



Research Article

STUDY THE EFFICACY OF *KHADIRADI KWATH* IN THE MANAGEMENT OF *BHAGANDARA* W.S.R. TO FISTULA IN ANO

Shekokar Anantkumar¹, Borkar Kanchan², Kulthe Bharat^{3*}

¹Professor, ² Associate professor, ³P G Scholar, Dept of Shalyatantra, S.V.N.H.T'S Ayurved Mahavidyalaya, Rahuri Factory, Maharashtra.

ABSTRACT

From the origin of civilization the people suffered from various diseases and among the many uncomfortable conditions, *Guda Roga* is one of the most important one. The disease is widely prevalent and numerous options are being practiced for its management.

Fistula-in-ano is one condition for which the maximum types of surgical, parasurgical and medical applications have been described. This divergent approach to the treatment for a single disease is only suggestive of the fact that none of these methods is complete or satisfactory. Sushruta described a detailed surgical approach involving excision of the fistulous tract but also felt the necessity of a parasurgical approach since he was not quite satisfied with the surgical excision which often resulted into recurrence. However, they limited this alternative method called *Ksharasutra* in selected cases only in which found unfit for surgery. Due to *Ksharsutra* procedure recurrence rate is almost nil but it takes very long duration to cut and heal the track. *Khadiradi Kwaths* helps to inhibit to break pathogenesis of *Bhagandara* in short time and also prevent the recurrence rate of *Bhagandara* and hence recurrence rate is nearly nil and it does not take very long duration to cut and heal the track of *Bhagandara* with minimum expenditure.

In our present study we have taken 60 patients, in two groups, 30 patients in each group. The first group is experimental group i.e., *Khadiradi Kwath* along with standard *Ksharsutra* and second is control group i.e. only *Ksharsutra*. We have taken observations viz. age, sex, occupation, *Agni*, *Koshtha* etc. by which we can observe the characteristics of disease in these conditions. To assess the nature of disease we have taken assessment criteria like pain, discharge, in duration, foul smell, burning sensation, itching. From above criteria we made the result of effectiveness of treatment by using 't' test on 0.001% level of significance.

KEYWORDS: *Bhagandara*, Fistula in Ano, *Khadiradi Kwath*, *Ksharsutra*.

INTRODUCTION

The *Bhagandara* is one among the *Ashtomahagad* and non-curable [1] diseases described in Ayurveda. *Bhagandar* is a disease that exists since the early days of evaluation of the mankind. In India the disease was known from very early days.

The literary meaning of *Bhagandara* is "Daran" of *Bhag*, *Guda* and *Basti* Area. It clearly indicated that bursting of a *Pakva Pidika*, result into *Daran* (rupture) of that area and communicates with *Bhag*, *Guda* and *Basti* with surrounding skin surface which is term as *Bhagandara*. [2]

The word fistula is derived from a Latin word a reed, pipe or flute. It implies a chronic unhealthy granulation tissue tract communicating two epithelial lined surface. [3] Fistula in ano is called as *Bhagandara* in Ayurveda according to sign and symptoms described in *Sushruta Samhita*. [4] It can cause due to

sedentary life style, irregular and inappropriate diet and prolong seating, etc. [5] The above mentioned causes result in derangement of *Jatharagni* and vitiated the *Doshas* which leads to all *Koshtagat Rogas* as well as anorectal disorder. Prolong Constipation leads to infection of anal crypts which converts into anorectal abscess and further progress into fistula in ano. [6]

In Ayurvedic literature, *Bhagandara* included in *Ashtomahagada*. [7] About the fistula-in-ano there is a proverb often used by modern surgeons is that "If you have enemy to a doctor, refer him a patient of fistula-in-ano and it will never heal". [8]

Bhagandara is critical disease of anorectal characterized by persistent pus discharge associated with intermittent pain, [9] if not treated gives raises so many complications. The modern surgical treatment

for fistula was unsatisfactory. Fistula-in-ano was the most difficult to tackle and cure. It was a disease for which operative procedure have been advocated and practiced by the surgeon but it causes wide surgical wound, which required number of dressing so normal daily routine of the patient disturb, its recurrence rate was very high among all the cases even after excision of track and serious complications like incontinence.^[10] Before the three decade to minimize above complication the scientific approach was made for fistula management with ancient *Ksharsutra* treatment. The *Ksharsutra* procedure was also popular in modern surgical literature.^[11] The treatment of fistula-in-ano was revolutionized after availability of *Ksharsutra*.

