WORLD JOURNAL OF PHARMACY AND PHARMACEUTICAL SCIENCES
SJIF Impact Factor 7.421
Volume 7, Issue 12, 646-656 Review Article ISSN 2278 – 4357

CONCEPTUAL STUDY ON *BHAGANDARA*

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Article Received on
08 Oct. 2018,

Revised on 28 Oct. 2018,
Accepted on 19 Nov. 2018

DOI: 10.20959/wjpps201812-12804

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ABSTRACT

Bhagandara is defined as a suppurative secondary ulcerative manifestation to an eruption usually affecting '*Bhaga'* (ano rectal, pelvirectal or perianal region) which can be simulated with "Fistula-in-ano". It is a typical "*saririkavrana".* The main cause or *nidana* of *Bhagandara* is infective in nature mainly involving the infected and inflamed condition of a crypt of Morgagni and infection from a hair-follicle or a sebaceous gland. Prolonged negligence leads to formation of fistula. The main symptom is pus discharge, Pain and tenderness in the perianal region. The classification according to Ayurveda is mainly based on the doshic involvement. And the modern classification is based on the area affected. *Bhagandar* is a common problem in today's life style and it is very difficult to treat because of its high rate of recurrence and delay in wound healing due to frequent chance of infection by sweat, fecal matter, soiling, discharges etc. The main principle of treatment in modern science is fistulectomy (complete opening of the tract). In Ayurvedic the basic principle of management runs through-Vedanashamaka, vranashodhaka, vranaropaka, lekhana karma, Shothahara, ausadhiprayog.

KEYWORDS: Bhagandara, Fistula, Fistulotomy.

INTRODUCTION

Bhagandara is a chronic purulent disease usually affect *'Bhaga'* (pelvic and perianal region around anus). It proceeds initially with an abscess.

The word *Bhagandara* is a composite word i.e. – "Bhaga" (perineal and perianal area) and "Darana" (tearing sensation with massive tissue destruction). Hence the derivation leads to draw an impression about a typical pathological lesion at the perineal and perianal area.

- it is a typical "saririkavrana".
- an eruption initially manifested at the perineal & perianal area and subsequently leads to suppuration leading to the condition termed "*Bhagandara*".

Hence *Bhagandara* can be defined as a suppurative secondary ulcerative manifestation to an eruption at ano rectal, pelvirectal or perianal region which can be simulated with "Fistula-in-ano".

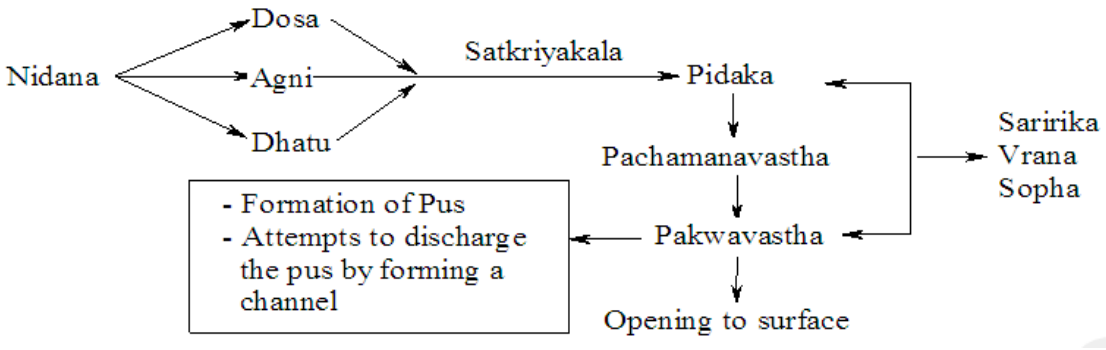
Nidana

Sl. No	Nidana			
1	ahara	i.	*AtiKasayaSevana*	excessive intake of astringent
		ii.	*AtiRukshyaSevana*	excessive intake of dry foods
		iii.	*AtiMamsaSevana*	excessive intake of meat
		iv.	*DoshaPrakopakaMithya Ahara Vihara*	untimely, unwholesome, excessive and disproportionate food habit
		v.	*Bruhanatiyoga*	excessive intake of heavy and fatty substance inducted in the process of anabolic therapy in Ayurveda
2	vihara	i.	*Ati Maithuna/Vyabay*	excessive sexual indulgence
		ii.	*Utkatasana*	practice of abnormal posture
		iii.	*Kathinasana*	sitting on hard surface
		iv.	*Atipravahana*	practice of forceful expulsion or tenesmus
3	agantuja (exogenous cause)	i.	*Krimi*	worm infestation
		ii.	*VastinetraVyapata*	improper instrumentation
		iii.	*Papa Karma*	sinful act, indulgence in social evil
		iv.	*Shalya abhighata*	foreign body injury

