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Bhagandara (Anal Fistula) - A Review Article

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Abstract

Management of Bhaganadara (Anal fistula) often remains a challenge for both general and colorectal surgeons due to high incidents of its recurrence rate. Sushruta was very well known to this fact that the disease is notorious and very difficult to deal with and that is why he kept it under the heading of *Ashtamahagada*. As far as its pathogenesis is concerned, it originates as a result of anal gland infection present between anal sphincters which drain via ducts into the anal sinuses at the level of pectinate line. If the outlet of the gland gets obstructed, the abscess forms which eventually extends to the skin surface and drains from the external opening developed in the skin. The tract thus formed refers to as fistula in ano. In the present article, recent advancement in ayurvedic and modern medical science for Bhagandara (anal fistula) treatment is discussed.

Key words- *Bhagandara*, anal fistula, *Ashtamahagada*

Introduction

Sushruta has kept Bhagandara under *Ashtamahagada*[1] because it is very difficult to cure. The disease, that can be correlated with anal fistula is "Bhagandara" described in Ayurvedic texts as the clinical sign and symptoms of both disease resemble each other to a great extent. Faulty food habits and life style has been considered to be the cause of anal fistula. As per ayurvedic texts, the disease which causes *daran* (deformity or splitting) in and around *bhaga* (pubic region, perineum, vaginal region, and genital area), *guda* (anal region) and *basti* (urinary bladder) is called Bhagandara, when the blister in perianal region remains unripe (not suppurated) it is referred to Pidaka and when it ripens and bursts, it is called Bhagandara[2]. Anal fistula is very challenging disease because of its tendency to recur[3], typically it consists 2 openings, primary or internal into the anal canal and secondary or external opening on the perirectal skin[4]. It is a chronic phase of ongoing infection of the anal glands present in the intersphincteric plane, when the outlet of these glands get occluded, it results in the development of cryptoglandular abscess[5] and eventually an unhealthy granulated fistulous track develops between anorectum and perianal skin. Anal fistulae may be found in secondary to

specific conditions, such as Crohn's disease, tuberculosis, lymphogranuloma venereum, actinomycosis, rectal duplication, foreign body and malignancy[6]. No definite treatment modality is available today, which may claim 100% success in the treatment of fistula in ano.

Definition of Bhaganadara

The disease responsible for tearing, splitting or deforming the Bhaga, Guda and Basti Pradesa is known as Bhagandara.

Nidana (Aetiology) Of Bhagandara

The following factors are responsible for pathogenesis of Bhagandara:

• AHARAJA

1) Ruksha or Kashaya-Rasa Sevana

2) Apathya Sevana

3) Asthi yukta Ahara Sevanaa

• VIHARAJA

1) Excessive coitus

2) Sitting in awkward posture

3) Straining during defecation

4) Excessive Horse & elephant ride

• AGANTUJA FACTORS

1) Krimi

2) Asthi shalya

3) Improper use of Vasti – Netra

4) Manas dosh

CLASSIFICATION OF BHAGANDARA

On the basis of Dosha prevalence and clinical manifestation of its pathogenesis.

According to Sushruta

There are five types of Bhagandara

1. Shatponaka –

Dosha –Vata,

Feature- Toda, Tadana, Chedana, Vyadhana, Guda darana

Discharge - Excessive phenila discharge

Appearance- Sieve like, fistula with multiple external opening.

2. Ustragreva –

Dosha –Pitta

Features- Chosha as if Kshara or Agni being touched to a wound

Discharge- Ushna & durgandhita smell

Appearance- Camel's neck like

3. Parisravi –

Dosha- Kapha

Feature- Kandu, mild pain

Discharge- Continous and slimy,

Appearance- Whitish.

4. Shabukavarta – Dosha- Vata along with Pitta - Kapha, Features- Toda, Daha, Kandu migratory pain around the Anal canal, Discharge- Multi colour, Appearance – Tip of great toe, turns of conch.

5. Unmargi/Agantuj – Dosha– Trauma to Rectum or Anal canal

Features- Kotha of Mamsa and Rakta infestation with Krimi

Discharge- Pus, faces, flatus, urine, semen

Appearance- No specific course of track.

