

BHAGANDARA (FISTULA IN ANO) AND ITS MANAGEMENT – AYURVEDIC AND MODERN REVIEW

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ABSTRACT

Bhagandara is the one among Astha maharoga (eight major diseases that are difficult to treat) according to Ayurveda. Fistula in ano is an abnormal communicating tract between anal canal and perianal region which is lined by unhealthy granulation tissue. Fistula in ano is mainly due to disturbed dietary and bowel habits due to sedentary life style. Conservative treatment for fistula is not at all successful because it is an. Surgical intervention is must. But surgical treatment is not that much successful in all cases of fistula-in-ano as it may re-occur after some period of time. So the only ray of hope for the patients of Fistula-in- ano is *Ksharsutra* treatment from Ayurveda the Science of life. *Ksharsutra* is a medicated thread works on a principal of cutting the tract, scrapping the unhealthy granulation tissue and healing of the tract.

KEYWORDS: Bhagandara, Astha maharoga, *Ksharsutra*.

INTRODUCTION

In *Ayurveda*, *Bhagandara* (Fistula-in-ano) is considered under eight major diseases (*Ashta Mahaaroga*).^[1] The disease in which *Bhaga*, *Guda* and *Basti Pradesha* becomes *Vidaarita* (get torn) is known as *Bhagandara*. In *apakva-avasthaa*, known as *pidakaa*, which in *pakva-avasthaa* causes *Bhagandara*.^[2] A fistula-in-ano, or anal fistula, is a chronic abnormal communication usually lined to some degree by granulation tissue, which runs outwards from

the anorectal lumen (the internal opening) to an external opening on the skin of the perineum or buttock (or rarely, in women, to the vagina).^[3] *Ksharsutra* application is a parasurgical procedure in which *ksharsutra* (medicated thread) is used to treat *bhagandra* (Fistula in ano).

In India reported anal fistula to constitute 1.6% of all surgical admission.^[4] Surgical treatment of fistula in ano requires hospitalisation, regular post-operative care and is associated with a significant risk of recurrence (0.7 to 26.5%) and a high risk of impaired continence (5 to 40%).^[5,6]

Modern Review

Most anorectal fistulae are secondary to cryptoglandular infection caused by enteric bacteria. Pus spreads in the inter sphincteric space upward, downward, or laterally and results in an abscess, commonly in the perianal region or in the ischiorectal fossa. These abscesses are treated by drainage or may spontaneously discharge. Once the anorectal sepsis has drained, there is a potential communication from the perianal region to the anal canal at the dentate line. Continued communication between the two epithelial surfaces results in anorectal fistula.^[7]

Clinical Presentation^[8]

- Purulent discharge around the anus and from within the anal canal.
- Discharge is associated with impaired anal hygiene and soiling.
- History of recurrent episodes of anorectal sepsis that have required surgical drainage or that have spontaneously ruptured may be there.
- There may be a history of sexually transmitted disease, inflammatory bowel disease, or malignancy.
- Inspection in most cases reveals an external opening around the anal canal but, particularly in patients with intersphincteric fistulae, there may be no apparent external opening.

Classification of Fistula-IN-ANO^[9]

1. Intersphincteric fistulae (45%)
2. Trans-sphincteric fistulae (40%)
3. Suprasphincteric fistulae
4. Extrasphincteric fistulae.

Investigations

- Fistulography^[11]
- Endo Anal Ultrasonography^[12]
- Computerized Tomography
- Magnetic Resonance Imaging
- X ray Chest.^[13]

Surgical Management^[8]

Patients with minimal symptoms, especially if they have compromised sphincters, may be managed expectantly. Eradication of sepsis requires surgery.

- Fistulotomy
- Fistulectomy
- Setons
- Advancement flaps
- Glues application.^[14]

Ayurvedic review

The word *Bhagandara* is the combination of two terms "*Bhaga*" and "*Darana*" which are derived from the roots "*Bhag*" and "*Dri*" respectively. *Bhaga*' is a word, means all the structures around the *Guda* (ano-rectal region) including *Yoni* (vagina) in case of females and *Basti* (urinary bladder). The word *Darana* means "sense of tear of surface associated with pain".^[14] The disease in which *Bhaga*, *Guda* and *Basti Pradeśa* becomes *Vidaarita* (get torn) is known as *Bhagandara*. In *Apakvaavasthā*, known as *Piḍakā*, which in *Pakvaavasthā* causes *Bhagandara*. (Su.Ni.4/4).

Nidāna (Aetiology)

Caraka: *Kṛmi*, *Tṛṇa*, *Asthīśalya*, *Ingestion of foreign bodies*, *Ativyavāya*, *Pravāhaṇa*, *Utkutasāna*, *Asvapṛstagamana*.^[16]

Suśruta: Did not narrate the etiological factors at a single place, he gave some idea separately while dealing with different types.

