



## KSHARASUTRA LIGATION IN ARSHA (SECOND DEGREE INTERO-EXTERNAL PILES): A CASE REPORT

Bibhu Sankar Das <sup>1</sup>, Sanjay Kumar Gupta <sup>2</sup>, Dudhamal Tukaram Sambhaji <sup>3</sup>,  
Vyasdeva Mahanta <sup>4</sup>

<sup>1</sup>M.S. Scholar, <sup>2</sup> Professor & HOD, Assistant Professor<sup>3,4</sup>, Department of Shalya Tantra IPGT&RA, Gujarat Ayurved University, Jamnagar, Gujarat, India

### ABSTRACT:

*In Ayurveda Ksharasutra is practiced for management of fistula and piles from ancient times. This modality is safe and effective for treatment of piles and cure completely without any complication in comparison to surgery. In this study a patient with intero-external piles at 7 and 11 O'clock position of anus was treated with Ksharasutra (medicated thread) ligation. The ligation of Piles was done under spinal anesthesia once and the assessment was done daily for relief in symptoms. The ligated piles were cut through on 5 postoperative day and wound healed completely on 21 post operative day without complication. This case demonstrated the advantages of Ksharasutra ligation in the management of piles.*

*Key Words: Anal dilatation, ApamargaKshara, Arsha, intero-external piles, Ksharasutra, Matra Basti.*

### INTRODUCTION

**Correspondent:**  
**Dr Dudhamal Tukaram Sambhaji**  
Assistant Professor  
Department of Shalya Tantra  
IPGT&RA, Gujarat Ayurved  
University, Jamnagar,  
Gujarat, India

In Ayurveda, Arsha (piles-in-ano) is considered under the heading of eight major diseases (Ashtomahagada) due to difficult to cure.<sup>1</sup> Even today intero-external second degree piles is more difficult to cure. In modern surgery different types of treatments like rubber band ligation, cryo surgery, infra-red therapy haemorrhoidectomy for

hemorrhoids are available options with their own limitations.<sup>2</sup> There may be complication like incontinence, hemorrhage and anal stricture.<sup>3</sup> Sushruta, the father of surgery described local application of *Kshara* in the treatment of *Arsha* (piles) and ligation or *Ksharasutra* in *nadivrana* (sinus), various tumors and tumor like lesions.<sup>4,5</sup> Piles are the engorgement of veins and it is the pedicle like lesion. In this study, a case of second degree intero-external piles at 7 and 11 o'clock position of anus was treated by *Ksharasutra* (medicated thread) ligation. The *Snuhi* (Latex of *Euphorbia nerifolia*) based *Ksharasutra* was prepared by *Apamarga Kshara* (Ash of *Achyranthus aspera* Linn.), and turmeric powder (*Curcuma longa* Linn.) in surgical Barbour's thread size 20 as per Ayurved Pharmacopeia of India (API).<sup>6</sup>

### **CASE HISTORY**

A 35 years old male patient of *Vatakaphaja Prakriti* visited in the outpatient department of Shalya Tantra for treatment of *Arsha* (Piles/hemorrhoids). He has habit of taking non vegetarian and spicy food, addiction of tobacco chewing and his occupation was labour worker in sea ship. The patient had complaints of bleeding per rectum during defecation in syringing pattern and protrusion of piles per anum during defecation which is self-

reducible since last 3months. On inspection external piles at 7 and 11 o'clock position were noticed. He was undergone proctoscopy examination for confirm diagnosis after performing HIV, VDRL, HbsAg investigation for blood. It was observed that there were two intero-external piles at 7 and 11 clock position (Fig-1). Patient took conservative Ayurvedic treatment for one month but did not get relief from the symptoms. Therefore he was admitted in Shalya Male ward for *Ksharasutra* ligation. Routine laboratory investigation for blood, urine, stool were done and found within normal limit. Chest X-ray and USG of whole abdomen were done and reports were found normal. So this case was planned for *Ksharasutra* ligation under spinal anesthesia.

### **Method of *Ksharasurta* ligation**

#### **Pre-operative:**

The written informed consent was taken from patient. Local part was prepared on previous day of operation. Soap water enema at night and proctolysis enema in morning on the day of operation was given. Inj. Tetanus Toxoid 0.5ml IM and Xylocaine sensitivity test was done on previous day of operation. *Erand Bhrasta Harataki* 5 gm was given at bed time with luke warm water. The patient was advised nil by mouth from 10:30pm in the previous



day of surgery.

