



ORIGINAL RESEARCH

A Clinical Evaluation of Snuhi Ksharasutra in the Management of Bhagandara (Fistula-in-Ano)

Authors - 1. Dr. Siddharth Rastogi; 2. Dr. Vivek Kumar;
3. Dr. Nishant Dubey

Author Affiliations -

1. Assistant Professor, Dept. of Shalya Tantra, Vaidya Yogdatt Sharma Ayurved Mahavidyalaya, Khurja, Uttar Pradesh, India
2. Professor & HOD, Dept. of Shalya Tantra, Major SD Singh PG Medical College, Fatehgarh, Farrukhabad, Uttar Pradesh, India
3. Associate Professor, Dept. of Shalya Tantra, Major SD Singh PG Medical College, Fatehgarh, Farrukhabad, Uttar Pradesh, India.



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Abstract

Kshar Sootra treatment heals the fistulous tract with maintaining integrity of sphincters of anal canal. In Ayurveda Chhedana Karma, Kshara Karma, Ksharasootra therapy and Agnikarma are described for the management of Bhagandara Out of these; Ksharasootra became more popular and proven therapy as a radical cure of Bhagandara with negligible rate of recurrence and complication in comparison to the contemporary methods like fistulectomy and fistulotomy. In this clinical study total 20 patients of Bhagandara were registered from OPD and IPD of Shalya Tantra department and randomly divided in two groups. In this comparative clinical study all the subjective parameters like pain, itching and objective parameter like swelling, discharge and unit cutting time showed statistically significant results in all groups. It was found that Snuhi Ksharasutrawas more effective than Apamarg Kshar Sutra.

Introduction

Bhagandara is a common disease occurring in anorectal region. Acharya Sushruta, father of surgery has included Bhagandara under eight Mahagadas. So, it is very difficult to treat.[1] The word Bhagandara is the combination of two terms "Bhaga" and "Darana" which are derived from the roots "Bhag" and "Dri" respectively.[2] All the body parts around the Guda (ano-rectal region) including Yoni (vagina) in case of female

and the Basti (urinary bladder) is termed as Bhag and the word Darana means painful tear.[3] Bhagandara is not only a disease of Guda, but in fact any disease that forms tracts in perianal and perineal region can be considered as Bhagandara. Bhagandara, if neglected and not treated properly, flatus, urine, faeces and semen (in male) may start coming from its openings.[4] According to Charaka Bhagandara is Pidaka, which is caused by improper Ahara & Vihara.

Apart from this he has mentioned Krimiroga as a cause. Foreign body impaction in Guda Pradesh, straining during defaecation, excessive intercourse, prolong sitting and excessive horse riding are also causative factors of Bhagandara.[5] According to Sushruta The people who are found of eating nonvegetarian foods, get the impaction of partly digested or undigested or bony parts in the Bhaga Pradesh which in turn causes local injury and sepsis and results in Mansa Kotha (decay) of that part in which Krimi develop and eat away the tissue which split or tear the Bhaga to form a Chirakalina (chronic), Unmargi Bhagandara of Kshataja (traumatic) aetiology.[6] According to Sushruta, a deep routed Pidaka is seen around Guda within two Angula circumference producing pain and fever⁶³. According to Vagbhata in Apakvaastha the Shopha is called Pidaka and after bursting, it is called Bhagandara. He also described 6 types of Bhagandara Pidaka- Vaataja, Pittaja, Kaphaja, Vaatakaphaja, Vaatapittaja, and Tridosaja.[7] The Purvarupa of Bhagandara includes pain in KatiKapala region, swelling itching, burning sensation in Guda. These symptoms become more aggravated during riding and defaecation.[8] According to Acharya Sushruta the Sannipaataja and Agantuja varieties are Asadhya and the remaining are Krichchhsadhya. Bhagandara localized in Pravahani Valee and Sevani should be refused to treat.[9] Main treatment of Bhagandara is Chhedana karma (excision of entire tract) after probing it.[10] Ksharasutra is one of the chief modalities described for the treatment of Bhagandara in Ayurvedic classics. Ksharasutra therapy is simple, safe and ambulatory in nature which requires minimal setup with maximum output; therefore, it is being globally accepted. Chakrapani [11] was the first scholar who mentioned the method of preparation of Ksharasutra with a clear-cut indication of its use in Bhagandara and Arsha. In his book 'Chakradutta' he explains the method that by smearing a sutra (thread) repeatedly in the latex of Snuhi and Haridra powder makes the Kshara-