Vāgbhata: *Hastipṛstagamana*, *Asvapṛstagamana*, *Katināsana*, *Utkutāsana*, all *Nidāna* of *Arśas*.^[17]

Mādhava Nidāna: Kasāyārāsa, Rūkṣagaṇa and other Vāta prakopa karanas.^[18]

Bhāvaprakāśa: Atisthauḷya is one of the cause.^[19]

Classification of Bhagandara *Suśruta* and *Vāgbhata* from surgical point of view depending on opening classified it into two.^[20,21]

1. **Arvācīna:** (*Antarmukhī*) In this abscess is located outside and track opens inside the anorectal canal without external opening (Blind internal).
2. **Parācīna:** - (*Bahirmukhī*) In this, cavity or abscess is situated inside and track opens outside without internal opening.

Other Types: 5 types of Bhagandra

1. Śataponaḱa – Vātaja Bhagandara^[22,23]

In this type of *Bhagandara*, *Vāta Doṣa* dominates. *Prakupita vāyu* gets localised in 1 or 2 *Angula* of *Guda Pradeśa* and forms a *Pidakā* by vitiating *Māmsa* and *Rakta*. The *Pidakā*, if untreated undergoes pus formation and causes *Bhagandara* with many openings.

Characteristics of Pidakā: *Aruna Varṇa* with pain like *Toda* etc.

Characteristics of Srāva: Abundant, thin, frothy discharge which flows continuously. If this stage is not treated properly, it will follow discharge of flatus, urine, faeces and semen through the openings.

Characteristics of Pain: There are various type of pain like cutting, tearing, pricking etc.

2. Ūṣṭragrīva–Pittaja Bhagandara^[24,25]: *Prakupita Pitta* is brought to the anorectal area by *Prakupita Vāta* gives rise to red, thin and a small raised *pidakā* which resembles neck of camel 'Uṣṭragrīva'.

Characteristics of Pidakā: Red coloured, thin texture and with raised appearance like the neck of a camel and associated with burning sensation. *Uṣṇa*, *cośa*, burning pain like *agni* and *kṣāra*.

Characteristics of Srāva: Warm and offensive discharge. If this is not treated properly, the condition further deteriorates with discharge of flatus, faeces, urine and semen through the opening.

Characteristics of Pain: Burning pain appears as if being burnt with fire or caustics.

3. *Parisrāvī- Kaphaja Bhagandara*^[26,27]

The term *Parisrāvī* has been used because of continuous discharging nature of the wound. The vitiated '*Kapha*' carried down by the '*Vāyu*' (into the rectum) and lodged there gives rise to white, hard, itching *piḍakā*.

Characteristics of *Piḍakā*: White in colour, firm in consistency, indurated, deep rooted and associated with itching sensation.

Characteristics of *Srāva*: Abundant, thick, sticky, often constant discharge. If not treated properly, it gives rise to discharge of flatus, urine, faeces and semen through the opening.

Characteristics of Pain: Mild pain and itching.

4. *Śambūkāvarta – Sannipātaja Bhagandara*^[28,29]

The word *Śambūkāvarta* literally means 'ridges of a conchshell' suggest that the pathway of track is curved and deeper one looks like ridges of *śankha*. *Prakupita Vāyu* carries both *Prakupita Pitta* and *Prakupita Kapha* to anorectal area causing this type of *Bhagandara*. It has the dominance of all the three *Doṣa* and hence it exhibits all the characters of the separate *Doṣic* type of *Bhagandara*.

Characteristics of *Piḍakā*: Large in size resembling the great toe and has the characters of all *Dosha* along with the pain like pricking, burning, itching, etc.

Characteristics of *Srāva*: Discharge has different colours.

Characteristics of Pain: Specific type of pain which appears like the whirls in a river or similar to the pattern of spiral ridges of a snail.

5. *Unmārgī – Āgantuja Bhagandara*^[30,31,32]

This variety is caused by injury. Here, The person, who is fond of *Māmsa* eating, anyhow ingests piece of bone with the meat, which ultimately comes to the anus and causes ulcer / injury. Here *Koṭha* of *Mansa* occurs in which pus and blood accumulates and at last *Kṛimi* develops. This *Kṛimi* causes the *Bhagandara* by eating away the tissues. The *Piḍakā* is not mentioned in this variety probably due to the fact that *Piḍakā* is usually originated with *Doshic* involvement and here the *Bhagandara* is created directly by the *Krimi* (worms or

maggots) without the formation of the *Piḍakā* initially. Therefore, *Kṛimi*, history of *Trauma*, ingestion of bone pieces (foreign body) play important role in producing this variety of *Bhagandara*.

