

CASE STUDY

Management of Arsha (4th Degree Multiple Obstructed and Strangulated Intero-External Haemorrhoids) with *Ksharasutra* Ligation” - A Case Report

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ABSTRACT

The most prevalent anorectal illness is haemorrhoid (*Arsha*) in which engorgement of haemorrhoidal venous plexus occurs, characterized by bleeding per rectum, constipation, pain, protrusion of mass and discharge. It manifests as a result of poor food, extended standing, prolonged sitting, and poor defecation habits, which cause Tridoshas derangement. In Gudavali, Pradhana Dhamani, and Mamsadhara Kala, vitiated doshas concentrate and vitiate *Twak, Mansa, Meda, and Rakta*, causing the *Annavaha sroto dushti*. In *Ayurveda Ksharasutra* is practiced for management of fistula and piles from ancient times. This modality is safe and effective for the management of haemorrhoid and cure completely without any complication in comparison to surgery. In this study, a patient with multiple obstructed and strangulated intero-external haemorrhoids at 1, 3, 5, 7 & 11 O'clock site was ligated with *Ksharasutra* (medicated thread). Under spinal anaesthesia, *ksharasutra* ligation was performed on all pile masses once, and daily symptom assessments were conducted. On the fifth post-operative day, the ligated hemorrhoid was shed, and the wound was fully healed without any complications on the twentieth post-operative day. This case illustrated the benefits of *Ksharasutra* ligation in the treatment of multiple, strangulated, and multiple-obstructed haemorrhoids of the fourth degree. It is required to study in more number of patients for existing conclusion.

Key Words *Anal dilatation, Apamarga Kshara, Arsha, intero-external piles, Ksharasutra, Matra Basti*

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INTRODUCTION

Sushruta Samhita the only text available in Ayurveda for surgical practice, and it has been stated that there are many diseases that are difficult to manage by conservative treatment

alone. One of these significant diseases is *Arsha* (haemorrhoids), which *Sushruta* included in *Ashtamahagada*¹ to highlight the severity of the condition.

CASE STUDY

Haemorrhoid is certainly one of the commonest disease that affect mankind. These radicles of the superior, middle, and inferior rectal veins are dilated veins that are situated in the anal canal in the subepithelial area². Haemorrhoids can affect anyone, anytime and anywhere. Its incidence increases with advancing age; at least 50% of people over the age of fifty years have some degree of haemorrhoidal symptoms³.

In modern surgery different types of treatments like Rubber band ligation, Cryotherapy, Infra-red coagulation, haemorrhoidectomy, Doppler guided haemorrhoidal artery ligation, Stapled haemorrhoidectomy are available options with their own limitations⁴. The options are restricted due to concerns about their efficacy despite a variety of therapy approaches. anal stricture, Incontinence and haemorrhage are a few possible complications⁵.

Acharya Sushruta, the father of surgery described four categories of treatment,⁶ i.e. *Bheshaja Chikitsa* (symptom management care), *Kshara Karma* (potential cauterization operative therapy), *Agnikarma* (direct cauterization agent therapy), and *Shastra Karma* (operation). Application of the *Ksharasutra* as it is described by *Charakpani* (11th AD) in his *Chakradatta* in the context of *Arshobhagandara Chikitsa* is one of the payments made during this time. Materials used for preparation of *Ksharasutra* are *Snuhi* (Latex of *Euphorbia nerifolia* Linn.), *Apamarga Kshara* (Ash of *Achyranthus aspera* Linn.), *Haridra* (*Curcuma longa* Linn.) and surgical Barbour's linen thread size 20 number⁷.

Varicosity of the hemorrhoidal vein occurs in haemorrhoids, which can be internal or external. The internal variety can be of the first degree, where the piles remain inside the anus and may bleed but do not prolapse, the second degree, where the piles prolapse on straining during defecation but spontaneously return, the third degree, where the prolapsed piles can be manually replaced, and the fourth degree, where the prolapsed piles are permanent. The margin between the external and dentate lines is occupied by external variety. Intero-external haemorrhoids are the term used when both types are present⁸.

