Case Report

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(ISSN Online:2229–3566, ISSN Print:2277–4343)

TREATMENT OF RUJU BHAGANDARA (FISTULA-IN-ANO) WITH SHASTRA KARMA AND KARANJA KSHARA SUTRA: A CASE REPORT

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Received on: 12/1/24 Accepted on: 13/3/24

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DOI: 10.7897/2277-4343.15361

ABSTRACT

The disease in which bhaga (anorectal region), guda (anus) and basti pradesha (bladder region) become vidaarita (get torn) is known as Bhagandara. Fistula-in-ano is defined as an abnormal track communicating between two epithelial surfaces. It is characterised by one or more openings in the perianal region having a connection with the anal canal/ rectum. Bhagandara can be correlated to Fistula-in-ano in modern surgery because of the similar clinical features. This paper is a case report of a 39-year-old male patient suffering from Fistula-in-ano with sub-scrotal extension who approached the Out Patient Department of Sri Kalabyraveshwaraswamy Ayurvedic Medical College Hospital and Research Centre, Bangalore, Karnataka, India, with the complaints of painful swelling and pus discharge is narrated. The condition, being unendurable, needed immediate surgical intervention. It was successfully treated with Shastra karma, Karanja Kshara Sutra, and the oral medicines mentioned in the Ayurveda classics. The patient found complete relief from the symptoms with minimal scarring without any complications.

Keywords: Bhagandara, Fistula-in-ano, Kshara Sutra, Karanja Kshara Sutra

INTRODUCTION

The word meaning of 'Bhaga' refers to the structures around the guda (anorectal region), including yoni (vagina) in females and basti (urinary bladder). The word 'Darana' means tear of surface associated with pain.

Fistula-in-ano is defined as an abnormal track communicating between two epithelial surfaces. It is characterised by one or more openings in the perianal region having a connection with the anal canal/ rectum[1]. Bhagandara can be correlated to Fistula-in-ano in modern science.

Vedanaayukta shopha (painful swelling) formed in guda pradesha (anal region) within the vicinity of two angula (two finger breadth), in apakva avastha (unsuppurated stage) is called pidaka, when it becomes pakva (suppurated stage) and causes darana (collection) in bhaga (anorectal region), guda (anal region) and basti pradesha (bladder region), then it is called as Bhagandara[2].

Acharya has classified the disease under five types: Shataponaka, Ushtragreeva, Parisraavi, Shambookaavarta, and Unmargi[3]. These varieties have dosha predominance of Vata, Pitta, Kapha and Tridoshaja, respectively, till shambookaavarta, whereas unmaargi originates with abhighataja (trauma).

There are eight Bhagandara since Vagbhata added three more varieties, Parikshepee, Riju, and Arshobhagandara, in addition to the five that Sushruta had already named. According to Vagbhata, the basis for these additional three categories is because two doshas predominace (dvandaja). Therefore, Vata and Pitta cause Parikshepee, Vata and Kapha cause Riju, and Pitta and Kapha cause Arshobhagandara[4].

CASE REPORT

A 39-year-old male patient visited Shalya Tantra Out Patient Department of Sri Kalabyraveshwaraswamy Ayurvedic Medical College Hospital and Research Centre, Bangalore, Karnataka, India, on 22nd February 2023 with the complaints of painful swelling in the sub scrotal and perianal region along with mild pus discharge for 15 days.

H/O present illness: The patient was normal one month ago. He gradually developed painful swelling in the sub-scrotal and perianal regions. The swelling gradually increased in size and spontaneously opened 15 days ago, along with mild pus discharge.

The pain was persistent almost throughout the day and increased during travelling and prolonged sitting, which was relieved by discharge of pus and sitz bath. The patient took analgesics but didn't find much relief. Hence, he approached Sri Kalabyraveshwaraswamy Ayurvedic Medical College Hospital and Research Centre, Bangalore, Karnataka, India for further treatment.

Purvavyadhi Vruttanta

- The patient is not a known case of Hypertension/ Diabetes Mellitus/ Thyroid disorders/ other systemic disorders.
- The patient is not on any regular medications.