Sutra. Later authors like Bhavmishra, Bhaisjuyarutnavali etc, also mention the same method. But because of brevity of preparation and inadequate explanation of procedure of application, it lost its popularity among Ayurvedic surgeons. There is no any direct reference regarding application of Ksharasutra in Bhagandara Chikitsa Adhyaya of Sushruta. But Sushruta while explaining the Nadivrana Chikitsa, mentioned the use of Ksharasutra and explained its detail procedure and further mentioned that the procedure of Nadivrana Chikitsa with Ksharasutra can be even adopted in cases of fistula in ano. It means that though Ksharasutra is stated in Nadivrana Chikitsa, but it is widely used in the treatment of fistula in ano. Sushruta mentioned an intelligent surgeon should excise a sinus, occurring in any of the Marmas, or in weak, timid or emaciated persons with Ksharasutra and not with knife.[12] The rationale behind including the classical Snuhi Ksharasutra was to reduce the unnecessary labour work to prepare Kshara, which require to make Ksharasutra. It shows same result as other Ksharasutra. This concept based on Chakradatta on Ksharasutra on preparation. According to Chakrasdatta it was prepared by only using Sunhi and Haridra churn devoid of Kshara.

Aims and Objectives

- To compare the effect of Snuhi and ApamargKsharasutra in the management of Bhagandara.”
- To review the Ksharasutra Karma in detail

Materials and Methods

Total 20 patients from OPD and IPD of Shalya Tantra department was selected. Also, patients from other institutions and hospitals were included. All the patients randomly divided in two groups.

Group A: (10 Patients): The patients of this group were treated with Snuhi Ksharasutra.

Group B: (10 Patients): The patients of this group were treated with Apamarga Ksharasutra.

Inclusion Criteria

- Irrespective of sex, religion, occupation, economic status and education status.
- Patients within the age of 20-60yrs.
- Patients with low anal fistula (Bhagandara).
- Patients who were co-operative and ready to give written consent.
- Patients who were ready to give written informed consent.

Exclusion Criteria

- Patient suffering from systemic diseases was excluded.
- Patient with high rectal fistula was being excluded.
- Patient suffering Ca. of rectum, HbsAg and HIV was also excluded.
- Patients suffering from ulcerative colitis, Crohn's disease were being excluded from the study.

Diagnostic Criteria

Diagnosis was done on the basis of chief complaints of patient, past history, history of associated disease, inspection, palpation, digital examination, Proctoscopy and required investigations as per specially designed proforma.

Preparation of Kshar Sutra

Ksharasutra is prepared in a well-equipped Ksharasutra Lab. The detailed method of preparation of Snuhi/Udumar/Apamarg Ksharasutra is described.

Drugs required for Ksharasutra preparation

- Snuhi Ksheer
- Snuhi Kshar
- Fine Haridra Churna

Method of collection of Snuhi Ksheer

Snuhi Ksheer used for the preparation of Ksharasutra was collected every day, only one or two hours before use

Other requirements

- Ksharasutra cabinet-fitted with timer, blower and U.V. Light
- Barbour Surgical Linen Thread no. 20
- Sterile Bowls
- Sterile Gloves

- Sterile Swabs
- Sterile gauze pieces
- Hangers
- Kharal (for proper mixing of Snuhi Ksheer, Snuhi/Apamarg Kshar & Haridra Churna)
- Sealing materials

Snuhi /Apamarg Ksharasutra Coatings	Coatings
Snuhi Ksheer	11
Snuhi Ksheer + Snuhi Kshar	7
Snuhi Ksheer + Haridra Churna	3
Total coatings	21

