



## Kshar-Sutra: A Magic Remedy

### KEYWORDS

Kshara sutra, Remedy, Snuhi, Haridra, Acharya

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**ABSTRACT** *Kshara Sutra therapy is a minimal invasive Ayurvedic Parasurgical procedure and time-tested Ayurvedic technique in the management of Anorectal disorders. It is a safe, sure and cost effective method of treatment for fistula-in-ano, haemorrhoids and other sinus diseases. Though the therapy has been described in Ayurveda by Sushruta, Charak and Vagbhata. This technique is being practiced widely in our country and in some other countries.*

### Indications –

Fistula-in-ano, haemorrhoids, sentinel piles, pilonidal sinus, rectal or anal polyps, warts etc.

### Application of Kshara Sutra in Fistula-in-ano –

The patient is anaesthetized with local or spinal or general anesthesia, then a malleable probe is passed through the external opening of the fistula to the internal opening in the anal canal and probe is gently taken out through anal opening to outside along with a Kshara Sutra in the groove of the probe. Later both ends of the Kshara Sutra is tied together. The Kshara Sutra is replaced by a new one after an interval of one week. The Kshara Sutra gradually cuts and heals the tract. Finally the whole fistulous tract heals after cutting.

### Mechanism of action of Kshara Sutra in Fistula-in-ano -

- It helps in cutting, curetting, draining and healing of the fistulous track.
- It destroys and removes unhealthy tissue and promotes healing of the fistulous track due to caustic action.
- Controls infection by the microbicidal action.
- Separation of debris and cleaning the wound.
- Facilitate in drainage of pus in fistulous tract and help in healing.
- Cutting through the tissues and laying the track open.

### Application of Kshara Sutra in Haemorrhoids –

The patient is anaesthetized with local anesthesia. First pile mass holding with pile holding forceps and bring them out of the anal orifice, then give incision at mucocutaneous junction. Later slight pull exerted over the pile mass and transfixed by Kshara Sutra at the base. Ligated pile mass replaced inside the rectum and rectal pack with Yastimadhu taila or ghrita.

### Mechanism of action of Kshara Sutra in Haemorrhoids –

- Chemical cauterization and mechanical strangulation of the blood vessel.
- Local gangrene of the pile mass tissue.
- Ischemic necrosis and debridement of unhealthy tissue.
- Sloughing of the mass within 5-7 days.
- Healing of the resulting wound takes 10-15 days.

### Application of Kshara Sutra in Pilonidal Sinus -

The patient is anaesthetized with local anesthesia and then

a malleable probe with Kshara Sutra is passed through the external opening of the pilonidal sinus to the skin. Later both ends of the Kshara Sutra is tied together. The Kshara Sutra is replaced by a new one after an interval of one week. The Kshara Sutra gradually cuts and heals the sinus tract.

### Advantages of Kshara Sutra Therapy –

- Simple and safe parasurgical procedure.
- Cost-effective and ambulatory.
- Minimal recurrence rate.
- Systemic diseases are also undergoing this procedure.
- No surgical complications like incontinence, stenosis and stricture.

### Fistula-in-ano and Ayurveda Kshar-sutra therapy <sup>5</sup>

The history of medical literature available today very clearly speaks that the disease Fistula-in-Ano (Bhagandara) affects more reputations of surgeons who deals with it. There is a saying in medical world "the best way to take revenge of a surgeon is to refer him a patient of Fistula-in-Ano". Thus, it is a well known fact that in spite of the tremendous developments of modern medical science especially of surgery, the disease Fistula-in-Ano still remains a challenging problem to the medical world.

The ano-rectal disorders and their management has established a separate surgico-dynamic speciality among the various surgical disorders. The ano-rectal disorders have been known from the very early period of evolution to the medical science. The disease Bhagandara (Fistula-in-Ano) is said to have existed about four thousand years according to Wilson (1963) as mentioned by Khurana et al (1972). Furstenbergh et al (1964) have mentioned the method of Apolinose by which Hippocrates, the Father of modern medicine (460 BC) treated Fistula-in-Ano.

The main limitation of treatment of Fistula-in-Ano by conventional surgery is that even after surgical excision of the tract the recurrence rate still remains between 20-30%. Hence this disease even today stands as a challenge in front of the medical world.

Susruta's method of thread treatment is known as Kshara-sutra treatment as mentioned above and even today it is quite successful method in treating this difficult disease. Hippocrates named the procedure of passing the ligature

along the fistulous tract as Appolinose. Chandsi and Madras treatments are known by their names only and much detail are not known about them. However it was Prof. P. J. Deshpandey at Banaras Hindu University, who took the lead after ancient Acharyas for exploring the technique, and modified and standardized it with the help of modern science and technology. The treatment was put to clinical trials in patient of Bhagandara and many scientific papers published. Apart from that, at the Department of Shalya Shalaky, Gujrat Ayurved University, Jamnagar many works done on Kshara-sutra treatment for the disease Bhagandara under the guidance of Prof. Kulwant Singh. Later on various other places in India and abroad started Kshara-sutra treatment in Bhagandara (Fistula-in-Ano) and piles patients. The Kshara-sutra treatment is now a well accepted Ayurvedic technique for treating the ano-rectal diseases viz. Fistula-in-Ano, Arshas (Piles), Parikartika (Fissures with tags) etc.