### **Operative procedure**

Under aseptic condition patient was given spinal anesthesia. Then he kept lithotomic position on operation table. After painting and draping four finger anal dilation was performed by Lord's procedure. First of all the intero-external pile mass at 11 O'clock was hold by piles holding forceps and skin of external piles was incised by cutting scissors up to mucocutaneous junction without injure the mucosal part. Then transfixation and ligation was done at the base of pedicle by *Ksharashootra*. The thread then placed along the incised part of external piles mass and riff knot was applied at four directions. Same procedure was adopted for transfixation and ligation of pile situated at 7 O'clock (Fig-2). After proper haemostatic achieved the part was cleaned by Betadine and diclofenac suppositories inserted inside the anal canal. T-bandage was applied. Routine shifting of patient was done from OT to ward in healthy and conscious condition without any complication.

### **Post-operative:**

Patient was advised nil orally for six hours with head low position and intravenous fluid of Ringer Lactate and Dextrose Normal saline one litter each was

administered. Liquids allowed after six hours of operation. Injection ceftriaxone 1gm two times, intravenous ornidazole two times and injection diclofenac as per need was given for two days. From next morning, sitz bath/*Avagaha swedan* by warm water and *Panchavalkala* decoction for two times a day. *Eranda Bhrashta Harataki* 5 gm at bed time and *Triphala Guggulu* 500mg thrice in a day was advised. Antiseptic dressing was done regularly and *matra vasti* with *jatyadi toila* was given. From next day evening patient advised to take diets like green vegetables, milk, fruits, rice, rooti and plenty of water. Patient was advised not to consume non-vegetarian, spicy and oily food, Junk foods, alcohol. He also advised to avoid long sitting and riding/travelling.

On the post-operative 5<sup>th</sup> day the *Ksharasutra* was twisted so necrosed piles mass sloughed out and fresh wound was observed (Fig-3). Dressing and *matra vasti* by *jatyadi toila* was continued for further 10 days. On the post-operative 11<sup>th</sup> day anal dilatation was started with anal dilator no. 4 lubricating with *jatyadi ghrita*. On the 15<sup>th</sup> day wound was observed in healing stage and there was no spincteric spasm. On post-operative 21<sup>st</sup> day the wound was completely healed without stricture or any complication (Fig-4).

## DISCUSSION

Sushruta described fourfold modality in the treatment of *Arsha* (Piles) that is use of *Ausadhi* (Medicines), *Kshara* (external use of Caustic), *Agni* (therapeutic cauterization) and *Shastra* (Surgical procedure).<sup>7</sup> In modern science there are many treatment options for piles/hemorrhoids like sclerosant injection therapy, rubber band ligation, cryo surgery, infra-red therapy, and haemorrhoidectomy. These treatments have more recurrence rate and post-operative complications like hemorrhage, post-operative pain, delayed healing and stricture. In comparison with haemorrhoidectomy *Ksharasutra* ligation therapy is said better as it has minimum complications. In this case there was no post-operative hemorrhage and retention of urine after *Ksharasutra* ligation. The delayed complications like anal stricture and fecal incontinence are not observed in this case.

In this study, *Ksharasutra* was applied first time under spinal anesthesia and it was dislodge spontaneously after 5 days. The applied *Kshara* on thread acts as anti-inflammatory and anti-microbial activity and renders chemical cauterization of tissue by virtue of its alkaline nature which facilitates cutting and healing.<sup>8</sup> The pH of *Ksharasutra* is alkaline (pH-10.3); hence,

it does not allow growth of bacteria in site of ligation. This cutting is presumed by local action of *Kshara*, *snuhi* and mechanical pressure of tight *Ksharashootra* knot during initial 1-2 days of its application which followed by healing in rest of the 5-6 days. *Curcuma longa* or turmeric powder minimizes reaction of caustics and helped for healing of tract.<sup>9</sup> *Ksharasutra* has combined effect of these three herbal drugs (*Apamarga Kshara*, *Snuhi ksheer* and, turmeric) and said to be unique drug formulation for cutting of piles pedicle as well as healing of wound.

The adjuvant drugs like *Panchavalkal Kwath* play important role in local hygiene, *Shodhan* (cleaning) and *Ropan* (healing) of the post-operative wound.<sup>10-11</sup>

The *Errand bhrishta haritaki* prescribed for the *anuloman* as patient had history of constipation and patient get relieved. *Triphala Guggulu* has anti-inflammatory action so in this case post-operative swelling get relieved. Most of the ingredients used in *Jatyadi taila* are *Shothahara* (anti-inflammatory), *Vedanasthapana* (analgesic) and *Ropaka* (healing) which helped in wound healing. The ingredients of *Jatyadi Taila* like *Neem* (*Azadirachta indica*) and *Daruharidra* (*Berberi aristate* DC) also promote

wound healing.<sup>12</sup> After cut through of the piles anal dilatation advised to avoid the stricture. Hence along with *Ksharasutra* ligation in piles these adjuvant drugs play role in early healing of the post-operative

wound. Patient was advised to consult regularly on every alternate day and after 21 days patient was free from all symptoms of piles with normal scar of wound without any complications.