Chikitsa Vruttanta: The patient took a Paracetamol tablet when he felt pain but didn't find much relief.

Kautumbika Vruttanta: All other family members are said to be healthy. There is no history of similar illness in family members.

Occupational History: The patient has worked as a professional taxi driver for the past ten years. His work involves travelling long distances by car.

Vayaktika Vruttanta

Diet	Mixed food diet, takes chicken/ mutton occasionally.
Appetite	Good
Sleep	Disturbed due to pain.
Micturition	4-5 times during the day; 1-2 times during the night
Bowel	Regular, once /day, soft in consistency
Habits	Coffee - 2 times/day
Addictions	None

General Examination

Tongue	Uncoated
Pulse	84 beats/ min
BP	120/90 mm of Hg
Temperature	98.4° F
Respiratory rate	16 cycles/min
Height	165 cm
Weight	65 kgs
BMI	23.9
Built	Moderately built
Nourishment	Well-nourished
Pallor	Absent
Icterus	Absent
Cyanosis	Absent
Clubbing	Absent
Lymphadenopathy	Absent
Edema	Absent

Ashtasthana Pareeksha

Nadi	84 beats per minute
Mutra	4-5 times during the day; 1-2 times during the night
Mala	Regular, once /day, soft in consistency
Jihwa	Alipta
Shabda	Prakruta
Sparsha	Anushna sheeta
Druk	Prakruta
Akruthi	Madhyama

Dashavidha Pareeksha

Prakruti	Vata Pittaja
Vikriti	Hetu- Aharaja- vidahi ahara, akala bhojana Viharaja- diwaswapna, ratri jagarana, ati yaana Dosha- Vata, kapha Dushya- Rasa, rakta Prakruti- Vata kaphaja Kaala- Adana kaala Bala- Avara
Saara	Madhyama
Samhanana	Madhyama
Pramana	Madhyama
Satmya	Vyamishra
Satwa	Madhyama
Ahara shakti	Abyavarana shakti- Madhyama Jarana shakti- Madhyama
Vyayama Shakti	Madhyama
Vaya	Madhyama

Systemic examination

Cardiovascular system examination
Inspection
- No distended blood vessels over the neck.
- No scar marks on the chest.

Palpation
- Apex beat felt at left 5th intercostal space, medial to the midclavicular line.

Percussion
- Cardiac dullness on left side 3rd to 6th intercostal space.

Auscultation
- S1, and S2 heard, no added sounds.

Respiratory System Examination
Inspection
- Size and shape of the chest - Normal
- Chest movements - Symmetrical
- Respiratory rate - 18/min

Palpation
- Trachea - Centrally placed

Percussion
- Resonant over the lung field except cardiac dullness

Auscultation
- Normal vesicular breath sounds are heard.

Per Abdomen Examination

Inspection
- Shape of the abdomen - normal, scaphoid, no distention.
- Umbilicus - inverted, centrally placed
- No visible peristalsis.
- No scar marks noted

Palpation
- Soft
- Non-tender
- No Organomegaly

Central Nervous System Examination

- **Higher Mental Functions** - intact
- The patient is conscious, oriented and co-ordinated to time, place and person.
- **Cranial nerves examination** - intact
- **Sensory nervous system** - intact
- **Motor nervous system** - intact

Local Examination

Position of the patient - Lithotomy
Inspection
- Swelling in the anterior perianal and sub-scrotal region.
- Small external opening in the anterior midline approximately 5 cm away from the anal verge with mild pus discharge.
- No presence of any sentinel piles.

Palpation
- Indurated tender swelling in the perianal and sub-scrotal region
  - **Local rise in temperature** - present
  - **Tenderness** - present
  - **Extent** - measuring approximately 8 cm * 4 cm
  - **Surface** - normal
  - **Edge** - indistinct
  - **Consistency** - soft
  - **Fluctuation test** - positive
  - **Trans illumination test** – negative

- **Digital examination**
  - Normotonic sphincter
  - Tenderness present in the anterior wall
  - The internal opening felt at the 12 o'clock position (anterior midline)
- **Probe examination**
  - On passing the steel probe from the external opening, a probe was directed downwards (which was the least path of resistance), and the fistulous track was traced opening into the internal opening at the 12 o'clock position (anterior midline).