Samanya Samprapti

A like *Saririkavranasopha,* following the course of "*Shat Kriya Kala", Bhagandara* initially exposes with a localized inflammatory lesion called pidika which subsequently undergoes three important pathological stages (i.e. *ama. pachyamana and pakwaavastha*) if not treated properly during the stage.

Proper treatment to a *Bhagandarapidika* has got all chances to resolve completely otherwise it undergoes suppuration and satisfies the outcome of description. i.e. "*Apakwastupidikapakwastu Bhagandara"*



Samprapti Ghataka

Dosha (Involvement of humor)	Vata, Pitta and Kapha
Dushya (Structural involvement)	Twak, Mamsa, Snayu, Meda, Rakta, Sandhi
Srotas (Systemic involvement)	Raktavaha and Mamsavaha
Srotadrusti (Sign of systemic affection)	Sanga, Atipravrutti
Adhisthana (Affected parts)	Gudapradesha(Perianal and pelvirectal part)
Rogamarga	Bahya
Agni	Jatharagni
Swabhava	Chirakalena (Sub-acute or chronic)

Purvarupa

Pain about the sacral bone and an itching around the anus, accompanied by a swelling and burning sensation are the premonitory symptoms of *Bhagandara*.

Rupa (Clinical Manifestation)

Colour of Eruption	***Sarvalinga***	**A mixed type of discolouration is present**
Nature of Eruption	*Padangusthpramanam*	Thick and elevated like a toe
Nature of Pain	*Toda, Daha, Kandwadinam, Vedana*	A typical pricking, burning and itching pain
Nature of Discharge	*Nanavidhavarnamsravanamsravati*	Profused mix discharge
Nature of Tract		A complete single curved tract affected both the sides of anus and encircles

Types of *Bhagandara*

According to Sushruta *Bhagandara* has been described as five types with their specific clinical characteristics. Vagbhatta has added three more *Dwidosaja* varieties tothem.

Sl. No.	Types	Description	Colour of eruption	Nature of eruption	Nature of pain	Nature of discharge	Nature of tract
1	VATIKA	Otherwise known as Sataponaka (multiple opening)	Dark reddish (Aruna Varna)	Multiple thin micro opening (Sataponaka Vat Anumukham)	A typical pricking, cutting and thrashings type of pain	Thin, frothy and profuse discharge (Phananuvidham Acham Adhikam Sravam)	Complete tract opens into bladder / rectum / urethra respectively (Vata Mutra Purisha Retasam Apayagama)
2	PAITIKA	Ustragreeva, (a typical curvature of the tract/eruption resembles with the neck of camel)	Reddish discoloration (Raktaram)	Thin and raised like neck of camel (Tanvi ucchitaustragreevakaram)	Sucking and burning pain (Chosadina Vedana Vishesha)	Hot and putrefied foul discharge (Durgandhamusnamsravam)	Single complete tract opens into bladder / rectum / urethra respectively (Vata mutra purisharetasam Visrujati)
3	KAPHAJA	Parisravi (that indicates a profuse, thick and continuous discharge)	Whitish (Suklavabhasam)	Immovable, unfluctuating eruption with itching sensation around the external opening (Sthira Kandumati)	A typical itching pain (Kanduvadini Vedana)	Continuous thick, sticky and profuse discharge (Pichilamajasramsravamsravati)	A Single complete tract opens into bladder / rectum / urethra respectively (Vata mutra purisharetasam Visrujati)
4	SANNIPATAJA	Sambukavarta. (The term is coined due to its course of pathology (circular or semicircular around the anus) and a typical whirling nature of pain, most complicated one)	A mixed type of discoloration is present (Sarvalinga)	Thick and elevated like a big toe (Padangustha Pramanam)	A typical pricking, Burning and itching pain (Toda Daha Kanduvadinam Vedana) – The character of pain aggravates like the eddies in a flooded river or spirals in a snail, i.e. whirling pain (Purna Nadei Vedana)	Profuse mixed discharge (Nanavidha Varnam Sravam Sravati)	A complete single curved tract affects both the side of anus (Sambuka Varta)
5	AGANTUJA	Unmargi (externally blind and internally opened)	Non-specific	Multiple opening (Gudam Anekadhaparswatoudarayanti)	Non-specific	Purulent discharge due to the involvement of specific pathogens like bacteria, maggot & heliminth (Kriminahsanjayate)	At first the tract is externally blind but the descending spread of infection converts in to a complete tract and later on communicating with the bladder/rectum/urethra respectively. (Bhaksayantou Gudam ------ Krumikrutae Vata Purisharetansya)