CASE HISTORY

A 37 years old male patient visited to Sukun hospital Radhanpur on 5st June, 2022 with complaints of protrusion of mass in ano and it is not reducible since last 1 year. Bleeding in ano occasionally before and after defecation since last 3 years. Discomfort in ano with mild pain during walking and sitting. On per anal examination **one, three, five, seven and eleven O'clock** huge swollen and strangulated interno-external haemorrhoids were seen [Fig-1].

CASE STUDY

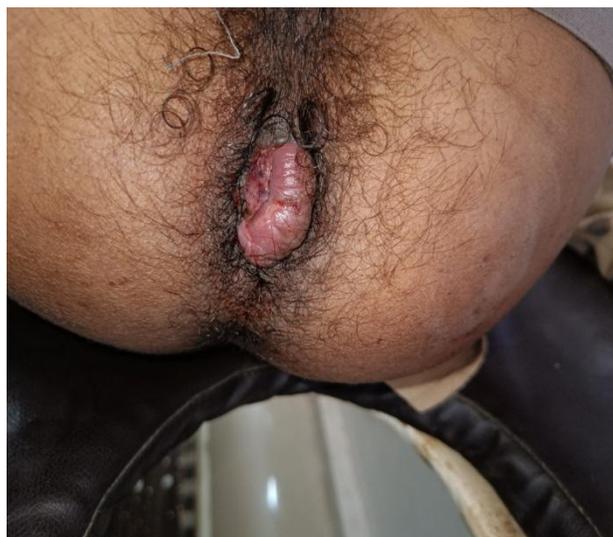


Figure 1 Before OT

Examination was done through proctoscope after blood investigations for HIV, VDRL, HbsAg. Diagnosis was confirmed as a case of fourth degree intero-external hemorrhoids at one, three, five, seven, & eleven 'o' clock position. Patient has no any history of HTN, DM or any cardiovascular disorders. The routine laboratory investigations for blood, urine, stool, chest X-ray and USG of whole abdomen were done and all reports were found within normal limit⁹. Systemic examinations reveal that patient was physically and mentally fit for surgery under spinal anaesthesia. Thus, this case was scheduled for *Ksharasutra* ligation under spinal anaesthesia.

Pre-operative:

Initially, the patient's written informed consent was obtained. Local part was prepared on previous day of operation. Isabgol husk 5 gm was given at bed time. The patient was instructed to avoid eating or drinking after midnight. Proctoclysis enema in morning on the day of operation was given and vitals were checked. Inj. Tetanus Toxoid 0.5ml IM and inj. Xylocaine

sensitivity test was done on previous day of operation.

Operative procedure:

Under all aseptic condition, patient was taken in OT room and spinal anaesthesia was given in **sitting** position by anaesthetist. **After that lithotomy position was given to patient.** Painting and draping of perineal area **were** done. Four fingers anal dilatation was done by Lord's procedure. First of **al** intero-external pile mass at one' O clock (left anterior) was **clutched** by pile holding forceps and skin of external pile was incised by scissors upto mucocutaneous junction without injury to mucosa. Then Tran's fixation and ligation by *Ksharasutra* was done at the base of haemorrhoid. The thread was then applied in four directions to the incised portion of the external haemorrhoid mass. Following that, the same procedure was used to fixate and ligate piles that were located at three o'clock, five o'clock, seven o'clock, and eleven o'clock. **[Fig-2]** After achieving proper haemostasis, local part was cleaned by betadine and hydrogen peroxide then diclofenac suppositories inserted inside anal canal. T-bandage was applied and patient was shifted to recovery room with stable vitals.

CASE STUDY



Figure 2 After OT

Post-operative:

Patient was kept in head low position and nil by mouth for six hours after that allowed liquids only little quantity i.e sip of water once. Hydration was maintained with intravenous fluid of Ringer Lactate, Dextrose, and Normal saline. Appropriate antibiotics and analgesic were given as injectables for initial two days and then orally for further five days.

