

CASE STUDY: EFFECT OF PAPAYA- TANKAN KSHAR SUTRA IN THE MANAGEMENT OF ARSHO-BHAGANDARA

Jaiswal Ashwani Kumar^{1*}, Gupta Ajay Kumar² and Jaiswal Ruchi³

¹Assistant Professor, Department of Shalya Tantra, Patanjali Bhartiya Ayurvedigyan Avum Anusandhan Sansthan, Haridwar, Uttarakhand.

²Professor, P.G. Department of Shalya Tantra, Rishikul Campus (Haridwar) Uttarakhand Ayurved University, Uttarakhand.

³Internee, Rishikul Campus (Haridwar) Uttarakhand Ayurved University, Uttarakhand.

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*Corresponding Author

**Dr. Jaiswal Ashwani
Kumar**

Assistant Professor,
Department of Shalya
Tantra, Patanjali Bhartiya
Ayurvedigyan Avum
Anusandhan Sansthan,
Haridwar, Uttarakhand.

ABSTRACT

Ayurveda is based on the time tested observations and medical experiences. It has immense potential in solving many challenging and unresolved problems of medical world. There are a few drawbacks that the human race carries with themselves from their ancestors and to their progeny, even though they live at the higher most places in the taxonomy. One such irregularity of mankind are the disease of Anorectal region. Bhagandara is one of the most common anorectal disease. After modern surgery, serious post-operative complications like recurrent sepsis, feecal incontinence and high recurrence rate is matter of great concern. An appropriate answer in terms of Ayurvedic management is a unique specialized parasurgical procedure viz. '*Kshar Sutra therapy*' which is well accepted and without any complications. This study elicits a case report of a Arsho-Bhagandara treated by the intervention of *Papaya-Tankan Kshar Sutra*, which cured and demolished the symptoms.

KEYWORDS: Arsho-Bhagandara, kshar sutra, fistula-in-ano.

INTRODUCTION

Sushruta Samhita is the only authentic text in surgical practice, describing detailed surgical techniques and parasurgical measures. Current surgical parlance has made enormous progress in branches like neurosurgery and microscopic surgeries. Also biomedical engineering has

advanced in diagnostic and management techniques. But certain diseases seem to mock the progress achieved. They demand for innovative techniques for their management. Regarding management of diseases, it has been opined that there are many diseases which are difficult to manage by conservative treatment alone. Among them Bhagandara is one such grave disease, for which it has been included in Ashta Mahagada^[1] by Sushruta. Ashta Mahagada includes eight dreadful diseases- Vatavyadhi, Prameha, Kushta, Mudha Garbha, Arsha, Bhagandara, Ashamari and Udara Roga. This shows the gravity of this disease, Bhagandara can affect anyone. Present mechanical modern life style is pushing the rise of prevalence rate of this disease. According to a recent study conducted by Sainio P.^[2] on the prevalence rate of fistula in ano in a London based hospital is 8.6 cases per 1,00,000 population, in Men : 12.3 cases per 1,00,000 population, in Women : 5.6 cases per 1,00,000 population , Male : Female= 1.8: 1, Mean age of patient: 38.3 year . 10% of all indoor patients and 4% of all outdoor patients reported to suffer from this disease. A similar study conducted in India has reported that fistula in ano constitutes about 15% to 16 % of all ano rectal disorders. It is being managed by specialized proctologists and surgeons. But inspite of the best possible efforts, the recurrence rate is very high i.e. 20-30 %, which is a big challenge before the surgeon's community.

Today different modalities of Bhagandara management are – Surgery, Non-medicated thread [Seton], Advancement flaps- Mucosal flap procedure, Fibrin glue, Anal fistula plug [AFP] repair, LIFT technique [ligation of intersphincteric fistula tract], VAAFT Procedure [Video assisted anal fistula tract ligation], Radiofrequency ablation of fistula etc. In all these different procedures, the cure is often not certain and there is always a great possibility of recurrence of disease.

CASE REPORT

A 36 years old female patient reported to the Shalya O.P.D. at *Rishikul Campus, Uttarakhand Ayurveda University, Haridwar, Uttarakhand* with complaints of bleeding and pus discharge through nodular swelling occurring around anal verge in January 2015. Patient was apparently alright before 7 years. She passes hard stool and something pile mass like structure comes out during defecation. After few months due to constipation, pile mass like structure prolapsed and bleeding occurs during defecation. Patient takes some allopathic medicine and bleeding stops but prolapsed pile mass does not subside. After one year, again bleeding occurs & prolapsed pile size increases. She takes allopathic medicines again.

