



MANAGEMENT OF PILONIDAL SINUS BY *Kshara Sutra* – A CASE REPORT

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ABSTRACT

A pilonidal sinus (PNS), which can result in discomfort, humiliation, and missed work, is in the cleavage between the buttocks (natal cleft). Men are more likely than women to have it because they have more hair. For this disorder, the most often utilized surgical techniques are excision combined with primary closure and excision combined with reconstructive flap. Nonetheless, there is a significant chance of infection or recurrence following surgery. In addition, the procedure is costly and the patient needs a longer stay in the hospital. Pilonidal sinus and Nadi Vrana, as described in Sushruta Samhita, are similar. For nadi vrana, Sushruta has recommended the minimally invasive Kshara Sutra procedure as a para-surgical treatment. The patient attended Shalya Tantra OPD of SDM College of Ayurveda & Hospital was treated with the Apamarga Kshara Sutra. The patient recovered well with complete excision of the tract.

KEY WORDS: Pilonidal sinus, Nadi Vrana Chikitsa, Kshara Sutra

INTRODUCTION

A sinus track that frequently contains hair is called a pilonidal sinus. The natal cleft, which is located just above the anus, is where it happens beneath the skin between the buttocks. Between the buttocks, the sinus track travels vertically. Most cases involve young adult males. Although hair growth, friction, infection, and hormonal imbalance are frequently linked to the onset of pilonidal disease, its exact cause is unknown. ^[1]

The most widely utilized treatment is surgery, which includes extensive excision and secondary intention healing. However, there is a high rate of post-operative recurrence after surgery, necessitating frequent and time-consuming wound care. Therefore, it's important to assess the potential of other cutting-edge or alternative approaches to managing this difficult illness in order to reduce recurrence, increase acceptability, save costs, and require the least amount of hospital stays.

Pilonidal sinus commonly presents in these forms. Nearly all patients experience an episode of acute abscess formation. Once the abscess resolves, either spontaneously or with medical intervention, many patients develop chronic or recurrent disease.

On examination, a pilonidal sinus typically contains a nest of hairs, earning it the nickname "jeep-bottom" due to its high prevalence among jeep drivers. It is an acquired condition commonly found in hairy males. Various surgical methods have been described for its treatment, including excision with primary closure and excision with reconstructive flap techniques. However, recurrence rates after surgery remain high.

There is a striking similarity between pilonidal sinus and *Shalyaja Nadi Vrana* described in the *Sushruta Samhita*. Acharya Sushruta has advocated a minimally invasive parasurgical procedure known as *Kshara Sutra* for the management of *Nadi Vrana* (pilonidal sinus). This treatment not only minimizes complications and recurrence but also allows patients to resume work quickly with minimal discomfort.

A patient who attended the *Shalya Tantra* OPD at SDM Ayurveda Hospital, Hassan, was treated with *Apamarga Kshara Sutra*. The patient recovered well, achieving complete excision of the sinus tract.



CASE REPORT

A 46-year female patient aged, came to Shalya (ARC) OPD at Sri Dharmasthala Manjunatheswara College of Ayurveda and Hospital, BM Road, Hassan 573201. Karnataka, India with complaints of painfull swelling in right gluteal region associated with pus discharge since 1 month She gave a history of Haemorrhoidectomy in 2015. The patient was not willing for surgery again and requested Ayurvedic treatment. Hence, *Kshara Sutra* procedure was offered. Before planning treatment other etiologies like Tuberculosis, Pelvic inflammation causing abscess, HIV, diabetes mellitus, foreign body or trauma were ruled out.

Following the CT scan's confirmation of the pilonidal sinus, the two external openings were surgically removed while local anesthesia was administered, and the embedded hair follicles were extracted [Figure 1]. In order to cut and heal at the same time, the entire underlying track was covered with the *Kshar Sutra* [Figure 2]. Under aseptic circumstances, the proper dressing was administered. After the procedure, the patient was discharged on the same day.

Patient was asked to attend near hospital for dressing on alternate days. Sitz bath with triphala choorna in lukewarm water was advised before dressing. The *Kshara Sutra* was changed weekly for 5 sittings [Figure. 4]. To promote healing and reduce pain & inflammation oral antibiotics, anti-inflammatory drugs and multi vitamins were also prescribed.

Kshar Sutra is a medicated thread (seton) coated with herbal Alkaline drugs like Apamarga (*Kshar*) (Ash of *Achyranthus aspera*), Snuhi (*Euphorbia neruifolia*) latex and Haridra (*Curcuma longa*) powder in a specific order. This combination of medicines on the thread helps in debridement and lysis of tissues, exerts antifungal, anti-bacterial, and anti-inflammatory. Another mechanism proposed for the *Kshara Sutra* is that it destroys the residual glands in the epithelium.



Figure 1: External openings coinciding with natal cleft



Figure 2: Probing done in between 2 external opening



Figure 3: changing of primary threading



Figure 4: Second changing of *Kshar Sutra* (after 7 days)



DISCUSSION

Acharya Sushruta has described *Baala* as one of the *Shalya* (foreign bodies), which is considered the primary cause of pilonidal sinus disease. In this case, the patient is obese with a deep natal cleft. Due to excess weight, there is a higher chance of hair friction between the gluteal regions. Additionally, improper cleaning of the anal region after defecation and excessive sweating in this area may contribute to the development of the condition.

Several treatment modalities are available for the management of pilonidal sinus. However, Kshara Sutra is emerging as a highly effective option. The *Kshanana* (corrosive) and *Ksharana* (draining) properties of Kshara Sutra help gradually cut the pilonidal sinus tract from the inside while simultaneously promoting healing.

Kshara Sutra is a minimally invasive procedure with good potential for managing Pilonidal sinus. As soon as possible, the patient can return to work and regular social activities, and the rates of complications and recurrence are reduced. Regarding treatment cost, degree of discomfort, and effect on body image and self-esteem, the patient finds it acceptable.

CONCLUSION

The modern surgical treatment of pilonidal sinus is often unsatisfactory, with a high recurrence rate in most cases. Kshara Sutra is a safe, cost-effective, and minimally invasive procedure that promotes healthy healing with a negligible recurrence rate. The management of pilonidal sinus with Apamarga Kshara Sutra has been found to be highly effective and can be successfully used as a curative measure in such cases.

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