

CASE STUDY

Ayurvedic and Surgical Synergy: Ksharasutra Ligation for Hemorrhoids – A Case Report

Bhargav Mungla¹, Hemant Toshikhane², Harish Daga³

1-3Department of Shalyatantra, Faculty of Ayurved, Parul University, Vadoadara, Gujarat, India.

*Corresponding author

Dr. Bhargav Mungla

ABSTRACT

The Sushruta Samhita, a foundational text in Ayurveda, highlights surgical approaches for managing conditions such as Arsha (hemorrhoids), which become more common with age. While modern interventions like rubber band ligation and hemorrhoidectomy are available, they often come with complications. One of Sushruta's key treatments is Ksharasutra, a caustic thread therapy for hemorrhoids. A 32-year-old male patient reported experiencing a persistent anal mass with intermittent bleeding for a year. Clinical examination identified fourth-degree inter-external hemorrhoids. Routine laboratory tests were normal, and the patient was considered suitable for Ksharasutra ligation under local anesthesia. After obtaining informed consent, pre-operative protocols were followed, including the administration of Ushnodaka Basti 500 ml through anal route, fasting guidelines. The procedure was performed under sterile conditions with local anesthesia. The hemorrhoids were treated using Ksharasutra ligation at multiple clock positions, ensuring adequate hemostasis before initiating post-operative care. The patient was kept hydrated with IV fluids and prescribed antibiotics. Sitz baths and Ayurvedic medications were recommended, along with a regulated diet. Monitoring continued for potential complications. By the fifth day post-surgery, necrosed hemorrhoidal tissue had sloughed off, and complete wound healing was observed by the 15th day. No complications were noted by the 21st day. Ksharasutra ligation proved to be a safe and effective treatment for fourth-degree hemorrhoids, with no major complications. The integration of Ayurvedic surgical techniques contributed to a smooth recovery, emphasizing the potential benefits of incorporating traditional Ayurvedic practices into contemporary surgical care.

Keywords: Hemorrhoids, Ksharasutra, Triphala, Arshonil

Received 24.09.2025

Revised 21.11.2025

Accepted 09.01.2026

How to cite this article:

Bhargav M, Hemant T, Harish D. Ayurvedic and Surgical Synergy: Ksharasutra Ligation for Hemorrhoids – A Case Report. Adv. Biores. Vol 17 [1] January 2026. 281-285

INTRODUCTION

The Sushruta Samhita, a fundamental text in Ayurveda, extensively discusses surgical procedures, emphasizing that certain conditions like Arsha (hemorrhoids) require more than just conservative treatment. Sushruta classified Arsha among the *Ashtamahagada*, highlighting its severity. Hemorrhoids are a widespread condition that can affect individuals of all ages, with prevalence increasing over time—approximately 50% of people over the age of fifty experience related symptoms.

Modern surgical interventions for hemorrhoids include techniques such as rubber band ligation, cryotherapy, infrared coagulation, hemorrhoidectomy, Doppler-guided hemorrhoidal artery ligation, and stapled hemorrhoidectomy. However, these methods have limitations, including concerns about long-term effectiveness and complications such as anal stricture, incontinence, and bleeding.

Sushruta outlined four primary treatment modalities: *Bheshaja Chikitsa* (medicinal management), *Kshara Karma* (cauterization therapy), *Agnikarma* (thermal cauterization), and *Shastra Karma* (surgical intervention). Among these, *Ksharasutra* therapy, later described by Chakrapani in the *Chakradatta*, is a significant Ayurvedic approach for managing Arsha. The preparation of *Ksharasutra* involves specific materials, including the latex of *Euphorbia nerifolia*, ash of *Achyranthus aspera*, *Curcuma longa*, and a specially selected surgical linen thread.

Hemorrhoids are classified as internal or external, with internal hemorrhoids further divided into four degrees: first-degree (bleeding without prolapse), second-degree (prolapses during straining but retracts

on its own), third-degree (prolapsed but can be manually repositioned), and fourth-degree (permanently prolapsed). External hemorrhoids occur near the dentate line, while a combination of both types is referred to as intero-external hemorrhoids.

CASE HISTORY



Fig: 1: Local Examination

A 32-year-old male patient presented with significant anal discomfort. She reported the presence of a non-reducible protruding mass in the anal region for the past six months. Additionally, she experienced intermittent rectal bleeding occurring both before and after defecation for the past year. The patient also described mild pain and discomfort in the anal area, which worsened while walking and sitting. A per-anal examination revealed large, swollen, and strangulated intero-external hemorrhoids located at the one, three, five, seven, and eleven o'clock positions. [fig.1]

The patient underwent a proctoscopic examination following blood tests for HIV, VDRL, and HBsAg, which confirmed a diagnosis of fourth-degree intero-external hemorrhoids at the one, three, five, seven, and eleven o'clock positions. She had no history of hypertension, diabetes, or cardiovascular conditions. Routine laboratory investigations, including blood, urine, and stool analyses, along with a chest X-ray and abdominal ultrasound, yielded normal results. A systemic examination confirmed that she was physically and mentally fit for surgery under spinal anesthesia. As a result, she was scheduled to undergo *Ksharasutra* ligation under local anesthesia.