Bleeding on and off occurs. After 3 years infection occurs in piles and this time blood and pus discharge both occurs. After this, patient came in *Rishikul Campus, Uttarakhand Ayurveda University, Haridwar, Uttarakhand* for management.

After digital rectal examination and proctoscopy the diagnosis is arshobhagandara^[3], a type of Bhagandara which has been described by Acharya Vagbhatta. The diagnosis is confirmed by fistulogram and CT scan. Before planning treatment, Patient was assessed for fitness for anaesthesia and surgery. After giving spinal anaesthesia, preparation of operated site is made. Methylene blue dye is introduced through the external opening of the arshobhagandar and through anal speculum internal opening is seen. Probing is done through external opening and tract is traced. When the patient was assured, gloved lubricated index finger was gently introduced into the anal canal and a suitable metallic malleable probe was gently passed with the help of other hand through the external opening of the fistula. The index finger inside the anus guided the probe. The probe was progressed towards the internal opening in the less resistant area. Forceful probing was not done. After passing through the internal opening, the tip of the probe came out through the anal canal. Then a suitable length of *Papaya-Tankan Kshar Sutra* was taken and threaded into the eye of the probe. Thereafter, the probe was pulled out through the anal orifice, to leave the thread in situ i.e. in the fistulous tract. The two ends of the *thread* were tied together outside the anal canal. After this extra growth of pile mass is excised and it is ligated with *Papaya-Tankan Kshar Sutra* by a transfixation suture. Complete haemostasis was checked by inserting a plain lubricated gauze piece in the anal canal. After this, antiseptic dressing was applied to the anal region and tied with the help of T-bandage and patient was shifted to the Shalya ward for post-operative management. *Kshar sutra* was changed on every week by Railroad technique^[4] until “cut through” of the fistulous tract. The ligated pile mass get necrosed and shed off spontaneously on 5th day leaving behind a raw surface which healed gradually in next one week.

Papaya-Tankan Kshar Sutra was made through Papaine powder, (it is made through drying unripe papaya fruit juice through Dryer oven upto maximum 100⁰C temperature.) papaya pulp, Tankan kshar & Haridra.

RESULT

The ligated pile mass shed off spontaneously and the remaining wound healed without any complications. Tract of Bhagandara healed completely by weekly changing of *Papaya-*

Tankan Kshar Sutra in a period of 5 weeks. No adverse effects were absrued during the course of study and management.



Figure1: Image showing the Case of Arsho-Bhagandara (Rishikul Campus, Uttarakhand Ayurved University, Haridwar)



Figure 2: Image showing the Case of Arsho-Bhagandara during Surgery (Rishikul Campus, Uttarakhand Ayurved University, Haridwar)

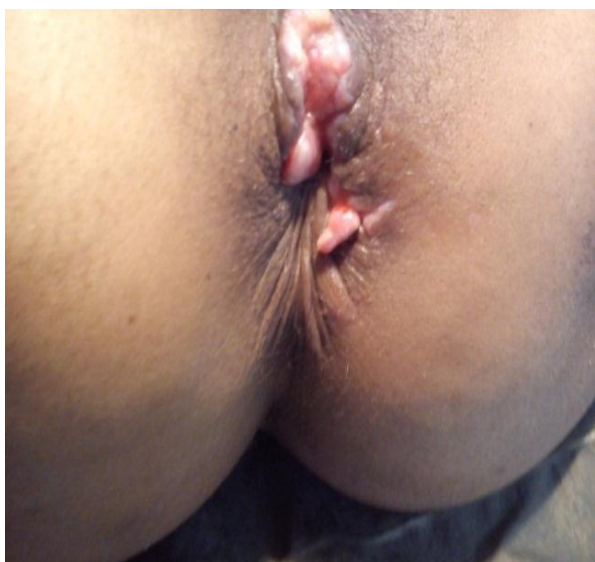


Figure 3: Image showing the Case of Arsho-Bhagandara during therapy (Rishikul Campus, Uttarakhand Ayurved University, Haridwar)

