama, chaukhamba orientalia Varanasi India, reprint 2010; p-79.