6. *Parikṣepī – Vātapittaja*

Ācārya Vāgbhata mentioned *Parikṣepī Bhagandara*. It originates from vitiated *vāta* and *pitta*. It manifests as *tāmra Varṇapida kā* with pain and burning sensation in the perianal region. The track is of curved type the runs around the anus or the rectum. *Arunadatta* and *Indu* state that the track resembles the trench of fort.

7. *Ṛiju – Vātakaphaja*

The vitiated *vāta* and *Kapha* produces the *pidākā*, which later on suppurates and form a straight track in the anal region. Because of its straight nature of track, it is called *Ṛiju Bhagandara*, Fistulas arising from the anterior half of the anal canal are usually straight in nature and can be compared with this.

8. *Arśo Bhagandara-Kaphapittaja*

It is originated from vitiated *kapha* and *pitta* which reaching at the base of pile already existing produces *sopha* causing burning and itching sensation. This swelling suppurates quickly to discharge continuously *Arśomula* gets wet, The track is present at the base of *arśha* and mixed type of discharge from multiple openings of the wound. Infection of the sentinel pile which develops at the lower end of the fissure at the anal verge may lead to the formation of a superficial fistula. This type of fistula can be compared as *Arśo Bhagandara*.

Management of Specific Types of Bhagandara

1. *Śatapona Bhagandara*

The specific feature of this *Bhagandara* is presence of multiple openings on the external surface of skin. It has been suggested that one track should be excised at once and after the previous wound has healed, the remaining tracks should be operated similarly. If multiple tracks are excised by single incision such wound causes *guda vidārana* i.e causes injury to the rectal walls and sphincters and leads to impairment of sphincteric function and may lead to leakage of flatus, faeces, urine. Both *Suśruta* and *Vāgbhata* have described different types of incisions, which can be applied according to the situation of track, relation with the anal sphincters etc.

2. Ūṣṭragrīva Bhagandara: No specific incision is described but simple excision of the track followed by application of *kṣāra* to remove the necrotic tissue. Suśruta has contraindicated the *Agni* for cauterization because *Agni* will aggravate the *pitta doṣha*.

3. Parisrāvī Bhagandara: In this type, first the track is located with probe, then it has to be excised and the wound should be cauterized with *Kṣāra* or *Agni*. Later the wound is washed with warm water and vasti of warm *anutaila* is given⁴⁹. Different incisions are described by *Suśruta* according to nature of the track and patient.

4. Śambūkāvarta Bhagandara:

It is considered as *asādhya* (incurable) for treatment because it is due to the vitiation of all the three *doṣās*. Hence, only conservative measures were described.

5. Unmārgī Bhagandara

It is described as *asādhya*, even though management has been described by both *Suśruta* and *Vāgbhata*. It is caused due to injury from foreign body hence the principle of treatment is excision of track and removal of foreign body followed by cauterization with *Agni*. Later *kṛimihara* drugs are applied locally and also taken internally.

6. Parikṣepī Bhagandara: *Vāgbhata* has suggested that it has to be treated on the lines of *Nādivraṇa* with *kṣārasūtra*.

7. Rju Bhagandara: No specific treatment is described for this *Bhagandara*. Therefore, it can be treated as the other simple types of *Bhagandara*.

8. Arśo Bhagandara: It is the co existence of *arśas* along with *Bhagandara*. So, *arśas* should be treated first before treating *Bhagandara*.

Para surgical measures: The main para surgical measures which have been employed in the treatment of *Bhagandara* are as follows:

Raktamokṣana (Blood Letting)

Agni Karma (Thermal Cauterization)

Kṣāra Karma (Chemical Cauterization)

Ksharsutra

The *Kshar* is an chemical substance obtained from methodological process of plants ash. Ancient Indian surgeon Susruta, the writer of *Susruta Samhita* described supremacy of the *kshar* than any of the surgical and para-surgical technique. *Kshar* (caustic alkali) is the most important one among *shastra* (sharp instruments) and *anushastra* (accessory instruments), but it does functions like excision (removal), cutting (diving), and scraping, mitigates all the three dosas and is suitable for being used by special methods. The word *kshar* is derived from two words *ksara* and *ksana*, *ksara* means to dislodge or to destroy. The term *ksharn* and implies to debridement and liquification of vitiated tissues in the infected wound. The term *kshanan* implies to excision by distruction of tissue.

CONCLUSION

It's the need of the hour to get a permanent relief for this disease of devastating nature. It completely ruins the social life of a patient, the person is not even able to perform his/her routine works. So, it's a complete justice when we say fistula-in- ano is a curse to humanity. The only ray of hope to manage this disease is *Ksharsutra*.

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