What is Fistula in-ano?

Anal fistula is a chronic inflamed, abnormal tunnel between the anal canal and the outer skin of the anus. Commonly this disease develops after spontaneous bursting or operation of an abscess located in this area. It then remains open and discharge pus, even after the abscess has healed.

Fistula in-ano discharging (a) pus mixed with blood, (b) pus, (c) faecal matter

In few cases there may not be any external opening and the patient discharges pus or blood mixed pus through anal opening.

Patient may develop collection of pus (abscess) if the external opening is blocked. In many patients there may be one or more external openings around the anus. Sometimes, external opening may extended to deeper structure.

Procedure of apply

What is Ksharsutra Therapy?-

Ksharsutra is a medicated thread described in the classics of Ayurveda for the treatment of Fistula in-ano and other sinus diseases. But it was not in practice until it was re-established by Dr. P. S. Shankaran, Prof. P. J. Deshpande and others researchers in the Department of Shalya tantra, Faculty of Ayurveda, Institute of Medical Sciences at Banaras Hindu University, Varanasi, India. This technique of treatment was re-established in the Dept. of Shalya Tantra at Banaras Hindu University and validated by “Central Council for Research in Ayurveda (CCRAS) and Indian Council of Medical Research (ICMR)”.

What is Ksharsutra?

Ksharsutra is a medicated thread (chemical seton) prepared by using plant based ingredients. The active ingredients are coated repeatedly on surgical linen to achieve therapeutic value. The thread when applied judiciously it helps in cutting, curetting, draining and healing of the fistulous track.

To prepare Ksharsutra, caustic material obtained from ashes of Apamarg, Kadli, Palas, Nimb etc. are used along with other plant products like guggulu and haridra.
**Ksharsutra Packed in sealed glass tubes with silica**

**How does it work?**
Various scientific studies confirm that the effect of drugs used in the preparation of *Ksharsutra* and due to mechanical pressure of tying, it gradually cuts and heals the fistulous tract.

The active ingredients in *Ksharsutra* -
(i) Control infection by the microbicidal action of drugs used for the preparation of *Ksharsutra*.
(ii) Due to caustic action it destroys and removes unhealthy tissue and promotes healing of the fistulous track.
(iii) Destroy infected tissues and the root cause of the fistula i.e. the infected anal gland.
(iv) Drugs like *haridra* (*Curcuma longa*), *guggulu* (*Commiphora mukul*), are helpful in healing of fistulous wound.
(v) Facilitate in drainage of pus caused by the infection and help in healing.

**What are the benefits of this treatment?**
Some important specialties of the therapy are as under –
- It is simple and safe minor surgical procedure.
- Hospitalization is generally not required and the patient can continue his/her routine activity during the course of treatment.
- Painful dressings are not required.
- Damage of tissue after treatment is minimum. Therefore chances of incontinence and stricture are practically nil.
- Cost of treatment is much less when compared to other modalities of treatment.
- By this method of treatment 100% cure can be obtained in simple low anal fistulae where as 93 to 97% cure rate can be achieved in difficult, complex and recurrent fistulae.
- Recurrence rate is less even in complex and difficult fistula (3 – 7%).

*Ksharsutra* therapy is highly effective in the management of fistula in-ANO. More than 30,000 patients have been treated successfully by this method of treatment in the Anorectal Clinic of S. S. Hospital at Banaras Hindu University, Varanasi, India.

Any type of allergy or associated disease should be informed to the doctor before treatment.
Rate of success in different types of treatment available for fistula in-ano.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Treatment type</th>
<th>Failure and Recurrence (%)</th>
<th>Incontinence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fistulostomy</td>
<td>1-21</td>
<td>10 - 50</td>
</tr>
<tr>
<td>2</td>
<td>Fistulectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Advance flap</td>
<td>37.5-57.0</td>
<td>12 – 23</td>
</tr>
<tr>
<td>4</td>
<td>Fibrin glue</td>
<td>Early 30-40</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term 70-100</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fistula plug</td>
<td>22-56</td>
<td>Nil</td>
</tr>
<tr>
<td>6</td>
<td>Seton</td>
<td>5 - 18</td>
<td>Up to 30</td>
</tr>
<tr>
<td>7</td>
<td>Ksharsutra</td>
<td>0-3</td>
<td>0-2</td>
</tr>
</tbody>
</table>

The success, failure and complications of treatment of fistula in-ano depend to a great extent on the severity of the disease and the type of treatment adopted. The information given in the above table is based on summary of the national and international research publications on the treatment of fistula in-ano.

Acknowledgement -

Further reading –

i. Colon and Rectal surgery –by Marvin and Corman, 5th Ed., Lippincott Williams & Wilkins
iv. Who is at risk for developing chronic anal fistula or recurrent anal sepsis after initial perianal abscess? Hamadani AB, Haigh PI, Liu IA, Abbas M., DCR February 2009, 52. 217-221


x. Anal Fistula / Abscess - The American Society of Colon and Rectal Surgeons, Bradley Champagne, MD, Assistant Professor of Surgery Case Medical Center, Cleveland, Ohio