Processing of Ksharasutra

1. The surgical linen thread was autoclaved and mounted on the hangers.
2. A piece of folded gauze was taken, dipped in Snuhi Ksheer and the thread was smeared. The threads are placed in the Ksharasutra cabinet for drying.
3. The second smearing was given on next day only when the previous coating was dried. Such 11 times coating is given in this manner, temperature inside the chamber maintained.
4. After coating of the thread done by Snuhi Kshar with Snuhi Ksheer was done. The thread was coated in this way 7 times, only when the previous coating got completely dried.
5. The last 3 coatings were given with Snuhi Ksheer and Haridra Churna. While applying every coating, care should be taken that the drug spreads evenly on all the sides of the thread and does not become thick at one spot to make beaded like appearance.
6. After finishing the coating on the threads total 21 times, the Sutras were dried well in the cabinet and were cut into assorted size and then packed in Borosilicate glass tube.

7. These prepared sealed Ksharasutra were kept in Ksharasutra cabinet-fitted with timer, blower and UV Light.

Procedure of Ksharakarma

To understand in an easy way, this can be divided into 3 stages.

- Purva Karma (Pre-operative measures)
- Pradhana Karma (Operative Procedure)
- Pashchat Karma (Post-operative measures)

(A) Purva Karma (Pre-operative measures)

Preparation of the patient: First of all, written informed consent was taken. Before Shastra Karma, the patient was prepared with Snehana, Svedana (Avagahana), Langhana and Anulomana (Mridu Virechana).

(B) Pradhana Karma (Operative procedure)

Position of the patient: Patient was made to lie down on a table and position as described for the operation of Arsha (piles). This position is similar to lithotomy position.

Instruments

1. Bhagandara Yantra is almost similar to ArshoYantra which is of two types i.e., Ekachhidram and Dvichhidram. In males, the Yantra should be of four Angula in length and five Angula in circumference. But in case of females, the Yantra should be as much as the length of the palm of the patient and six Angula in circumference. This Bhagandarayantra and anal opening are lubricated by Ghrita and then Yantra is to be introduced into Guda after instructing the patient to strain down.
2. Eshani: Required for both procedures - Ksharasutra and Chhedana
3. Chhedana (General Ayurvedic Surgical Procedure for any type of Bhagandara): The patient was kept in a position similar to lithotomy position. The anus and the Bhagandara Yantra are lubricated with Ghrita. Then with the use of Eshani, the Bhagandara tract is examined to decide whether the Bhagandara is Paracheena (blind internal) or Arvacheena (blind external). In case of Paracheena Bhagandara, the Eshani

Yantra (probe) is introduced into the external opening and whole tract is excised without leaving its Aashaya. If it is Arvacheena Bhagandara, Bhagandara Yantra is introduced into the Guda and patient should be asked to strain down. During straining, the Eshani (probe) is introduced through the internal opening. Then the whole tract is excised followed by cauterization with the help of Kshar or Agni.

The modern fistulectomy is same to this procedure of Chhedana, mentioned by Acharya Sushruta.

Observation and Results

Total 20 patients were randomly selected and divided into two groups, in present study. The efficacy of the therapy was at adjudging on varied parameters and the results were derived after execution of statistical methodology. In symptoms like pain 87.5% and 50% of relief was observed in group A and B respectively. Relief in itching was 70% in group-A, while in group B it was 75%. The result showed that treatment was statistically significant at $p < 0.01$. In swelling 83.33%, 80.90% of relief was observed in group A and B respectively. In symptoms like discharge 84.61% and 77.78% relief was observed in group A and B respectively. The result shows statistically highly significant value $p < 0.001$ in Group -A, the result for effect on Unit cutting time showed that treatment was statistically highly significant at $p < 0.001$ in a both groups

Effect on Unit cutting time - (UCT)