Sl. No.	Types	Description	Colour of eruption	Nature of pain	Nature of tract
6	VATA PITTAJA	Parikshepi (having a circular horseshoe shaped tract around the anal canal and discharges outside the perianal region with multiple opening. According to Sushruta school of thought it is included in Sambukavarta).	Blackish in color	Severe pain	Tracks formed around the anus like pit around a wall. (Paritastatra Prakara Pariksepa cha)
7	VATA KAPHAJA	Rhiju *Bhagandara*. (The term Rhiju means straight, thus it is a straight tract *Bhagandara* associated with fissure)	White and a little blackish	---	A straight tract is formed in the anal canal making a fissure (GudamGata to Diryate)
8	KAPHA PITTAJA	Arsho-*Bhagandara*	---	---	The tract is formed at the root of the pile mass. (GatibhirayamArshao)

Concept of Fistula-in-ano

A fistula is communicating tract between two epithelial surfaces, commonly between a hallow viscus and the skin (external fistula) on between two hollow viscera (internal fistula). The tract is lined with granulation tissue which is subsequently epithelialized. A fistula may be an abnormal communication between vessels (arteriovenous fistula).

Fistula-in-Ano is an inflammatory tract which has an external opening (secondary opening) in the perennial skin and an internal opening (primary opening) in the anal canal on rectum. This track is lined by unhealthy granulation tissue and fibrous tissue.

The course of pathology in it is analogous to the anal sinus and fistula in-ano that an abscess discharges simultaneously on the skin as well as to a mucous surface, the tract connecting these surfaces is called a fistula.

Aetiopathogenesis

Fistula-in-ano is invariably a chronic termination of an acute abscess situated in any one or more of the potential spaces around the ano-rectal canal described earlier. The source of infection to these spaces may lie in a number of predisposing conditions like.

1. fissure-in-ano,
2. an ulcer at the root of a pile mass,
3. infected and inflamed condition of a crypt of Morgagni,
4. infection from a hair-follicle or a sebaceous gland,
5. an infected sweat-gland,

6. traumatized muco-cutaneous lining of the ano-rectal canal due to an ingested foreign-body,
7. the inflamed and/or thrombosed condition of a previously existing pile-mass,
8. retained sutures after hemorrhoidectomy,
9. injection of chemicals for treating pile-masses,
10. a foreign-body penetrating from outside and
11. radiation burns from X-rays and radiotherapy.

These are the common causes which transmit infection to form an abscess in the vicinity ofano-rectal canal and the fistula-in-ano in all the cases should result from an inadequate drainage or a prolonged negligence of these abscess cavities.

Classification

1. Milligan and Morgan Classification

Milligan and Morgan of St. mark hospital, London in 1934 classified fistula according to their relationship to the anal sphincter and in particular to the anorectal ring and classified as-

i) Sub Cutaneous Fistula: - When a tract lies under the skin of the epithelial lining of the anal canal, is termed as sub cutaneous fistula. It lies superficial to the sphincter and below the pectinate line.

ii) Sub Mucous Fistula: - These usually take the form of blind sinuses extending upwards from an opening at the level of the pectinate line and lie not in the submucosa entirely interval to the sphincter musculature.

iii) Low Anal Fistula: - low-anal fistula is more common; the tracts do not extend above the level of the anal crypts and usually open at this level. These types of fistula usually run below the subcutaneous external sphincter in intersphincteric plane and then pass through the lower most part of the internal sphincter to open at the level of the pectinate line.

iv) High Anal Fistula: - The tract rises to a higher level in relation to the upper parts of the anal sphincters but does not extend above the ano rectal ring. The tract may be curved, which looks like “Semi horse-shoe” or“ Horse shoe” in shape (depending upon whether the tract is unilateral or bilateral).

v) Ano Rectal Fistula: - It is rare type of fistula in which tract extent above the level of the Ano rectal ring and usually lies opposite both the anal canal and the lower part of the rectum.

