



## Case Study

### ROLE OF *KSHARASUTRA* IN THE MANAGEMENT OF RECURRENT EAR PINNA KELOID - A CASE STUDY

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#### ABSTRACT

Ear pinna Keloid is an over growth of the fibrous tissue which is concerned in wound healing and strengthening of the wound. The cause of keloid is piercing, pimple, acne, chickenpox, insect bite, infection, repeated trauma. As per ear pinna keloid excessive and repeated ear piercing is main cause which is bad gift of modern style.

Keloids affect both sexes equally, although 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.

Surgery is one of the treatments on that. But it's not last and best. because even after surgery there is chances of recurrence. The most effective treatment is superficial external beam radiotherapy (SRT), but it's economically costly. So comparative to all this *Ksharasutra* is cheap and best result with minimum injury.

In *Ayurvedic samhita* it's described as *Arbuda of Karna Pali*. *Ksharasutra* is best treatment as compare with modern surgery. *Ksharasutra* do dual work excision as well as healing. It is have property of incision, excision, debridement, scrapping along with aerostatic, antiseptic and healing. Present case is successful management of recurrent ear pinna keloid by *Ksharasutra*.

**KEYWORDS:** Recurrent ear pinna keloid, *Ksharasutra*.

#### INTRODUCTION

Keloid is result of frequent physical trauma on certain part of the body. Nowadays ear piercing is most knowingly fashion. keloid of ear pinna is the complication of ear piercing. keloid expands in claw-like growths over normal skin. They have the capability to hurt with a needle like pain or to itch without warning.

Keloids were described by Egyptian surgeons around 1700 BC. Baron Jean-Louis Alibert (1768–1837) identified the keloid as an entity in 1806. He called them cancroïde, later changing the name to chéloïde to avoid confusion with cancer. The word is derived from the Greek chele, meaning "hoof", here in the sense of "crab pincers", and the suffix -oid, meaning "like".

The causes of keloid are piercing, pimple, acne, chickenpox, insect bite, infection, repeated trauma. As per ear pinna keloid excessive and repeated ear piercing is main cause which is gift of modern style. Such trauma developed circular, painless, irregular swelling and hard in consistence and devoid of tenderness<sup>1</sup>. The frequency of occurrence is 15 times higher in highly pigmented people<sup>2</sup>.

According to *Ayurvedic samhita* it's described as *Arbuda of Karna pali*. According to *Ayurvedic* literature, keloid of ear pinna can be correlated with *Arbuda*. *Arbuda* is *Mansa dhatupradoshak vhyadhi*<sup>3</sup>. *Sushruta charya* describe *shastra karma* treatment in *Mansadhatupradoshakvhyadhi*. As comparing to modern surgery *Ksharasutra* is best surgery in such disease<sup>4,5</sup>.

*Ksharasutra* has controlled chemical cauterizing action on living tissue. Its action is a simultaneous combination of incision, excision. Debridement, scrapping along with haemostatic, antiseptic and healing.

Ayurvedic management for such case gives best result and avoid relapse and provide complete cure.

#### 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 its result in Right ear pinna keloid. As beauty precaution so she done excision of ear pinna keloid from ENT surgeon. But it is occurring again and again. To stops its recurrence she came toward Ayurveda - our hospital – Seth Sakharam Nemchand Jain Ayurvedic Rugnalaya in Shalya-chikitsa department OPD.

### Personal History

Occupation: House wife.

O/E:

*Nadi* (pulse) = 74/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) = 100/70 mm/Hg.

### Material and Method

#### Material

*Ksharasutra* ligation (on every 3<sup>rd</sup> days )

#### Method

Center of study: S.S.N.J. Ayurvedic Rugnalaya, Solapur.

Simple random single case study.

#### Preparation of *Ksharasutra*

*Ksharasutra* was prepared as per classical method<sup>6</sup>.

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 legated tightly on the incision site<sup>7</sup>. After ligation dressing with povidone iodine was done. The patient

was observed for pain, inflammation, discolouration, and necrosis.

The same *Ksharasutra* kept for three days<sup>8</sup>. 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 asking to visit on day the keloid fell off completely.

### DISCUSSION

According to Ayurvedic literature, keloid of ear pinna can be correlated with *Arbuda* of *Karna pali*. *Arbuda* is *Mansa dhatupradoshak vhyadhi*. Application of *Ksharasutra* is best in such disease.

#### 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<sup>9</sup>.
- *Haridra* (*curcuma longa*) is anti-inflammatory, antiseptic and antibacterial having wound healing activity which prevents infection and facilities tissue growth thereby promoting healing.
- *Ksharasutra* has controlled chemical cauterizing action on living tissue. Its action is a simultaneous combination of incision, excision, debridement, scrapping along with haemostatic, antiseptic and healing<sup>10</sup>.

This lead to removal keloid mass without producing any other injury<sup>11</sup>.

### 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 significance risk reduction in recurrence of ear pinna keoid.

### CONCLUSION

Since the even after surgery of ear *pinna keloid* there is chances of recurrence, Ayurvedic management with *Ksharasutra* can be effective therapy in recurrent ear pinna keoid.

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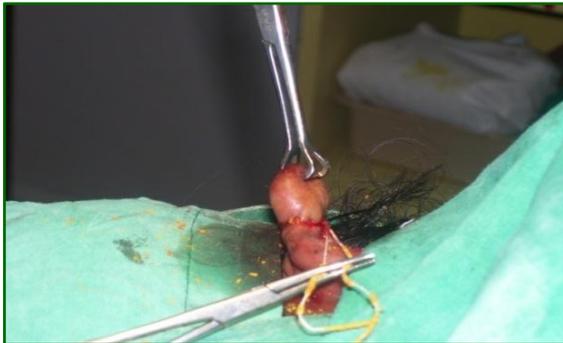
**Study Photographs**



**Before (19-04-2014)**



**After (02-05-2014)**



**1<sup>st</sup> Sitting (19-04-2014)**



**2<sup>nd</sup> Sitting (22-04-2014)**



**3<sup>rd</sup> Sitting (25-04-2014)**



**3<sup>rd</sup> Sitting (29-04-2014)**



**Keloid Get fall (01-05-2014)**