

## MANAGEMENT OF PILONIDAL SINUS WITH KSHEER SUTRA THERAPY: A CASE STUDY

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### ABSTRACT

Pilonidal sinus is a chronic condition consisting of an opening or series of openings, placed close together or spread out over a distance of 2-3cm situated in midline app. 5cm behind the anus. Sometimes they are so small that they barely admit a fine lacrimal probe, but usually of matchstick size. Hairs often project from the openings. In Ayurveda acharya Sushruta has considered it under shalyaj nadi vrana (sinus or fistula due to foreign body). Ksheera sutra is a kind of medicated thread made from snuhi ksheer (*Euphorbia nerifolia*) and haridra powder (*Curcuma longa*) as mentioned in Bhavaprakash and Bhaisajaya Ratanavali. A few cases of pilonidal sinus were thoroughly examined and treated with ksheer sutra therapy after expelling out the tuft of hairs inside and cleaning the wound properly. It is an ideal

procedure to be adopted as it helps in cutting and healing of the wound simultaneously. A complete cure of disease achieved in 7 weeks with minimum scar formation. No recurrence and any type of complications were found in the patient during follow up period and also took less time in preparing ksheer sutra as compared to standard kshar sutra.

**KEYWORDS:** Shalyaj Nadi Vrana, Pilonidal Sinus, Ksheer Sutra, Haridra Powder, Snuhi Ksheer.

### INTRODUCTION

Pilonidal sinus consists of a sinus or fistula situated a short distance behind the anus and generally containing hairs. It was first described by Anderson in 1847 in a paper entitled 'Hair extracted from an ulcer'. Warren in 1854 reported an 'Abscess containing hair on the nates' and Hodges in 1880 coined for it the expressive term pilonidal sinus (L. pilus = hair,

nidus = nest). This disease also referred to as a Jeep Disease, Sacrococcygeal Fistula, Pilonidal Cyst or Pilonidal Abscess. Pilonidal sinus usually occurs in the post-anal region but they may be found in finger web space (barber), axilla, the perineum, in the umbilicus, in the supra pubic region and on the occiput. Prolonged sitting, presence of deep natal cleft, obesity, repeated irritation due to hair and family history may increase the risk of disease. In ayurveda acharya Sushruta has mentioned eight type of sinuses as nadivrana, among these pilonidal sinus can be considered under shalyaj nadivrana (sinus due to foreign body). He has described nadi very beautifully as- ‘A doctor who mistakes a suppurated for an unripe one and ignores suppurated one or when a patient allows a lot of pus to accumulate, then that pus penetrates in to the deeper tissues. Due to copious flow it is known as *gati* as it moves excessively and *nadi* as it carries like a drain or tube.

### PURPOSE OF THE STUDY

To evaluate the efficacy of ksheer sutra in pilonidal sinus.

### MATERIAL AND METHODS

#### Selection Criteria

##### Criteria for inclusion of the patients

- 1 Patient aged between 20-50 years.
- 2 Routine haematological and biochemical investigations should be within normal limit.
- 3 Patient not having any other systemic disease.

##### Criteria for exclusion of the patients

- 1 Patient below 20 years and above 50 years.

#### Method of preparation of ksheer sutra

For the present study following materials are required for preparation of ksheer sutra –

1. Snuhi ksheer (*Euphorbia nerifolia*)
2. Haridra powder (*Curcuma longa*)
3. Barbour's thread no. 20
4. Glass container
5. Kshar Sutra cabinet

Ksheer sutra preparation technique has been taken from **Bhavprakash** and **Bhaisajaya Ratnavali** –“Bhavitam rajni churnai snuhi kshrae punah punah . Bandhanat sudridam sutram bhinnati arsho bhanderam/chinnati arsho na sanshya”.

Fresh solution of snuhi latex and haridra is made in a glass container. The thread is dipped completely in the solution and left for 24hours. This procedure has been repeated till the thread is saturated with the solution. Then the thread is tied on hangers and kept in ksharsutra cabinet, it took 7days (5days for saturation and 2days for drying and sterilization). After drying and sterilizing (uv light) in kshar sutra cabinet medicated threads were packed in air tight glass tubes.

### **Mechanism of action**

Sutra/thread/seton allows the proper drainage of pus and gradual cutting of skin (due to its mechanical pressure) overlying the tract. Haridra has got shodhan- ropan, tridoshghan properties where as snuhi is tikshan virechak having properties tikshan, katu, katu, ushan. Therefore haridra and snuhi helps in debridement, scraping, decreasing infection and side by side healing of the wound. Trifla guggul as anti – inflammatory and jatyadi oil for further healing of the wound.

### **CASE STUDY**

Four male patients of age between 25years – 35years with occupation shopkeeper (obese), driver, farmer, computer operator having thick and long hairs visited shalya tantra opd of CDL college of Ayurveda Bhagwargarh Jagadhari Haryana in 2015 with complaints of discharge, itching, swelling and pain, on and off in the natal cleft since last 3 yrs. (average). One case was having multiple branches and others with unhealthy granulation tissue obstructing the either openings. The patients were examined thoroughly (systemic as well as local examination), investigated for Hb, T.L.C., D.L.C., E.S.R., F.B.S., B.T., C.T. and rectal pathology also ruled out.

### **Preoperative preparation**

Xylocaine sensitivity, tetanus toxoid, broad spectrum antibiotic, preparation of the part (shaving and painting), consent of the patient and attendant taken and also procedure explained to the patient.

### Operative procedure

Positioning of the patients in prone position on operation theatre table, cleaning and drapping done. After achieving the local anaesthesia (by locally infiltrating xylocaine 2% with adrenaline) unhealthy granulation tissues obstructing the tract were excised. The hairs were taken out with the help of probe and artery forceps, track washed with hydrogen peroxide and normal saline. The probe threaded with ksheer sutra is inserted in to the tract and snugly tied and wound dressed. Broad spectrum antibiotics and anti-inflammatory drugs were given for 3 days and after that trifla guggul 500mg three times a day and hot sitz bath twice a day till the complete cutting achieved. After that wound managed with jatyadi oil (only) for further one week.

### Follow ups

Patients were asked for follow up and change of ksheer sutra on every seventh day.

### RESULT

In an average 5cm tract took 6 sittings for complete cutting and another week for complete healing only with jatyadi oil local application.

### CONCLUSION

Although several conservative and surgical techniques are available to treat pilonidal sinus but all are having its limitations such as recurrence, cost effectiveness, prolonged hospital stay and infections etc. Ksheer sutra therapy is minimal invasive procedure and it can be performed as a day care procedure in most of the patients. It is simple, safe, effective, cost effective, needs no longer hospital stay and having less recurrence rate. So the ksheer sutra therapy has shown very good results although it needs more clinical study on it with large number of the patients.

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