2. Parks et al. Classification

Parks in 1976 classified the fistula in-ano into following five types.

i) Superficial Fistula: - A superficial fistula occurs in association with a chronic anal fissure and runs subcutaneously, under a sentinel tag.

ii) Inter Sphincteric Fistula: - Inter sphincteric fistula is very common in which the tract reaches to the intersphincteric plane. In this type, the tract passes from the place of primary abscess to inter sphincteric plane straightly and /or to the anal region downward.

a. Inter sphincteric fistula with high tract opening in the lower rectum: - In this type fistulous tract covers the whole inter sphincteric plane and having a opening in to the wall of the rectum.

b. High inter sphincteric fistula with pelvic extension: - This fistulous tract opens in to the true pelvic cavity and extend above the levator plane.

iii) Trans Sphincteric Fistula: - In this type of fistula the tract opens at the ischiorectal fossa through the external sphincteric from the inter sphincter plane.

iv) Supra Sphincteric Fistula: - A supra sphincteric fistula extremely rare. The tract passes in to the inter sphincteric place over the top of the puborectalis, then proceeds downwards through the levator ani in to the ischiorectal fossa and finally opens to the skin. Which lies partly above the levator musculature in the pelvis proper the term pelvirectal or supralevator anorectal fistula may conveniently be applied.

v) Extra Sphincteric fistula: - This type of fistulous tract opens in to the rectum through the perianal skin, ischiorectal fat and levator muscle. The tract lies laterally to the external sphincter. Pelvic trauma, pelvic inflammation, perforation of the rectum by the foreign body, ulcerative colitis, Crohn's disease, colloid carcinoma and secondary to trans sphincteric fistula are the causes to produceextra sphincteric fistula in due course.

Goodsall's Rule

Goodsall in 1900 observed that, if an imaginary transverse line is drawn across the midpoint of the anal orifice, fistula with their external opening anterior to this line usually run directly to the anal canal. While those with external openings posterior or behind the transverse line tend to take a curved course terminating in an opening in the midline of the posterior wall of this anal canal. Further if the external opening of a fistula lies interiorly but beyond three

centimeters (1-1/2 inches) from the anal verge, the tract is curved, and the internal opening possibly lies in the posterior midline in the anal canal. Though the majority of fistula probably does conform to Goodsall's rule, there are many exceptions to it. The Horseshoe fistula with anterior opening and the posterior fistula that pursued a straight course within 1-1/2 inch from the anus are not commonly seen.

Clinical Features

- Discharge,
- Pain,
- Inflammation,
- Tenderness,
- Sprouting granulation tissue,
- Induration,
- Pruritus

Treatment

A. Medicinal treatment (Bhesaja Karma)

B. Surgical treatment (Shalya Karma)

1. Ayurvedic approach

Para surgical approach (Anusastra Karma).