Pre-operative Preparation: Written informed consent was obtained from the patient before the procedure. The surgical site was prepared a day in advance. The evening before surgery, the patient received *Ushnodaka Basti* (500 ml) via the anal route and was advised to abstain from food and liquids after midnight. On the morning of the procedure, vital signs were monitored. Additionally, a 0.5 ml intramuscular injection of Tetanus Toxoid was given, and a Xylocaine sensitivity test was performed a day before the operation.

Operative Procedure: Under strict aseptic conditions, the patient was brought into the operating room, and local anesthesia was administered. The perineal area was disinfected and draped. A four-finger anal dilatation was performed using Lord's technique. The intero-external hemorrhoid at the one o'clock position (left anterior) was grasped with Babcock forceps, and an incision was made along the skin of the external hemorrhoid up to the mucocutaneous junction, carefully preserving the mucosa.

Ksharasutra ligation was then performed at the base of the hemorrhoid, with the thread applied in four directions to secure the incised external hemorrhoidal mass. This process was repeated for the hemorrhoids at the three, five, seven, and eleven o'clock positions.[fig.2] After achieving proper hemostasis, the surgical site was cleansed with Betadine and hydrogen peroxide. Diclofenac suppositories were inserted into the anal canal, and a T-bandage was applied. The patient was then transferred to the recovery room with stable vital signs.

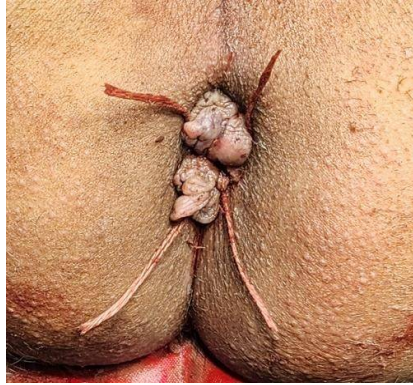


Fig 2: After post operative day 0 pile mass still intact and swelling present

Post-operative Care: Postoperatively, the patient was initially permitted only small sips of water, while hydration was maintained through intravenous fluids, including Ringer's Lactate, Dextrose, and Normal Saline. Antibiotics and analgesics were administered via injection for the first two days, followed by oral medication for an additional five days. Starting the next day, the patient was advised to take sitz baths twice daily using a diluted *Panchavalkala* decoction. Additionally, she was prescribed *Erandbhrusta Haritaki* (three tablets at bedtime with lukewarm water), along with *Triphala Guggulu* (500 mg) and *Arshonil Vati*, both taken three times daily. Regular antiseptic dressings were performed to aid healing. Dietary guidelines included a nutrient-rich intake of green vegetables, milk, fruits, rice, and roti, with an emphasis on maintaining adequate hydration. The patient was advised to avoid non-vegetarian, spicy, oily, and junk foods, as well as tobacco and alcohol. Restrictions were also placed on prolonged sitting, traveling, and riding two-wheelers. On the fifth post-operative day, the *Ksharasutra* was twisted, facilitating the sloughing of necrosed hemorrhoidal tissue and the formation of a fresh wound.[fig.3] Dressing and *Matra Basti* with *Jatyadi Taila* were continued for another ten days. By the 15th day, the wound had healed significantly, allowing for the introduction of anal dilatation using a medium-sized plastic anal dilator.[fig.4] By the 21st post-operative day, complete healing was observed without any signs of stricture or complications.



Fig 3: After post operative day 5 reduced Swelling and thread is still intact



Fig 4: After post operative day 15 thread is shredded off indicating, there by Relieving the disease condition.

RESULTS AND DISCUSSION

Acharya Sushruta described four therapeutic approaches for managing *Arsha* (hemorrhoids): *Ausadhi* (medications), *Kshara* (external caustic applications), *Agni* (medical cauterization), and *Shashtra* (surgical procedures). In modern medicine, treatment options include sclerosant injection therapy, rubber band ligation, cryosurgery, infrared therapy, and hemorrhoidectomy. However, these methods are associated with higher recurrence rates and post-operative complications, such as hemorrhage, pain, delayed healing, and stricture formation. In contrast, *Ksharasutra* ligation is considered superior to hemorrhoidectomy due to its lower complication rates. In this case, there were no instances of post-operative bleeding, urinary retention, or pain, and delayed complications such as anal stricture and fecal incontinence were not observed.