Proctoscopy Examination

- No internal haemorrhoids or polyps were noted.

Investigations

- Hb - 12.3g%
- WBC - 9230 cells/cumm
- DC - within normal limits
- RBC - 5.47 million/cumm
- PCV, MCV, MCH, MCHC, RDW - within normal limits
- Platelet - 2.37 lakhs/cumm
- ESR - 16 mm/hr
- RBS - 94 mg/dL
- CT - 6' 10''
- BT - 2' 35''
- HIV 1 & 2 - non-reactive
- HbSAg - non-reactive

Roga Pareeksha

Nidana

- Aharaja- vidahi ahara, akala bhojana
- Viharaja- ratri jagarana, diwa swapna, ati yaana

Poorvarupa: Manifestation of swelling in the perianal and sub-scrotal region

Rupa: Toda and puya srava in perianal region

Upashaya: Avagaha sweda

Anupashaya: Ati yana, ati aaseena

Samprapti

Nidana→Agnimandya→Vata Pitta pradhana tridosha prakopa→Attains adhogathi→Sthana samshraya in guda pradesha→Twak, Rakta, Mamsa dushti→Formation of Pidaka→when not treated, Pidaka attains paaka, which spontaneously opens forming external opening which later communicates internally→Formation of Bhagandhara

Diagnosis: Ruju Bhagandara/ Fistula-in-ano with Sub-scrotal extension.

Treatment: Shastra karma and Karanja Kshara Sutra ligation.

Poorva Karma

- Informed consent was taken as per ICMR National Ethics guidelines.
- The patient was made to lie in a lithotomy position.
- Part of the preparation was done.
- Painting with Povidone iodine solution was done.

Pradhana Karma

- Under aseptic precautions injection Xylocaine 2% was locally infiltrated into the area of the swelling's opening.
- A vertical incision of about 3 cm was taken on the most prominent part of the swelling, and pus was drained.
- Probing was done towards the least path of the resistance, which was directed downwards and opened into the internal opening of the anal canal at 12 o'clock position.
- Karanja Kshara Sutra ligation was done with moderate tightness.

Paschat Karma

- A thorough wash was given with Panchavalkala kashaya.
- Jatyadi taila[5] Pichu was kept.
- Bandaging was done.

Karanja Kshara Sutra was changed weekly for eight weeks using the rail road technique until the track was completely excised and healed.

Oral medications (for 15 days)

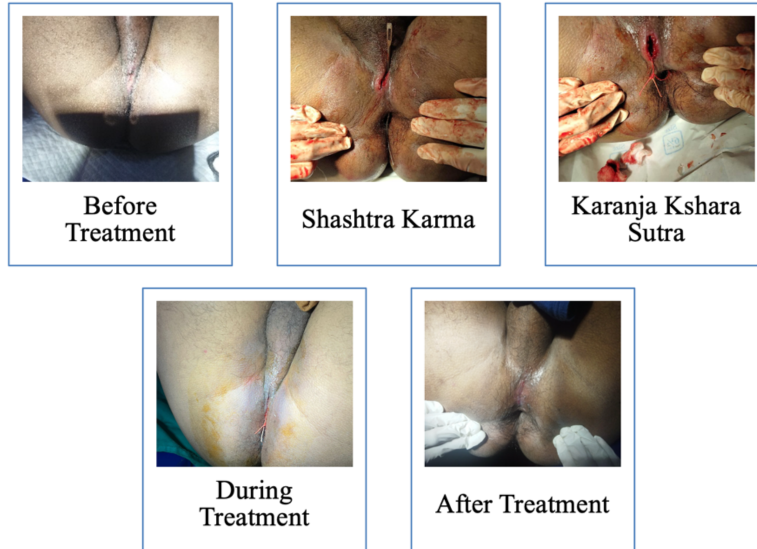
1. Tab. Saptavimshati Guggulu 2-0-2 after food.
2. Varunadi kashaya 3tsp-0-3tsp with water before food.

