THE EFFICACY OF VIBHITHAKI KSHARASUTRA IN THE MANAGEMENT OF NADIVRANA W.S.R PILONIDAL SINUS

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ABSTRACT

Pilonidal sinus (PNS) is a chronic disorder that occurs in the space between the buttocks (natal cleft). Men are more susceptible (because they have more hair) to pilonidal sinus than women. Excision, primary closure and reconstructive flap surgery are the most commonly used surgical techniques for this disease. However, there is a high risk of recurrence or wound infection after surgery. In addition, the patient needs a longer hospital stay, and the procedure is expensive. Acharya Susrutha (800 BC) considered this disease under Nadivrana (Shalyaja) and advocated a minimally invasive para surgical treatment namely the Kshara Sutra procedure. Susrutha mentioned Kshara dravyas like Apamarga, Palasha, Vasa, Vibhithaki, etc used in the preparation of the Ksharasutra. Here we selected Vibhithaki to prepare Kshara and Ksharasutra. Vibhithaki is cost-effective as it is easily available and the properties of this plant are favourable to Kshara qualities. The present case study deals with the efficacy of Vibhithaki Ksharasutra in the management of Nadivrana (pilonidal sinus).

INTRODUCTION

Nadi Vrana is recognized as a tubular Vrana and is identical to Dusta Vrana in all aspects, improper management or negligence of management of Vrana sopha will lead the Vrana into Nadi Vrana. According to the classics, foreign substances (Shalya) also induce the formation of sinuses. One of the main causes of non-healing nature of Nadi Vrana (Shalyaja)¹ is the presence of hair. Pilonidal sinus is a condition that most usually affects the hair follicles of the sacro-Coccygeal natal cleft which is similar to Shalyaja Nadi Vrana. It is also called as jeep disease (²) because it is very common in jeep drivers. Males are twice as likely as females to be affected and young adults of working age are disproportionately affected. Pilonidal sinus generally manifests as an abscess or a painful, continuously draining sinus passage. The painful nature of the illness generates severe morbidity, frequently with a prolonged loss of normal activities, regardless of the route of presentation.

The main principle of treatment of pilonidal sinus is to complete removal of sinus tract, healing and to prevent recurrence. So many different techniques have been developed e.g. Z-plasty procedure, cryosurgery, vacuum assisted closure, excision with secondary healing, excision with primary closure, local flap surgery etc. Modern treatment employs wide excision which usually depends on secondary healing and leaves an ugly scar behind. Acharya Susrutha (800 B.C) advocated a minimally invasive para surgical treatment namely the Kshara Sutra procedure in the treatment of pilonidal sinus. Ksharasutra requires minimal incision and produces very less scar. Regarding Kshara Sutras, the Apamarga Ksharasutra is widely practiced. As we turn to the classics (Susrutha Samhita), we find the reference regarding Vibhithaki grouped in Kshara dravyas³. When we consider the properties⁵ of Vibhithaki like Kashaya Rasa, Ushna Veerya, Madhura Vipaka, Ruksha, and Laghu Guna, which are favourable to qualities of Kshara. It is also cost effective due to easy availability. So Vibhithaki Ksharasutra was tried to treat the disease Nadi vrana in the present case.
Case Report

This is a single case study, a 28 years old male, working as sales boy, came to Shalya Tantra OPD (Op no. 23146) at SV Ayurveda hospital, Tirupati, Andhra Pradesh, on 7th April 2023

Chief Complaint

Patient complaints of pus discharge from natal cleft at Sacro-Coccygeal junction associated with intermittent pain since 6 months.

History of Present Illness

The patient is suffering from pus discharge from natal cleft near to the Sacro-Coccygeal region along with pain since the last 6 months. He consulted many allopathic hospitals but could not get relief. So he came to SVAYH for better treatment.

History of Past illness

No H/o T2 DM, HTN, CAD, CKD, epilepsy, hypothyroidism

Surgical history

No surgical history was found.

Clinical Examination

Ashtavidha Pariksha

1. Nadi: 80 beats/min
2. Mutra: Normal
3. Mala: Malabaddhata
4. Jihwa: Malavrita
5. Shabda: Spashta
6. Sparsha: Anushna-seeta
7. Drik: Normal
8. Akriti: Sama

General Examination

- Height: 163 cm
- Weight: 66kg
- B.P.: 120/80 mm of Hg
- Pulse: 80/BPM
- Respiratory Rate: 17/Min
- Temperature: Afebrile

On Examination

- Two external openings at mid line of natal cleft just above the buttocks with a distance of 5cm from anal verge.
- Pus discharge present.
- Tenderness present.
- On probing: the two sinuses were interconnected with the length of 4cm directed downwards, hair on withdrawal of probe is seen

METHODOLOGY

Preparation of Vibhithaki Kshara

Kshara is prepared by burning Panchangas of Vibhithaki plant and ash is collected in vessel, then ash was mixed with 6 parts of water, then ash has to settle down, the supernatant water is collected and filtration was repeated for 21 times with clean cloth. The liquid was then evaporated slowly on a moderate constant flame. During evaporation process, the mixture has to stir time to time with a flat stirrer. By evaporating, a uniform fine clear white powder, Kshara was produced at the end of boiling. The alkaline Kshara, with a pH of 12, is stored in a glass bottle.