From next day sitz bath was advised twice in day with diluted *Panchavalkala decoction*. *Isabgol* husk 5g at bed time and *Triphala Guggulu* 500mg thrice in a day was advised. Antiseptic dressing was done regularly. The patient was instructed to begin eating green vegetables, milk, fruits, rice, roti, and plenty of water the following morning. Patient was advised not to consume non vegetarian, spicy and oily food, Junk foods, tobacco, and alcohol. He also advised to avoid long sitting, travelling and riding on two-wheeler. On the fifth post-operative day, Ksharasutra was twisted, causing mass sloughing of necrosed piles and the appearance of a fresh wound. [Figure 3]. Dressing and *Matra Basti* by *Jatyadi Taila* was continued for further 10 days. Wound was

observed completely healed on 15th day. Thereafter anal dilatation was started with medium size plastic anal dilator. The wound was fully healed without stricture or any consequences on the 21st post-operative day. [Figure 4].



Figure 3 Before OT

RESULTS AND DISCUSSION

Acharya Sushruta described four therapy options



Figure 4 Before OT

for *Arsha* (Haemorrhoid): *Ausadhi* (Medications), *Kshara* (external usage Caustic), *Agni* (medical cauterization), and *Shastra* (Surgical procedure). In modern science there are many treatment options for haemorrhoids like sclerosant injection therapy, rubber band ligation, cryo surgery, infra-red therapy, and haemorrhoidectomy. These treatments have more

CASE STUDY

recurrence rate and post-operative complications like haemorrhage, post-operative pain, delayed healing and stricture. *Ksharasutra* ligation therapy is claimed to be superior to haemorrhoidectomy because it causes less complications. Following *Ksharasutra* ligation, there was no post-operative haemorrhage, urine retention, or pain. The delayed complications like anal stricture and faecal incontinence are not observed in this case.

Ksharasutra was administered under spinal anaesthetic in this study, and it dislodged spontaneously after 5 days. *Kshara* on thread has anti-inflammatory and anti-microbial properties, as well as chemical cauterization of tissue due to its alkaline composition, which promotes cutting and healing¹⁰. The pH of *Ksharasutra* is alkaline (pH-10.3); so, it does not allow growth of bacteria in site of ligation. This cutting is accomplished through the local action of *Kshara*, *Snuhi*, and mechanical pressure on a tight *Ksharasutra* knot during the first 1-2 days of its application, followed by healing over the next 5-6 days. Curcuma longa or turmeric powder minimizes reaction of caustics and helped for healing of tract¹¹. *Ksharasutra* has combined effect of these three herbal drugs (*Apamarga Kshara*, *Snuhi ksheer* and turmeric) and it is considered to be a one-of-a-kind medication composition for cutting hemorrhoids pedicle as well as tissue repair.

The adjuvant drugs like *Panchavalkal Kwath* plays important role in local hygiene, *Shodhan* (cleaning) and *Ropan* (healing) of the post-

operative wound¹²⁻¹³. The *Isabgol* husk prescribed for the *Anulomana* (bulk purgative) 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 healing¹⁴. After slough out of the haemorrhoid, anal dilatation advised to avoid the stricture. As a result, in addition to *Ksharasutra* ligation in haemorrhoids, these supplementary medicines have an effect on the early recovery of the post-operative lesion. Patient was directed to check frequently on every alternate day and after 20 days patient was free from all symptoms of haemorrhoids with normal scar of wound without any complications.

CONCLUSION

Ksharasutra ligation is well as it has less complication, simple, taking less time, no primary and reactionary haemorrhage and no recurrences in comparison of modern surgical procedure. The patient can perform his daily activity from the next day after the surgery. Antibiotic and anti-inflammatory drugs requirement are quite less. In the post-operative period, the patient feels less pain because no anal

CASE STUDY

pack is required. After separation of the mass, the wound heals quickly and smoothly. It takes less hospitalization time, less expenditure and there is least possibility of recurrence. All pile masses; both primary as well as secondary can be ligated at one sitting. There is no adverse effect during the post-operative period, like anal stricture, incontinence, bowel irregularities, etc. This single case demonstrated that Multiple Fourth degree intero-External Haemorrhoids (*Arsha*) can be treated with *Ksharasutra* ligation without post-operative complication. It is required to study in more number of patients for existing conclusion.

Conflict of interest: No

Source of Support: Nil

Consent of Patient: Taken

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CASE STUDY

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