DISCUSSION AND RESULTS

In the present case, Fistula-in-ano with the sub-scrotal extension can be noted. This requires combined therapy of Shastra Karma and Kshara Sutra. The incision and drainage helped drain the collection of pus in the sub-scrotal region and reduce swelling.

The cutting of the fistulous tract is affected by the pressure exerted on anorectal tissue by the cutting of moderately tight Kshara Sutra. The presence of Kshara Sutra in the fistulous tract doesn't allow it to close from either end, and there will be continuous discharge from the tract. Applying Kshara Sutra cuts layer by layer, and there is continuous drainage of the fistulous tract, which helps in healing. The medicaments used to prepare the thread will dissolute the fistulous tissue of the track (Debridement by the ksharana process) and stimulate the healthy granulation tissue for healing. Kshara Sutra-in-situ encourages healing by new granulation tissue formation from the base.

Karanja (*Pongamia pinnata*) is one of the drugs mentioned in the Ksharapaka vidhi adhyaya by Acharya Sushruta and is widely available[6]. Hence, Kshara Sutra was prepared out of Karanja, and mrudu kshara was used. Sapthavimshati Guggulu[7] is mentioned in Bhaishajya Ratnavali in Bhagandhara chikitsa and has ingredients such as Trikatu (Shunti - *Zingiber officinalis*, Maricha - *Piper nigrum*, Pippali - *Piper longum*), Haritaki (*Terminalia chebula*), Vibhitaki (*Terminalia bellerica*), Amalaki (*Emblica officinalis*), Vidanga (*Emblica ribes*), Amruta (*Tinospora cordifolia*), Chitraka (*Plumbago zeylanica*), Shati (*Hedychium spicatum*), Ela (*Elettaria cardamomum*), Hapusha (*Junioerus communis*), Suradaru (*Himalayan cedar*), Tumburu (*Zanthoxylum aromaticum*), Pushkara (*Inula racemosa*), Chavya (*Piper retrofractum*), Vishala (*Citrullus colocynthis)*, Haridra (*Curcuma longa*), Daruharidra (*Berberis aristata*), vida lavana, sauvarchala lavana, yavakshara, sari kshara, saindhava lavana which helps to reduce pain and pus discharge in this condition. Varunadi kashaya[8] is indicated in Vidradi. It has ingredients such as Varuna (*Crataeva nurvala*), Saireyaka (*Strobilanthes ciliates*), Shatavari (*Asparagus racemosus*), Dahana (*Plumbago Zeylanica*), Morata (*Chonemorpha fragrans*), Bilwa (*Aegle marmelos*), Vishanika (*Aristolochia bracteolata*), Brihati (*Solanum melongena*), Bhadra (*Aerva lanata*), Karanja (*Pongamia glabra*), Pootikaranja (*Holoptelea integrifolia*), Jaya (*Premna corymbose*), Pathya (*Terminalia chebula*), Bahalapallava (*Moringa olifera*), Darbha (*Desmostachya bipinnata*) and Rujakara (*Semecarpus anacardium*). So, it helps to reduce swelling and pus discharge.



The results were promising. Pain, swelling, and pus discharge in the sub-scrotal and perianal regions subsided. A healed wound with minimal scarring was noticed at follow-up.

CONCLUSION

Acharya Sushruta has enlisted Bhagandara (Fistula-in-ano) among Astamahagada as it is challenging to treat. The nidana, described by various authors, still holds good today, i.e., long time sitting on hard seats and excess travelling on vehicles attributed to the formation of Bhagandara. Ruju Bhagandara is a fistula that arises from the anterior half of the anal canal with a straight tract in nature. The present case of Ruju Bhagandara was successfully treated with Shastra karma and Karanja Kshara Sutra along with oral medications.

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Cite this article as:

Jambavathi S and Srinivas Masalekar. Treatment of Ruju Bhagandara (Fistula-in-ano) with Shastra Karma and Karanja Kshara Sutra: A Case Report. Int. J. Res. Ayurveda Pharm. 2024;15(3):8-11
DOI: http://dx.doi.org/10.7897/2277-4343.15361

Source of support: Nil, Conflict of interest: None Declared

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