Preparation of Vibhitaki Ksharasutra

Barbour linen surgical thread no- 20 is fix to the Ksharasutra hangers, Snuhki keehra (Euphorbia neriifolia) smeared on the thread with the gauze piece and dried in the Ksharasuta cabin, the same process is repeated for 11 days then pass the thread through Vibhitaki Kshara powder and allowed to dry, same process is repeated for 7 days, then pass the thread through Haridra churna (Curcuma longa) and allowed to dry, same process is repeated for 3 days. The thread is sterilized with UV light for 30 minutes per day; then Ksharasutra is sealed in glass test tube.

Application of Vibhithaki Kshara Sutra in Nadi Vrana: Pre operative

Before planning this procedure other aetologies like TB, HIV, HBsAg, DM were rule out. Informed written consent was taken. Part Preparation was done. Enema was given at early morning on day to be operated. Injection T.T 0.5 cc IM was given and Inj/plain lignocaine 2% was given intradermal for sensitivity test.

Operative

Patient was shifted to OT. Under all aseptic condition patient was taken in OT with normal vital data. Patient was taken on OT table in prone position after panting and drapping local anesthesia (Xylocaine 2%) given on operated part, malleable probe is introduced in one of the sinus opening which is gradually extended to the other opening taking it out, then Vibhithaki ksharasutra was threaded into eye of probe and taken out trough second opening. The two ends of the thread were tied together. Complete haemostasis was checked, a sling soaked with betadine and xylocaine jelly is packed with bandage.

Post operative

From next morning, sitz bath/Avagaha sweda (warm water + Panchavalakla decoction) was advised for two times. Daily antiseptic dressing is done after keeping Jayyadi Taliapichu.

- Triphala guggulu 1 tab TID
- Kanchanara guggulu 1 tab TID
- Arogyavardhini vati 1 tab TID
- Kshara sutra change weekly once

Patient is advised to take fibre rich diet and plenty of water.
Follow up

Regular follow up were done to assess the progress of the disease by taking pain and pus discharge into consideration. The pus discharge was heavy during first 3 days then it was completely subsided after 16 days, pain was also heavy during first 4 days then for every thread change intensity of pain decreased. After cut through of thread the wound completely healed after 8 days.

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<thead>
<tr>
<th>Symptoms</th>
<th>1st follow up</th>
<th>2nd follow up</th>
<th>3rd follow up</th>
<th>4th follow up</th>
<th>5th follow up</th>
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<tr>
<td>Pain</td>
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<td>Discharge</td>
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<td>Tenderness</td>
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OBSERVATIONS AND RESULTS

In this study the track has been completely cut in 5 weeks, after cut through of thread the wound completely healed after 8 days. Patient returned to normal life with no side effects after one and half month, there was no reoccurrence of symptoms after 6 months of follow-up.

DISCUSSION

There are so many modalities are available in the treatment of pilonidal sinus (Nadivrana) nowadays, Ksharasutra is becoming more potential to treat pilonidal sinus. Acharya Sushruta mentions Ksharasutra therapy in Nadivrana chikitsa. Action of Ksharasutra is cutting through and laying the tract open by the medicinal property in Ksharasutra. For this present study the Vibhithaki Ksharasura, is selected for the management of Nadivrana, as it is mentioned one of the Kshara Dravya according to Susrutha. When Kshara was prepared using Vibhita, it attains properties of Kshara like Shodhana, Ropana, Soshana, Stambana, Lekhana and Krimighna. Kashaya Rasa of Vibhita helps to binds the wound margins. By virtue of Ruksha Guna, Vibhita removes slough, there it dries the wound. The Madhura Vipaka of Vibhitaki, aids in fast healing by formation of healthy granulation tissue. The Krimighna Guna of Vibhitaki prevents the wounds from getting infected. The Shothahara property of Vibhataki is due to Laghu and Ruksha guna, which helps reducing swelling. Sthambhna karma is due to Kasaya rasa Pradhana which controls discharge. The qualities of Kshara, Haridra and Snuhi help both fast cutting and simultaneously help in fast healing. This peculiar quality of drug has made this Kshara a unique thread for the best treatment of Nadivrana.

CONCLUSION

The Vibhithaki Ksharasutra has good potential in the management of pilonidal sinus. It enables the patient to resume work and normal social activities as early as possible. In this technique, scar formation is minimal and can be cosmetically supported technique, but to establish this fact and effect on recurrence of disease, further study of longer duration and on larger sample is required, probably double blind randomized studies may required to re-establish the facts.
REFERENCES


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