

EFFECT OF KSHARASUTRA LIGATION IN THE MANAGEMENT OF EAR PINNA KELOID- A CASE REPORT

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SUMMARY:

A 31 year old female patient presented with the complaints of swelling and growth on left and right ear pinna associated with pain and itching since 7 years. After local examination it was diagnosed as a case of ear pinna keloid. The treatment employed is *ksharasutra* ligation. *Ksharasutra* ligation was done to the keloid of ear pinna under aseptic precautions. The *ksharasutra* ligation helped in cutting the ear pinna keloid with no side effects and further reoccurrence.

Key Words: Ear pinna keloid, Ksharasutra

INTRODUCTION:

Ear pinna or ear lobule keloids are a challenging management problem. Keloids are benign, hypertrophic, fibrous lesions that generally develop following trauma, ear piercing or surgery^[1]. These keloids usually appear as shiny, smooth, globular growths on one or both sides of earpinna. Patients frequently complain of cosmetic embarrassment. They are common in darkly pigmented people and are frequently found on the pinna or lobule. The term keloid, meaning 'crab claw' was first coined by Alibert in 1806^[2]. An excess of extracellular matrix, particularly glycoproteins characterizes the histologic appearance of keloids. The otologist most often encounters keloids of the ear pinna or lobule^[3]. The location size, depth, duration of ear pinna keloid influence the choice of treatment. The treatment methods for these keloids include both surgical and non-surgical methods^[4].

According to Ayurveda, keloid of ear pinna can be correlated to *Arbuda*^[5]. *Arbuda* is the mass or growth that occurs at the pinna or lobule. According to Ayurvedic principles, *Arbuda* is a *mamsa dhatu pradoshaja vyadhi*^[6] (~disease having abnormal involvement of muscular and fibrous tissue) and application of *ksharasutra* is the important treatment modality. This *Ksharasutra* ligation action on tissue begins with severe irritation and inflammation of local tissue, initiating cutting action and pressure of ligation causing lack of blood supply to keloid mass leading to tissue necrosis^[7].

CASE HISTORY:

A Hindu, female patient Mrs X of 31yrs age visited the OPD of SDMCA & H, Hassan with an O.P. No. 002191 for the following complaint.

Swelling and growth on left and right ear pinna since 7yrs and Associated with pain and itching in both ear pinna.

Patient was said to be asymptomatic 7yrs back. Gradually she noticed small growth on the ear pinna of both ears, associated with pain and itching on the spot of additional ear piercing. After few days she noticed considerable increase in growth of the lesion and reddish

discoloration. She took steroidal inj. 5yrs back to keloid. She didn't get relief. Again she noticed worsening in the condition.

Investigations

Routine haematological and urine investigations were carried out to rule out systemic pathology.

Systemic Examination-

Skin over the ear

Inspection (Lesion)

Type - Large growth on both ear pinna

Site - Right and left ear pinna, upper 1/3rd part

Colour - Reddish in colour

Number - one in each ear, total two in number

Palpation - Feel on touch - Doughy on touch

Tenderness - Present

Discharge - Absent

Measurements - Right ear pinna keloid - 2cm wide, 1 cm in length

Left ear pinna keloid - 3cm wide, 1cm in length

Treatment Given-

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The treatment protocol followed was *ksharasutra* ligation

***Ksharasutra* Preparation - *Apamargakshara sutra*^[8]**

SURGICAL PROTOCOL:

PurvaKarma - Patient consent was taken by explaining about the procedure. Part is prepared by cleaning and scrubbing with spirit and povidine-iodine

Pradhanakarma - Under aseptic precautions, *ksharasutra* is ligated to right ear pinna followed by left ear pinna and tightened well. Patient was observed for pain, inflammation, discolouration, necrosis

Paschatkarma - *Shivagutika* 1-0-1 after food, and *Nimbadi guggulu* 2-0-2 after food.

Table 1: Treatment schedule

Date	<i>Ksharasutra</i> Ligation	Observation	<i>Ksharasutra</i> removed
17/7/13	Ligated to right and left ear pinna keloid	Tenderness, Itching associated with redness	
24/7/13			Thread removed
31/7/13	Fresh sutra ligated	Tenderness, Itching present	
7/8/13			Thread changed
24/8/13		Left keloid-50% cutting done Right keloid-10% <i>ksharasutra</i> tightened	
29/10/13	Fresh thread tied		Changed old thread
9/11/13	Thread tightened	Tenderness reduced Itching absent Bluish discolouration	
7/12/13	Fresh thread tied to right keloid	Left ear pinna keloid detached	
5/1/14		Right ear pinna keloid detached	Thread removed

RESULTS:

Size of lesion got shrunken and Itching, Tenderness reduced in subsequent months.

Following the case since 11 months there is no reoccurrence of keloid.

DISCUSSION:

It was a case of Ear pinna keloid. As per Ayurveda, it is *Arbuda of Karnapali*^[9]. It is a *mamsa pradoshaja vikara*. Keeping all this in mind management preferred was *ksharasutra ligation*. The debris of necrosed tissue is cleared out giving away for fresh budding granulation tissue^[10].

Haridra is an antiseptic, anti bacterial and anti-inflammatory having wound healing activity which prevents infection^[11].



Figure 1: Before treatment



Figure 2: After treatment

Ksharasutra has a controlled, cutting and healing action on living tissue. It does incision, excision, debridement and haemostatic which helps in removal of keloid mass.

CONCLUSION:

From this case report, we can conclude that *ksharasutra* can be used to remove ear pinna keloid.

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