



# **Case Study**

# A CASE REPORT ON THE RESTORATION OF PIERCING HOLE OF EAR THROUGH KSHARAKARMA

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#### Article info

#### Article History:

Received: 19-04-2023 Revised: 13-05-2023 Accepted: 27-05-2023

#### **KEYWORDS:**

Ear-piercing-hole, Ksharakarma, Apamarga Kshara, Ksharakarma in enlarged ear-piercing-hole, Stages of wound healing.

### **ABSTRACT**

Ornaments are the marker of culture, tradition, status, passion and personality. Sometimes those heavy ornaments cause trauma and recurrent infection in the piercing-hole of ear, which may lead to enlargement of the piercing hole. To restore the, enlarged piercing hole; in *Ayurved* we have techniques like scraping and suturing of the piercing-hole edges, which is also practiced by modern advanced surgery. *Kshara* (alkali) is an *Anushashtra*; it performs the *Lekhana* (scraping), *Chhedana* (excision), *Bhedana* (incision), *Ropana* (healing) and also ceases the bleeding. Because of these properties, *Kshara* can also be used to restore the enlarged piercing-hole of ear. The *Kshara* causes ulceration of the piercing-edges and induces healing through the inflammation, proliferation and remodeling phases. There were inflammation, secretion and gradually the piercing hole healed. Based on this concept, we have tried to restore the piercing hole of the ear through *Ksharakarma* and an ideal protocol is made for this procedure.

### **INTRODUCTION**

Usage of ornaments, earrings and pins are the symbol of beauty and passion for female and represents personality of the male. It also represents culture, tradition and status. Sometimes these ornament causes enlargement of the ear piercing hole due to long use of heavy earrings and pins, trauma and recurrent infection. The general treatment protocol for this alignment is to repair through scrapping and suturing the piercing-hole edges. Still, here is an attempt is made to repair and restore the enlarged piercing-hole by *Apamarga Kshara* application. *Kshara* is responsible for Lekhana (scraping), Chhedana (excision), Bhedana (incision), Ropana (healing) and it ceases bleeding [1,2,3]. It has a unique property of Ksharana (secretion)[4], which is usually caused by inflammation.

These are the important characters, which are indeed needed for healing. The *Sadya-vrana* (acute

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wound) is healed through the inflammation, proliferation and remodeling phases [5]. *Kshara*; destroys the epithelium and induces acute wound, which is later healed through the different phases. *Kshara* application and *Kshara* neutralization followed by the medicated *Ghrita* (ghee) application are the treatment modalities followed to restore the enlarged ear-piercing hole.

## **Patient Information**

A non-diabetic female patient around 55 year presented with enlarged piercing holes in both ear lobule. She was wearing the earrings since childhood. The right ear lobule has two oblique or elliptical holes and on stretching the lobule, the piercing-hole seems to be measured around 2mm and 1.5mm. The left ear lobule has a single piercing-hole measuring around 1.5-2mm.

# **Therapeutic Intervention**

**Protocol:** *Kshara* application, *Kshara* neutralization followed by medicated ghee application are considered as the important steps of this procedure.

*Kshara* **Application:** *Apamarga-Kshara* was applied for 5 minutes inside the piercing-hole and 1-2mm around the hole for 5 min.

*Kshara* **Neutralization:** *Kshara* application for desired time is followed by *Kshara* neutralization by cleaning

the lesion with fresh lemon juice.

*Ghrita* Application: *Triphala-Ghrita* was applied over the lesion for healing.

The above three steps were considered as the single **Left ear** 

sitting and total two sittings were made on day 1 and 3 and the *Triphala Ghrita* was applied twice daily until healing.









Fig: 1 Before Treatment Fig: 2 After 1st sitting Fig: 3 After-15 Days Fig: 4 After 2.5 month of treatment Right Ear









Fig: 5 Before Treatment Fig: 6 After 1st sitting Fig: 7 After-15 Days Fig: 8 After 2.5 month of treatment Drug Review

Apamarga Kshara: Kshara is the best among the Shashtra (sharp edged instrument) and Anushastra due to the Tridoshahara (medicine that balance Tridosha) effect, applicability in the extreme areas and due to the function of all the surgical technique that is excision, incision, puncturing, scraping. It acts as a Sashtra (sharp instrument) and Agni (fire). It sucks quickly, heals, spreads everywhere and it pulls out all the Dosha by their root. After its actions, when the disease disappears, Kshara also subsides on its own accord. Kshara also ceases the bleeding. The pH of the applied Apamarga Kshara is found to be around 12, through pH paper.

*Triphala-Ghrita*: Ghee is a *Rasayana* that means, it can rejuvenate the damaged tissue or cell, hence restores their function. During the preparation of this ghee, *Triphala* was added to the processed ghee as medicated decoction and paste. Then this solution is boiled until it reduced to 1/4th. By this procedure, the ghee is enriched by the active principle like *Rasayana*, *Tridoshahara* property of *Triphala*, ghee and cow milk<sup>[8,9,10,11,12]</sup>.

**Lemon Juice:** Indian lemon juice pH is around 2.2<sup>[13]</sup>, which is sufficient for the purpose of neutralizing the *Apamarga Kshara* or alkaline.