1. The mean U.C.T. of overall patients in group b was 8.97 days/cm and in group a it was 9 days/cm. while in group c it was 10.1 days/cm.
2. U.C.T. (Unit cutting time) was less (4.66 days/cm.) in sub cutaneous fistulae. In this category, Mean U.C.T. was found 8.44 days/cm.
3. In relation to types of Bhagandara U.C.T. was less (4.26 days/cm.) in Shatponaka Bhagandara. Mean U.C.T. was found 6.27 days/cm in this category.
4. U.C.T. decreases as length of fistulous tract increases; U.C.T. was 7.22 days/cm. in tract

having initial length within 5 cm. whereas it was 4.26 days/cm in tract of more than 10 cm. In this category, Mean U.C.T. was found 9.30 days/cm (according to length of fistulous tract) and 8.99 days/cm (according to chronicity).

Discussion

Bhagandara is one of the most common ano rectal diseases in field of surgery. It is very difficult to manage due to its multifold variation of presentation, high recurrence rate and sometimes serious postoperative complications like faecal incontinence, recurrent sepsis etc. Ksharasutra treatment heals the fistulous tract with maintaining integrity of sphincters of anal canal. Description of Bhagandara Pidika clearly shows that the Acharyas had an exact idea regarding the occurrence of perianal abscess and also knew that it could lead to the Bhagandara (Fistula in ano). They also told that not all the abscesses in this region could lead to the formation of Bhagandara eg. Furunculosis. Sushruta has mentioned Kshara Karma, but not Ksharasutra in the chapter of Bhagandara Chikitsa. The Ksharasutra application is mentioned in the Visarpa-Naadi- Stanaroga Chikitsaadhyaya. The description of Parachin and Arvachin are nothing but the blind external and blind internal types of fistulain-ano respectively.[14] Apamarga Ksharasutra proven device to treat fistula-in-ano and has been standardized by Ayurvedic Pharmacopeia of India.[15] The effect of Ksharasutra has the combined effect of ingredients and found effective in cutting and healing of the fistulous tract. Ksharasutra cuts unhealthy portion of the tract and provides simultaneous healing due to above properties. Hence, it advances tract outwards day by day and the length of the tract cut by the Ksharasutra which was measured as the Unit Cutting time (UCT). Snuhi Ksharasutra keeps the tract clean, providing the Suddha Vrana Avastha and only a Suddha Vrana can heal properly. Due to Vrana Ropana Karma of the Ksharasutra, the healing process runs simultaneously. As a whole, it can be said that the Ksharasutra acts by gradual chemical

excision of the Bhagandara (fistula in-ano) with simultaneous healing of tract as observed in this study.

Mode of action of Snuhi Ksharasutra

In this clinical trial Snuhi Ksharasutra was used in patients. The ingredients are Snuhi Ksheer, Haridra Powder. Snuhi having Katu and Tikata Ras and has properties of, Vran Shophhar(anti inflammatory), Chhedana, (excision) Bhedana (incision), Lekhana (scrapping) and Tridoshaghna (alleviating all Dosha).[16] Haridra powder has the properties like Rakta Shodhana (blood purifying), Twaka Doshahara, Shothahara (anti-inflammatory), Vatahara (allivate Vata), Vishaghna (antimicrobial) and it is useful in Vrana Ropana (wound healing). Due to all above properties, prepared Ksharasutra from above two ingredients have the properties like Chhedana, Bhedana, Lekhana, Krimighna, Vrana Shodhaka and Vrana Ropaka. Healing from the base of the fistulous tract runs parallel to the cutting of tract. Ultimately, one day the Ksharasutra comes out by cutting through the entire fistulous tract with simultaneous healing from its base. At last, a small linear scar remains at the site of fistula. The Chhedana Karma of the Ksharasutra is facilitated by Vrana Shodhana, Vrana Ropana, Sophahara, Krimighna and Vishaghna Karma. It reduces inflammation by Shophahara Karma. Due to Krimighna and Vishaghna properties, it destroys the microorganisms in the tract and thus controls the infection at local site. In cases of fistulain-ano infection is one of the factors which do not allow to heal fistula with the Vrana Shodhana property.