2. Present modern surgical approach

i. Operative technique

ii. Non operative technique

Medicines and Formulations Prescribe for the Treatment of *Bhagandara*

External Applications			
Name	**Main Ingredient**	**Reference**	**Dose**
A. TAILA (Medicated Oil Preparation)			
1. VisyandanaTaila	*Snuhi, Arka, Sarjikshra, Haritala etc.*	B.R.51/36	3-5 ml once a day or as required
2. BhagandarNasakaTaila or JyotismatiTaila	*Til oil*	A.H. 28/34	–do–
3. KaraviradyaTaila	*Karaviras, Haridra, Danti, Kalihari, Citraka, etc.*	B.K. 51/39	–do–
4. NisyadyaTaila	*Haridra, Citraka, Guggulu, Saindava, Candana, Tila oil etc.*	B.R. 51/40	–do–
5. SaindhavadiTaila	*Saindhava Lavana, Citraka, Danti, Palasa, Indrayana, Tila oil etc.*	B.R. 51/41	–do–
6. Madhu YastyadiTaila	*Yastimadhu, Pippali, Sariba, Sarjarasa etc.*	A.H. 28/35	–do–
7. CitrakadiTaila	*Citraka, Snuhi,Trivrutta, Arka, Tila oil etc*	S.Chi. 8/50-51	–do–
***B. LEPA** (Medicated Ointment)*			
1. BhuNagadiLepa	*Bhunagachurna or Danti, Citraka etc.*	B.R. 51/7	As required
2. KusthadiLepa	*Kustha, Tribruth, Danti, Pippali, Saindhava, Triphala etc.*	B.R. 51/8	–do–
3. BidalasthiLepa	*Triphala kwatha, Bidala asthi etc.*	B.R. 51/5	–do–
4. TiladiLepa	*Tila, Haritraki, Ladhra Nimba etc.*	B.R. 51/10	–do–
5. NishadiLepa	*Haridra, Daruharidra, Lodhra, Vaca etc.*	B.R. 51/4	–do–
6. RasanjanadiLepa	*Rasanjana, Haridra, Manjistha, Nimbu, Tribrotta etc.*	B.R. 51/9	–do–
7. JatipatradiLepa	*Jatipatra, Vata Patra, Guduchi, Sunthi etc.*	B.R. 51/11	–do–
***C. VARTI** (Medicated Phystick)*			
1. SnuhyadiVarti	*Snuhiksheera, ArkaKsheera, Daruhardra etc.*	B.R. 51/3	Inserted into the external opening of the *Bhagandara*

Following certain.

1. Para surgical approach *(Anusastra Karma)*

(a) *Kshara karma*

Kshara karma is one of the major procedures among Para surgical methods. It is a procedure where *chedana, lekshana, darana* are performed by application of specially prepared drug called *Kshara* (caustic alkali). The etymological significance of term *kshara* significance of *kshara* is based on the quantity of destroying or scrapping body tissues and drainage of liquefied material. It includes *Kshara sutra, Ksharataila* and *Ksharavarti.*

(b) *Agni Karma* (Cauterisation)

This Karma is indicated in all types of *Bhagandara* except in pitaja. Main objective of agni karma is to stop the bleeding and to cautery the granulated lining of the tract.

2. Present Modern Surgical Approach

i. *Operative Technique*

(a) Laying open the fistula and allowing the wound to heal by granulation. (Fistulotomy).

(b) Laying open the fistula, followed by immediate skin grafting. (Fistulotomy).

(c) Laying open of the fistula, excision of fistulous tract and primary suture. (Fistuloectomy).

ii. *Non-Operative Technique*

a) Destruction of fistulous tract by carbon dioxide laser beam.

b) Endo rectal advancement flap.

c) Seton.

d) Fibrin Glue.

e) Surgisis Biodesign Anal Fistula Plug.

DISCUSSION

Bhagandara which is related to Fistula in Ano a communicating tract between two epithelialsurface, commonly between a hollow viscus and the skin (external fistula) or between two hollow viscera (internal fistula). It is a typical *saririkavrana*. The main cause or nidana of *Bhagandara* is infective in nature. The source of infection to these spaces mainly involves the infected and inflammed condition of a crypt of Morgagni and infection from a hair-follicle or a sebacious gland. Prolonged negligence leads to formation of fistula. The main symptom is pus discharge in the perianal region. Pain and tenderness are present. The classification according to Ayurveda is mainly based on the doshic involvement. And the modern classification is based on the area affected. The main principle of treatment in modern science is fistulectomy (complete opening of the tract). Ayurvedic treatment principle involves *bhesaja, agni karma and kshara karma.*

CONCLUSION

From the above literary study and discussion of both *Bhagandara* and fistula, it can be concluded that Bhagandar is a common problem in today's life style and it is very difficult to treat even by modern methods also because of its high rate of recurrence and delay in wound healing due to frequent chance of infection by sweat, fecal matter, soiling, discharges etc. The basic principle of management runs through –*Vedanashamaka, vranashodhaka, vranaropaka, lekhana karma, Shothahara, ausadhiprayog. Vranaropana* by the local application of various medicated oils described in Ayurveda can help in accelerating the wound healing giving fast results in treatment. Further studies can be done in this aspect.

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