## Follow-up and Outcomes (Fig. 1-8)

After the first sitting of *Kshara* application, the area becomes moderately inflamed and it becomes *Pakwa Tala Varna* (blackish in color). On the second day there was thick discharge was found inside and

around the lesion and on mopping the discharge with *Triphala* Ghee, there was peeling of skin was found in all the piercing holes. Then the peeled skin was excised with forceps and the edge of the piercing-hole is scrapped followed by application of *Triphala Ghrita* over the lesion. On the day three, the same procedure of cleaning along with the application of the *Apamarga Kshara* was followed without disturbing the piercing hole.

After a few days, the wound gradually healed leaving a hyper-pigmented mark over the healed piecing hole. Still the patient was advised to apply the medicated ghee over it for another fifteen days.

After 15 days, the piercing holes were at the stage of healing. However, after 1.5 months, there was complete healing with a depressed area over the piercing-hole was marked and there were hyper-pigmentation over the lesion. At 2.5 months of treatment, the depression marks were disappeared and the hyper pigmentation were turned to faint pink color.

## **DISCUSSION**

Chronic use of heavy earrings and pins, trauma and, recurrent infection and epithelialization of the wound edges lead to permanent enlargement of piercing hole. The enlarged or dilated piercing-hole of ear may be repaired by scrapping followed by suturing like the *Khandaoustha Sandhana* (repair of cleft lip) [14]. Though there is *Karna-Paali Sandhana* (repair of ear lobule) procedure is available, still an alternative

method was tried in this case. The concept was to scrap the epithelial tissue away, which is nothing but the de-epithelialization of the piercing hole edges and to initiate the inflammation to induce healing. In addition the patient was nervous for surgical procedure and bleeding, for this, the *Kshara* was found to be more suitable. The patient was nervous for surgical procedure and bleeding.

Kshara or alkali is an Anushashtra; it destroys tissue through scraping, excision and incision. It heals and also ceases bleeding. For these properties, it is termed as best among sharp instrument<sup>[1,2,3]</sup>. Here Apamarga Kshara is used having pH 12.

Human body has a unique mechanism of acutewound healing through inflammation, proliferation and remodeling phases.

#### **Mode of Action**

*Kshara* burn the tissue. This is because of its alkaline pH. The cell membrane of human being is made up of biphospolipid layer, which is a lipid chain [15].

Kshara are nothing but the alkaline. Alkali dissociates and saponifies fatty acid, of the cell membrane and therefore destroys the structure of the cell membranes of the tissue. It is hygroscopic, so it extracts the water out from the cell, which causes total necrosis. Alkali combines with lipid of cells to form soluble compounds, which produce a condition of softening and gelatinization. Thus, result in an increased deep penetration of the alkali in to the tissue. Alkali burns, saponifies the lipid chain of cell membrane, spreads deeply and widely into the tissue and tissues [16].

This concept was well known by our ancient seers during the *Samhita* period that is around 1500 B.C. They have explained in detail about the function of *Kshara*. They clearly mentioned the tissue destructive property of *Kshara* as Scraping, excision, incision, healing and puncturing. *Kshara* is ideal and best among the sharp instrument and *Anushashtra* and it induces blood coagulation or ceases bleeding. It can be applied in the unreachable areas, where sharp instruments cannot be applied.

The applied *Apamarga Kshara* has a pH around 12 basing on the above conditions; the *Kshara* is applied locally all around and in the edges of the enlarged piercing hole. After application, the *Kshara* starts its action. The alkaline area, where *Apamarga-Kshara* was applied; was neutralized by the application of lemon juice (acid) followed by *Triphala Ghrita*, leading to the induction of the healing of the lesion. Because of the irritation and destruction of the tissues, there was inflammation, which was nothing but the innate initial reaction of body to injury or body defense mechanism in response to injury.

There will be inflammation because of the vasodilation, fluid extravasations into extracellular spaces and lymphatic blockage. The proliferative stage starts with cellular activity predominance. Reepithelialization, establishment of angiogenesis and reinforcement of the fibroplasia are the cardinal features of this stage which is accelerated by the application of *Ghrita*. This stage is followed by remodeling phase and ultimately leads, it leads to wound healing.

## **CONCLUSION**

Ayurved has many mesmerizing treatment modalities and *Ksharakarma* is one among them. *Apamarga-Kshara* is a natural alkaline, which performs tissue destruction and promotes healing or repair of the lesion through inflammation, proliferation and remodeling. Though there are Lobuloplasty, simple scrapping and suturing techniques, still this treatment protocol of *Ksharakarma* may be added to the restoration of enlarged or piercing-hole of the ear lobule.

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#### Cite this article as:

Tarun Kumar Dwibedi, Nibedita Panda, Mridulata Maurya, D.K. Maurya. A Case Report on the Restoration of Piercing Hole of Ear Through Ksharakarma. International Journal of Ayurveda and Pharma Research. 2023;11(5):47-50. https://doi.org/10.47070/ijapr.v11i5.2813

Source of support: Nil, Conflict of interest: None Declared

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