Conclusion

Ksharasutra therapy is simple, safe and ambulatory in nature which requires minimal setup with maximum output; therefore, it is being globally accepted. Statistically both groups have shown good results as there was no much difference seen in efficacy of different treatment modalities. But Snuhi Ksharasutra is more effective than Apamarga Ksharasutra in all the

subjective parameters like pain, itching and objective parameter like swelling, discharge, and unit cutting time showed statistically significant results. It has shown better UCT and it can be useful in recurrence / fibrosed fistula-in-ano. There was no any adverse effect of any of the drugs observed during the course of study.

References

1. Prof. K.R. Srikantha Murthy editor. 1st ed, SushrutaSamhita, Sutrasthan, Chapter 33, Verse 4-5. Vol-II.Varanasi: Chaukhamba Orientalia, 2001;pg 291.
2. Syar Raja Radhakant devbahadur. editor,Shabdakalpadruma Nag publishers, reprint 1987, Vol.1, pp- 1893
3. Bhattacharya, Taranath Tarkavachaspat. editor,Vachaspatyam: Edition: 4th ed.a comprehensivesanskrit dictionary, Vol.3 Publisher: Varanaasi :Chowkhamba Sanskrit Series Office , 1990, 473
4. Sharma RK and Bhagwan Dash. editor, (2nd ed.).Charaka Samhita, Nidan Sthana, Chapter 6, Verse 12,English Translation, Reprint. Vol. 2. Varanasi:Chowkhamba Sanskrit Series Office; 2009. pp. 231
5. Shukla V, editor, (2nd ed.). Charaka Samhita of charak,Chikitsta sthan: Chapter12, Verse 96. Varanasi:Chowkhambha Sanskrit Series, 2002; 377
6. Shashtri AD, editor, (1st ed.). ssSushrut Samhita ofsushrut, Nidan sthan: Chapter 4, Verse 10. Varanasi:Chowkhambha Sanskrit Series, 2009;318
7. Tripathi B, editor, (1st ed.). Ashtangahridaya of Vagbhata, Uttar sthan ; Chapter28, Verse 6. Varanasi:Chowkhambha Sanskrit Series, 2009; 550
8. Shashtri AD, editor, (1st ed.).Sushrut Samhita ofsushrut, Nidan sthan: Chapter 4, Verse 13. Varanasi:Chowkhambha Sanskrit Series, 2009;319
9. Tripathi B,editor,(1st ed.). Ashtangahridaya ofVagbhata, Uttar sthan ; Chapter28, Verse 21. Varanasi:Chowkhambha Sanskrit Series, 2009; 552
10. Prof. K.R. Srikantha Murthy editor. 1st ed, SusrutaSamhita, Chikitsa sthan, Chapter 17, Verse 27. Vol-II.Varanasi: Chaukhamba Orientalia, 2001;pg 145
11. P.V. Sharma (Ed.), Chakradatta of Chakrapani,Arshachikitsa; chapter 8, verse 45 (1th ed.),Chowkhambha Sanskrit sanssthan, Varanasi (2007), p.87
12. Prof. K.R. Srikantha Murthy editor. 1st ed, SusrutaSamhita, Chikitsa sthan, Chapter 17, Verse 27. Vol-II.Varanasi: Chaukhamba Orientalia, 2001;pg 280.
13. Prof. K.R. Srikantha Murthy editor 1st ed, SusrutaSamhita, Chikitsa sthan, Chapter 8, Verse 54. Vol-II.Varanasi: Chaukhamba Orientalia, 2001;pg 121
14. Sushruta Samhita, Chikitsa Sthana 8/4.in Shastri A,editor.Varanasi: Chaukhambha Sanskrita Sanssthan;2009, p. 57
15. Ayurvedic Pharmacopeia of India, first edition, Chapter69 - part 2, volume 2, Appendix 7.pg 352
16. Sharma P.V, editor Dhanvantari Nighantu,Guduchayadivarga/53,54,55. .Varanaasi: Chaukhambhaorientalia;2008,p.25,26