

## KSHARSUTRA AS A POTENTIAL THERAPY IN THE MANAGEMENT OF PILONIDAL SINUS

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### Abstract

The *Ayurveda* has the ancient text of various surgical processes for management of various diseases which are difficult to treat by non-surgical therapy. *Ksharsutra* is one of the most important para-surgical procedures described by *Acharya Susruta*. Generally, it's employed for the management of the *Nadivrana*. There is similarity between *Shalyaj Nadivrana* and Pilonidal Sinus. It is defined as nest of hairs into skin in the inflammatory or dermatitis skin know as 'Pilonidal Sinus'<sup>1</sup>. It usually present as an abscess or a chronic discharging, painful sinus tract. *Acharya Shusruta* described in *Sutrasthan* '*Kutakaasthishrit Vrana*'<sup>2</sup> The management of chronic pilonidal disease is variable, contentious and problematic. Principles of the sinus tract complete healing of the overlying skin and prevention of recurrence<sup>3</sup>. As recurrence rate after surgery is very high. Hence there is a need to evaluate the role of the other alternative and innovative *Ksharsutra* techniques for the management of challenging disease so as to minimize recurrence make it cost effective with improved acceptability and minimum hospitalization.

**Keywords:-** Ksharsutra, Nadivrana, Pilonidal Sinus, Kshara, Kutakaasthishrit Vrana.

### Introduction

Pilonidal sinus is a disease that most commonly arises in the hair follicles of the natal cleft of the sacrococcygeal area<sup>4</sup>. It is due to penetration of hairs through the skin into subcutaneous tissue.<sup>5</sup> It is common in males and mostly affects hairy men age group between 20 to 30 years<sup>6</sup>. 'Jeep bottom disease' – during the Second World War the condition was common in jeep drivers<sup>7</sup>. Pilonidal Sinus usually presents as an abscess or a chronically discharging, painful sinus tract. The ideal therapy would be a quick cure that allowed activity, with a low risk of complications. The management of chronic pilonidal disease is variable, contentious and problematic. Principles of the sinus tract complete healing of the overlying skin and prevention of recurrence. As recurrence rate after surgery is very high. Hence there is a need to evaluate the role of the other alternative and innovative *Ksharsutra* techniques for the management of challenging disease so as to minimize recurrence make it cost

effective with improved acceptability and minimum hospitalization.

### Pathology – <sup>8</sup>

These are sinuses at the natal cleft, containing hairs within it. This was previously thought to be a developmental anomaly. But now there is no doubt that these are acquired conditions and caused by the intrusion of the hair into the dilated ducts of the sweat glands which ultimately get infected. Hair penetration the skin, Dermatitis

, Infection, Pustule formation, Sinus formation, Hair gets sunked into the sinus by negative pressure in the area, Further irritation and granulation tissue formation, Pus forms, Discharging sinus

### Ksharsutra therapy in pilonidal sinus

The *Ksharsutra* theory for Pilonidal Sinus must consider prevalence of other disease condition like TB HIV DM etc before starting treatment procedure. The procedural protocol utilizes excision of external opening using local anesthesia and the removal of embedded hair follicles that after *Ksharsutra* tied up

covering the entire underlying track for healing after dressing the patient may be discharged on the day after the procedure. Study advocate dressing alternatively and change of Ksharsutra as required getting maximal beneficial effect. study attributes the beneficial effect of Ksharsutra in Pilonidal Sinus due to the medicated thread (Seton) coated with herbal drug which helps in debridement and lysis of tissues exerts antifungal, antibacterial and anti-inflammatory activity. Ksharsutra also destroys the residual glands in the epithelium which decreases chance of recurrent.

#### **Aim-**

To prove the procedure of Ksharsutra has good potential in the management of Pilonidal Sinus

#### **Objectives-**

To explain the role of Ksharsutra procedure in Pilonidal Sinus

#### **Methods and Material -**

Kshara prepared from Apamarga ash. Snuhi latex, cotton wool, surgical linen Thread no 20, gloves, ksharsutra cabinet. Preparation of Ksharsutra is standardized with the following drug and method like Apamarga ksharsutra. Considering the caustic action of kshara the proteolytic action of Snuhi latex and antiseptic action of turmeric powder, coating of three drugs are done on surgical linen thread no 20 Ksharsutra is a medicated seton<sup>(9,10)</sup>

- **Apamarga kshar** –  
Latin name-Achyranthus Aspera  
Form -Ash  
kshar which maintains acid base balance and water balance in cell also maintains intracellular osmotic pressure adequate intracellular concentration of kshar is necessary for biosynthesis of proteins kshar if used on open wound acts like caustic agent
- **Sunhi** -  
Latin name- Euphorbia Nerifolia

From- Latex

Chemical composition- Euphol

Action-proteolytic, debridement of tissues, sticking property

#### • **Haridra powder-**

Latin name-Curcuma Longa

Chemical composition – Curcumin

Aromatic and turmeric oil

Haridra contains petroleum ether which is anti-bacterial, anti-fungal, anti-inflammatory, anti-oxidant, anti-hepatotoxic, coagulatory.

The order and number of coatings is as follows-

Snuhi latex -11 coatings

Snuhi latex + Apamarga kshar -7 coatings

Snuhi latex + Turmeric powder – 3 coatings

#### **Mode of action of ksharsutra** <sup>(11,12)</sup>

- Ksharsutra get absorbed in tissue within 36 to 48 hrs resulting in inflammation
- Lysis of cells
- Discharges
- Debridement

#### **Wound healing takes place in following stages**<sup>13</sup>

- Epithelialization
- New capillary formation
- Fibroblastic proliferation
- Collagen laying.

#### **Excellence of Ksharsutra over a Surgical Management**<sup>14</sup>

1. Minimum trauma
2. No tissue loss
3. Therapy cost is less
4. Very narrow and fine scar
5. Minimum bleeding occurs
6. Low quality Anesthesia is required
7. Minimum hospital stay
8. No dressing required
9. It cuts and heals from the base
10. Recurrence rate is practically nil

#### **Discussion and conclusion -**

*Ksara* (caustic alkali) is the most important one among *sastra* (sharp instruments) and *anusastra* (accessory instruments). Combination of many plant

drugs it mitigates the *tridosha*, being white in color it is cool; though being cools its action such as burning, ripening, bursting etc Because of predominance of *agneya* drugs it is pungent, hot, penetrates deep, causes ripening, liquefaction, purification, healing, absorbing, withholding and scarifying, destroys worms, *ama* and *kapha*.

Study attributes the beneficial effects of Ksharsutra in Pilonidal Sinus. Due to the medicated thread (Seton) coated with herbal drug which helps in debridement and lyses of tissues exerts anti-fungal, anti-bacterial and anti-inflammatory activity.

Ksharsutra also destroys the residual glands in the epithelium.

Which decreases chance of recurrent, Study establish by Ksharsutra as

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a potential therapy in the management of Pilonidal Sinus has the capability to minimizes rate of complication and recurrence and also after acceptability of cost and comfort This minimal invasive procedure Ksharsutra has good potential in the management of Pilonidal Sinus. It minimizes the rate of complication and recurrence and Enable the patient to resume work and normal social activities as early as possible It is an acceptable treatment to the patient in terms of cost of treatment, extent of discomfort impact upon body image Pilonidal Sinus disease is a chronic and painful condition that can affect self-esteem, body image and personal relationships, multiples studies have shown ksharsutra therapy decreases both short – term and long term recurrence of the condition.

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