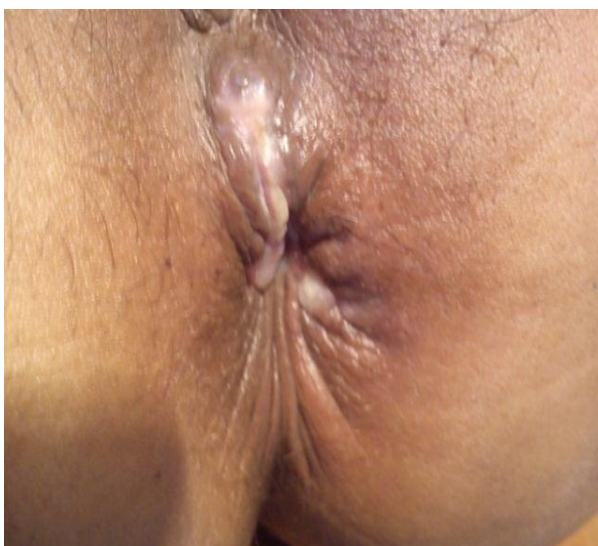


Figure 4: Image showing the Case of Arsho-Bhagandara during therapy (Rishikul Campus, Uttarakhand Ayurved University, Haridwar)



Figure 5: Image showing the Case of Arsho-Bhagandara after healing (Rishikul Campus, Uttarakhand Ayurved University, Haridwar)

DISCUSSION

Kshar Sutra is a well-established method for perfect excision and healing of Bhagandara. It is being practiced since the era of Acharya Sushruta. There were some problems coming in the way while preparing conventional Snuhi-Apamarga Kshar Sutra.^[5] For example, Snuhi Ksheer is difficult to procure from the market as well as from the local area. Snuhi Ksheer requires a specific season and time for collection. Preservation of Snuhi Ksheer for a long period of time is also very difficult. During Kshar Sutra therapy patients suffers some discomfort due to presence of Apamarg Kshar & Snuhi ksheer like pain, burning sensation, inflammation and itching. Therefore, in this case study, Snuhi ksheer has been replaced by *Papaya Pulp* and Apamarg kshar has been replaced by Tankan kshar.

Papaya is easily available in all seasons & its pulp can be preserved at the normal temperature whole day without any change in its consistency and property. Its fruit^[6] is Pittashamak; Vranaropana, Shothahara, Vednasthapana, kusthaghna, Krimighna, Raktshodhak. Carica papaya have different ingredients which have various medicinal properties in which *Papaine enzyme* is main component. Some other chemical constituents of Papaya include:-*Proteolytic enzymes Chymopapaine & Carpaine; Alkaloid like Carpaine, Pseudocarpaine & Carpinine; Vitamins like A, C & E; Minerals like Mg & Zn*. These chemical constituents act as debriding agent^[7], anti-inflammatory^[8], analgesic effect^[9], anti-microbial^[10], wound healing^[11], exfoliative action on skin and are less irritant. Tankan does not absorb moisture so it

dissolves very slowly, so retained in fistulous tract for longer time.^[12] It works as local antiseptic. Local application on wound stops bleeding^[13], due to its vasoconstriction action.

The best response was seen in reduction of Burning Sensation and Pain after ligation of Papaya-Tankan Kshar sutra. It provide radical cure of Bhagandara with negligible recurrence rate as evident by regular follow-up visits by the patient after completion of therapy. In this case no sign and symptom of recurrence or incontinence was ever found out.

CONCLUSION

Man always strives for the best, that is why the advancements and research has become a continuous process. These are few operations in surgery where the quality of the result is so much influenced by the technical skill of the surgeon. John Goligher has reported that recurrence rate in the fistulectomy is about 8%. Besides that 12% of the patients complained of inadequate control of faeces, 16% of imperfect control of flatus and 24% of frequent soiling of their underclothes. Kshar Sutra ligation therapy in the management of Bhagandara (Fistula-in-ano) has proved boon for the humanity. It is effectively substituting the modern surgical procedures. *Papaya-Tankan Kshar sutra* acts by gradual chemical excision of the Arsho-bhagandara with simultaneous healing. It is economically low cost and less discomfort occurs. Early ambulation of patient even after the procedure is possible as it is a minimal invasive procedure. Damage of sphincter and soft tissues in anal region does not occurs. *After ligation of Papaya-Tankan Kshar sutra, the best response was seen in reduction of Burning Sensation and Pain.* Other complications of the operation that mentioned priorily has never been reported in *Papaya-Tankan Kshar sutra therapy in this case study.*

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