Ksharasutra was applied under local anesthesia and spontaneously dislodged after five days. The *Kshara* coating on the thread exhibits anti-inflammatory and antimicrobial properties, while its alkaline nature facilitates chemical cauterization, aiding in tissue cutting and healing. With a pH of 10.3, *Ksharasutra* inhibits bacterial growth at the ligation site. The cutting action

results from the combined effects of *Kshara* and *Snuhi*, along with the mechanical pressure exerted by the tightly knotted *Ksharasutra* during the initial one to two days, followed by healing over the next five to six days. Turmeric (*Curcuma longa*) plays a crucial role in minimizing caustic reactions and promoting wound healing. The formulation of *Ksharasutra*, which includes *Apamarga Kshara*, *Snuhi ksheer*, and turmeric, effectively cuts hemorrhoidal pedicles while facilitating tissue repair.

Additionally, adjuvant therapies contributed to post-operative healing. *Panchavalkala Kwath* helped maintain local hygiene while promoting *Shodhan* (cleansing) and *Ropan* (healing) of the surgical wound. *Swadista Virechana Churna* was administered to relieve constipation, a common concern in hemorrhoidal cases. The anti-inflammatory properties of *Triphala Guggulu* helped reduce post-operative swelling, while *Arshonil Vati* supported the healing process. *Jatyadi Taila*, enriched with ingredients like Neem (*Azadirachta indica*) and Daruharidra (*Berberis aristata*), provided anti-inflammatory, analgesic, and wound-healing benefits. After the sloughing of hemorrhoidal tissue, anal dilatation was recommended to prevent stricture formation.

The integration of *Ksharasutra* ligation with complementary Ayurvedic medications significantly enhanced the patient's recovery. She was monitored every alternate day, and by the 20th post-operative day, she had fully recovered, exhibiting a normal wound scar with no complications or residual symptoms.

CONCLUSION

Ksharasutra ligation proved to be an effective and safe treatment modality for managing fourth-degree intero-external hemorrhoids. The procedure resulted in minimal complications, with no significant post-operative pain, bleeding, or stricture formation. The unique properties of *Ksharasutra*, including its antimicrobial, anti-inflammatory, and chemical cauterization effects, facilitated the controlled sloughing of hemorrhoidal tissue and promoted faster wound healing. Additionally, the integration of Ayurvedic adjuvant therapies, such as *Panchavalkala Kwath*, *Triphala Guggulu*, *Arshonil Vati*, and *Jatyadi Taila*, played a vital role in enhancing recovery, preventing infections, and ensuring optimal post-operative care. The patient experienced complete wound healing by the 21st day, with no recurrence or complications. This case highlights the potential of combining traditional Ayurvedic approaches with modern surgical techniques, offering a holistic and effective alternative for hemorrhoid management. Further studies and

clinical evaluations can help establish Ksharasutra therapy as a standard treatment for advanced hemorrhoidal conditions.

REFERENCES

1. Shastri A. (2001). Sushrutacharya, Sushruta *Samhita*, Ayurved Tatva Sandipika. Varanasi: Chaumbika Sanskrit Sansthan. Sutra *Sthana* 33/4.10, p. 126-7.
2. L. Prasad, S. Prakash, A. Prakash. (2013). Colorectal Diseases and *Kshara Sutra* Surgery. 1st ed. Globalmedik, New Delhi, P. 104.
3. Goligher J, Duthie H, Nixon H. (2004). Surgery of the Anus, Rectum and Colon. A.I.T.B.S. Publishers and Distributors, New Delhi, 1:98-105.
4. 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 (25th Edition), Edward Arnold Publishers Ltd., London.
5. Shastri A. (1953). Sushruta acharya, *Sushruta Samhita Dalhanacharya* Kaviraj, 11th ed. Varanasi: Published Chaukhamba Sanskrit Sansthan; 1953, *Chikitsa Sthana* 6/03, p. 35.
6. Sushruta, Sushruta Samhita. By Ambikadatta Shastri, (2001). Chowkhambha Sanskrit Sansthan-Varanasi, 13th edition; 6(3):35.
7. Michal R.B. Keighley, Norman S Williams. (2008). Surgery of the anus, rectum & colon. 3rd ed. Vol. China: Elsevier Limited; 2008. P. 543.
8. Bijendra S and Tukaram Si D. (2017). Integrated approach in diagnosis of Ano-rectal (guda) diseases: A review. *Int. J. Res. Ayurveda Pharm.* 2017; 8(Suppl 3):72- 76 .<http://dx.doi.org/10.7897/2277-4343.083173>.
9. 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
10. Kohli K, Ali J, Ansari MJ, Raheman Z. (2005). Curcumin: A natural anti- inflammatory agent. *Indian Journal of Pharmacology.* 37(3): 141-47.
11. Arawatti S, Boppareddy S, Narinder S, Kumar A, Shringi M. (2012). Clinical evaluation of surgical hand scrubbing techniques and their effectiveness in reducing microbial load. *Journal of Clinical and Diagnostic Research.* ;6(8):1381-1384.
12. 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]
13. 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.

Copyright: © 2026 Author. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.