According to Vagbhata

Vagbhata added 3 more types of Bhagandara:

6. Parikshepi –

Dosha- Vata & Pitta

Feature- Fistula with curved track all around the anal canal

Discharge- Pus mixed with blood

Appearance- Horse shoe shaped fistula.

7. Riju –

Dosha–Vatta & Kapha

Feature – Linear track associated with pain, Discharge - Pus,

Appearance- low type fistula or fistula with straight track.

8. Arsho-bhagandara-

Dosha- Kapha & Pitta

Feature- Located at the base of the Arsha, burning pain and itching sensation, Discharge- continuous discharge

SIGNS & SYMPTOMS OF BHAGANDARA- Rupa

The most typical sign and symptoms of Bhagandara are:

• Vrana within two-finger periphery of anal region with discharge and pain. History of Bhagandara Pidika, which bursts and heals spontaneoulsy and recurs repeatedly.

• Characters of discharge and pain depends upon doshik involvement in the disease.

CLINICAL FEATURES

• Pain, swelling and discharge are the frequent presenting complaints.

• Pain and swelling are often associated with abscess when the external opening is sealed.

• Perianal discharge is mucous or pus mixed with stool.

• Fistula in ano is usually associated with an antecedent history of perianal abscess.

PREVENTIVE MEASURES (what to avoid?)

1. Diet

• Guru (non-digestible food)

• Madya (Excessive intake of alcohol)

• Asatmya Ahara (Unwholesome food)

• Virudha Ahara (untimely, unbalanced food)

• Vishama Ahara (Incompatible foods).

2. Life style

• Strenuous heavy exercise

• Excessive Coitus

• Uncomfortable ride

• Suppressing Natural Urges

• Anger

Management of supputrative Bhangandrapidika

Medical management – Application of Vartee, Kalka, Kwatha, Tail, Ghrita etc.

Drugs- Triphla Gugglu, Saptavinshati Gugglu, Nvavkarshika Guggulu etc.

Rakatamokshana: Jaloukavachrana is the commonest way of Raktamokshana. It prevents suppuration of Pidaka and minimizes inflammation & infection in post-operative period.

2. Surgical Process[7]**-** As per Sushruta Chedan (excision) and Bhedan (incision) over the fistulous track should be according to the type of fistula.

Shatponak- Langlaka, Ardhlanglaka, Sarvatobhadraka, Gotirthaka.

Ushtragreeva- Eshana - chedana - kshara lepana.

Parisravi- Kharjurapatraka, Ardhachandra, Chandrakara, Suchimukha, Awangmukha.

Unmargi- Due to impaction of foreign body in the distal bowel (Guda), the Unmargi Bhagandara develops and treatment requires removal of foreign body followed by Bhedana and Agnikarma.

Arsho Bhagandara – Excise the tag and fissure bed prior to Ksharsutra therapy.

C. Parasurgical Measure

Agnikarma: It is advocated in all types of Bhagandara except Ushtragreeva. It acts as hemostatic during procedure and also prevents recurrence

Ksharakarma: Application of kshar can be achieved by using sutra, Vartee, Pichu, local application in the form of paste.

Ksharsutra therapy[8]: Application of a specially prepared medicated thread processed with certain medicinal plant like *Apamarga, Arka, Snuhi, Guggulu* etc. The thread is passed into the fistulous track from external opening, taken out from anal canal via internal opening and tied outside the anal aperture and left in situ for seven days. Ksharsutra is changed every seventh day and pateint is released immediately after procedure and

is advised to continue his routine work. In this therapy both cutting of the track and healing takes place simultaneously, so chances of fecal incontinence is very less. With this therapy, the fistula heals completely in due course of time without damaging the anal sphincter mechanism.

Recent advancement of Ksharsutra Therapy:

IFTAK (Interception of fistulous track with application of ksharsutra)[9]

The novel technique IFTAK (Interception of fistulous tract with application of *Ksharsutra*) for the treatment of anal canal is a modified technique of *Ksharsutra* therapy. The technique was developed by Dr M. Sahu, (Professor, Department of Shalya Tantra, faculty of Ayurveda, Banaras Hindu University, Varanasi, u.p India) and is being practiced for treating complex and recurrent fistula in ano in Banaras Hindu University, Varanasi since 2007. In this technique, proximal part of fistulous track is intercepted at the level of external sphincter along with the application of *Ksharsutra* from the site of interception to the infected crypt in anal canal. The procedure is aimed to eradicate the infected anal crypt with no or minimal damage to anal sphincters by using *ksharsutra* (medicated seton). Use of *ksharsutra* causes extensive fibrosis and favors proper healing of fistula and reduces the chances of recurrence.