#### APPLICATION OF KSHARA-SUTRA IN A PATIENT OF BHAGANDARA (FISTULA-IN-ANO):

Pre Kshara sutra (Pre-operative):

- The patient should be admitted in the hospital a day before operation.
- Laxative like Panchsakara churana is given at previous night
- Shave and part preparation done.
- Patient is kept fasting for at least 8 hours
- Consent of the patient in written
- Proctoclysis enema 2-4 hours before the procedure
- Inj. Xylocaine sensitivity test
- Inj. Tetenus toxoid 1 Amp. IM stat.

#### EQUIPMENTS AND OTHER REQUIREMENTS

Proctoscope

Probes of different sizes

Artery forceps both Staigt & curved

Sponge holding forceps

Surgical gloves assorted size and pair

Scissors

Towel clips

Syringes

Swabs

Linens

Kshara sutra

Jatyadi oil

**POSITION:** All the patients were given lithotomy position for the procedure.

**Kshara sutra threading procedure (Operative procedure):**

Spinal anesthesia is induced by the Anesthetist.

The patient is made to lie on the operation table in Lithotomy position.

The perianal area is cleaned with Savlon and spirit followed by Betadine painting.

The outer area is covered with sterile cloth, leaving the anal area open.

Digital examination done to locate any induration, internal opening and to exclude other lesions.

Probing is done through a malleable probe to locate the internal opening with the index finger of other hand inside the anus. If internal opening is located, the probe is pushed out through the anal verge and the track is threaded loosely by Kshara sutra. However if internal opening couldn't be located it is made inside the anal canal at a point which offer least resistance to the tip of the probe. Again Kshara sutra threading of the track is done loosely.

10 ml. of Jatyadi oil is pushed inside the rectum and sterilized gauze is applied on the anus covering the external opening.

T-bandage is tied to keep the dressing in proper position.

Thereafter the patient is shifted to the ward.

#### Post Kshara sutra threading management (Post operative):

- Nil orally for 4 hours
- Give liquid diet after that to avoid any type of in convenience.
- Monitor the vitals
- If operation is done under spinal anaesthesia, to avoid complication give head-low position for 12 hours.
- Jatyadi oil P/R OD
- Hot sitz bath with panchvalka kwath 8 hourly
- To avoid hard stool, give mild laxative to the patient
- If pain is excessive, urinary retention occurred, it is managed accordingly.

#### Post Kshara sutra threading complications:

1. Retention of urine – it has been observed that within 8 to 10 hours after ligation, some of the patients complain of retention of urine which can be tackled by frequent sitz bath in lukewarm panchvalkala kwatha or simple warm water. Catheterization is seldom required.

2. Local irritation – In some of the patients local i.e. perianal irritation is seen which needs frequent use of oil application and hot sitz bath etc.

3. Abscess formation – In some of the patients (especially who was suffered from interno-external piles), abscess formation takes place which was managed with local application of Dashang lepa with Goghrita.

4. Haemorrhage – Alarming type of haemorrhage is not a rule with Kshara sutra treatment. However in some of the cases slight oozing may be seen which need no special care except the usual routine line of management, viz. avoidance of hard stool and much straining during defecation.

**Weekly change of the sutra:** - Kshara-sutra applied initially is kept for 7 days after which it is replaced by a fresh Kshara-sutra by Rail Road Technique. This procedure is repeated every week till the track completely cut through and if there is any unhealthy granulous tissue, it is scrapped-off during this weekly follow-up to promote a better healing.

#### Mode of action of Kshara sutra:

Kshara sutra works by pressure necrosis, chemical cauterization by kshar (alkali) and sloughing of the tissue of the walls of the fistulous track along with adequate drainage. It leads to an easy debridement of unhealthy tissue and pus etc. and thus providing a cleaner base for the wound healing of the fistulous track. The Kshara-sutra is changed weekly so that an average pace of cutting of about 0.5-0.8 cm/week is maintained along with healing from behind. Finally the whole track is cut through and the fistula gets healed up with minimal scarring and without any other major complication.

#### Pathya-apathya (Diet and routinely activities):

From the very first day of Kshara sutra threading procedure, light diet like Khichri is advised. Patient is also ad-

vised to take plenty of fluids, blend diet, green vegetables, salad and seasonal fruits. Patient is further advised to avoid spicy and fried food and not to strain during defecation.

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