### **CONCLUSION**

This single case demonstrated that intero-external piles can be treated with *Ksharasutra* without any adverse effects. As it is a single case study so it require to study in more number of patients for concrete conclusion.

### **Figures and Legends**



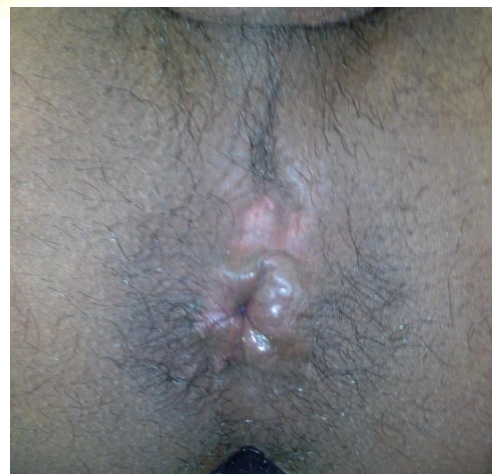
**Fig-1: Intero-external piles**



**Fig-2: Ksharasutra ligated piles**



**Fig-3: On 5<sup>th</sup> Post-operative day**



**Fig-5: On 21<sup>st</sup> Post-operative day**



REFERENCES

1. Sushruta Samhita with Ayurved Tatva Sandipika commentary by Ambikadata Shastri, sutrasthana, chapter 33, sutra 4, Page 35, published by Chowkhambha Sanskrit Sansthan-Varanasi, 13<sup>th</sup> edition, 2001.
2. R.C.G. Russell, Norman S. Williams, Christopher J.K. Bulstrode & P.Ronan O'Connell(2008) Bailey & Love's Short practice of Surgery, Chapter 75, Page 1256 (25<sup>th</sup> Edition), Edward Arnold Publishers Ltd., London.
3. R.C.G. Russell, Norman S. Williams, Christopher J.K. Bulstrode & P.Ronan O'Connell(2008) Bailey & Love's Short practice of Surgery, Chapter 75, Page 1258 (25<sup>th</sup> Edition), Edward Arnold Publishers Ltd., London.
4. Sushruta Samhita with Ayurved Tatva Sandipika commentary by Ambikadata Shastri, chikitsasthana, chapter 6, sutra 4, Page 36, published by Chowkhambha Sanskrit Sansthan-Varanasi, 13<sup>th</sup> edition, 2001
5. Sushruta Samhita with Ayurved Tatva Sandipika commentary by Ambikadata Shastri, chikitsasthana, chapter 17, sutra 33, Page 81, published by Chowkhambha Sanskrit Sansthan-Varanasi, 13<sup>th</sup> edition, 2001.
6. Unanimously, Ayurvedic Pharmacopia of India part-II volume-II chapter - 51Ksharasutra (Medicated thread) 1st ed. Published by AYUSH, Govt. of India, Delhi. 2001 p.209-13
7. Sushruta Samhita with Ayurved Tatva Sandipika commentary by Ambikadata Shastri, chikitsasthana, chapter 6, sutra 3, Page 35, published by Chowkhambha Sanskrit Sansthan-Varanasi, 13<sup>th</sup> edition, 2001.
8. Londonkar M, Reddy VC and Abhay Ku (2011). Potential Antibacterial and Antifungal Activity of *Achyranthes aspera* L., Recent Research in Science and Technology. 3(4): 53-57
9. Kohli K, Ali J, Ansari MJ, Raheman Z. (2005) Curcumin: A natural anti-inflammatory agent. Indian Journal of Pharmacology. 37(3): 141-47.
10. Arawatti S, Boppareddy S, Narinder S, Ashok K, Shringi M. (2012) Clinical evaluation on the effect of nishadya taila and *Panchavalkal kwath* in the management of bhagandar vrana (Fistulotomy wound). e: Publication, 5th WAC. Art. No.10969
11. Khadkutkar DK, Kanthi VG. (2014) Therapeutic uses of *Panchvalkal* in different forms-a review. Ayurlog; National Journal of Research in Ayurveda Science. 2(1): 1-5. [ISSN

2320-7329]

12. Biswas, Kausik ; Chattopadhyay, Ishita; Banerjee, Ranajit K; Bandyopadhyay, Uday.( 2002) Biological activities and medicinal properties of neem (Azadirachta indica). Current Science. 82 (11): 1336-1345