Recent advanced methods of Surgery according to modern science-

Ligation of the Intersphincteric Fistula Tract (LIFT)-

It is the novel modified approach through the intersphincteric plane for the treatment of fistula in ano. LIFT procedure is based on secure closure of the internal opening and removal of infected cryptoglandular tissue through the intersphincteric approach. Essential steps of the procedure include, incision at the intersphincteric groove, identification of the intersphincteric tract, ligation of intersphincteric tract close to the internal opening and removal of intersphincteric tract, scraping out all granulation tissue in the rest of the fistulous tract, and suturing of the defect at the external sphincter muscle[10].

Video-assisted Anal Fistula Treatment (VAAFT)-

VAAFT is Video Assisted Anal Fistula Treatment. It is a novel, minimal invasive and sphincter-saving technique for treating complex anal fistulas. The technique involves use of an endoscope. In this technique patient is placed in the lithotomy position under fistuloscope vision and the internal fistula opening and other associated secondary tracks or extensions are identified. The anal canal is kept open by speculum and irrigation solution is used to have a clear view of the fistulas tract. Light from the fistuloscope can be very well appreciated inside the anal canal at the site of internal opening of the fistula. Now a unipolar electrode is used to cauterize the contents of the fistulous tract under video guidance. Necrotic debris is removed using the fistula brush and forceps and by continuous irrigation. Using stiches and staples internal opening is closed through anal approach. VAAFT procedure only deal with anal fistula, preserving sphincter muscle function is preserved and no faecal incontinence develops[11].

Fistula Laser Closure (FiLaC)-

The FiLaC is novel sphincter preserving procedure for anal fistula treatment. Primary closure of the fistulous track is achieved using laser energy emitted by a radial fibre connected to the diode laser. The energy causes shrinkage of the unhealthy tissue in the track around the radial fibre with the aim to close the fistula track. The procedure is designed to destroy both the gland and the additional epithelial layer of fistula track simultaneously by a photo thermal effect of laser. The patient is given spinal anesthesia and positioned in lithotomy. Antibiotic prophylaxis may be given one day before surgery and bowel preparation should also be there prior to surgery. After identifying the internal and external opening, the fistulae catheterization is done using probe followed by saline irrigation and miomucosal flapping post resection of the internal orifice. Insertion of the laser fiber from the external to internal opening is done and energy is given by laser fibre and gradual 5mm of fibre is withdrawn from the internal to the external opening every 3s. The fiber laser diode used is a radial emission with a wavelength of 1470 nm and preset generator 13W. At the last of the procedure, the miomucosal flap is sutured to cover the area of the internal opening[12].

Conclusion

After detailed review of literature availbale in Ayurvedic and modern medical science, it can be concluded that, the Bhagandara (Anal fistula) is indeed a notorious disease to deal with due to its tendency to recur. The mainstay of Anal fistula treatment is surgery mentioned in both Ayurveda and Modern medical science, so it is upto surgeon's choice that which treatment modality he opts. Each and every treatment modality used in Fistula in ano has its own merits and demerits. No single therapy is suitable for all types of fistula. If we talk about the role of ksharsutra therapy in the management of Fistula in ano, it is cost effective and patient friendly. Ksharsutra therapy is OPD procedure, often performed under local anesthesia, sphincter mechanism is preserved with this therapy and patient can be released on the same day and he can continue with his routine work after the procedure while in modern therapies available today, it requires hospitalization of patient, surgery is done under spinal anesthesia and the recurrence rate is also high. IFTAK (Interception of fistulous track with application of ksharsutra) has made a revolutionary change in the management of Fistula in ano. Now all types of fistula can be dealt effectively with ksharsutra therapy with less number of post-operative follow ups.

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