The method involves the application of medicated thread which has been termed as *Ksharasutra*. In this method the tract or anal fistula is threaded through by *Ksharsutra* which is brought out at external surface of anal canal aperture and tied with knots. The thread cuts through the fistulous tract in due course of time to lay open the wound which exhibits spontaneous healing. The biggest advantage with the technique is that the patient can be treated at the level of outpatient department, there is no necessity of hospitalization. The patient remains ambulatory throughout the treatment period and continues with his work without disturbance. The merits of the *Ksharasutra* treatment are minimal trauma to the anal region thereby avoiding the sphincter trauma and avoiding the anal incontinence, negligible recurrence, its ambulatory method and also needs low dose anaesthesia. Due to all merits, this technique besides being parasurgical procedure is equally effective like surgery.

Due to *Ksharsutra* procedure recurrence rate is almost nil but it takes very long duration to cut and heal the track. Patient may causes pain while changing the thread. Sometimes patient may have foreign body sensation. They feel discomfort and tightness in the anal region during changing the thread bleeding may occur and patient also gets psychological discomfort to his or her normal activities.^[12]

Khadiradi Kwath will be beneficial to break *Samprapti* of *Bhagandara*.^[13] In the *Samprati* of *Bhagandara Tridosha* and *Rakta, Manmsa, Med Dhatu Dushties* are vitiated^[14] as well as *Ras Dhatu Kshaya*.^[15] *Khadiradi Kwath* advocated in the treatment of *Rakta, Manmsa, Meda Strotas Dushti* because of its *Krumighna* property.^[16] *Khadiradi Kwath* decreases *Kleda, Dushta Kapha, Snehansh* in the body by its *Tikta Kashay Ras* and *Rukshan*

property^[17] and *Snigdhta* in *Meda Dhatu* is suppresses by its *Rukshan* and *Stambhan* property.^[18] In *Bhagandara Rasdhatu Kshay* is filled by *Triphala* by its *Rasayan* property, *Manmsdhatu Agni Dushti* is cure by *Ghritha*^[19] by improving the activity of *Jatharagni* by its *Agnivardhan* and *Dipan* properties. *Khadiradi Kwaths* helps to inhibit to break pathogenesis of *Bhagandara* in short time and also prevent the recurrence rate of *Bhagandara* and hence recurrence rate is nearly nil and it does not take very long duration to cut and heal the track of *Bhagandara* with minimum expenditure.

Aim and Objectives

Aim

Study the efficacy of *Khadiradi Kwath* in the management of *Bhagandara* w.s.r. to fistula-in-ano.

Objectives

To provide safe, painless, economical and without recurrence management of *Bhagandara*.

Material and Methods

A) *Khadiradi Kwath*^[20, 21]

B) *Khadir* – 10 gm

C) *Amalaki* – 10gm

D) *Bibhitak* – 10gm

E) *Haritaki* – 10gm (above all powder drug mix in one polythene pouch)

F) *Vidang Churna* – 2.5gm (in separate polythene pouch)

G) *Ghritha* – 5gm (Advice to patient take itself upto the one table spoon)

Method of preparation of *Khadiradi Kwath*^[22]

Khadiradi Kwath prepared as per mentioned in *Sharangdhar Samhita*, as below.

Kwath (Decoction) Preparation

Khadir, Amalki, Bibhitak and *Haritaki* each raw drug was taken clean and dried as well as observed proper Authentication and Standardization. Each raw drug was made separately with the help of grinder mixer in *Yavkuta* form. *Yavkuta* obtained in powder form will pack in sterilize polythene pouches, labeled and store in dry place as well as protect from moisture.

Vidang Churna: Made same as above mentioned procedure, fine powder form of *Vidang churna* pack in polythene pouch.

Drug Properties

Khadiradi Kwath was acts as *Krumighna, Rukshan, Rasayan, Sthamban, Vranshodhak* and *Vranropak, Agnivardhak* properties. It will try to prove its efficacy in *Bhagandara* (Fistula-in-ano)

Table 1: Concise the ingredients of Khadiradi Kwath

Dravya	Khadir	Amalki	Bibhitak	Haritaki	Vidanga	Goghrita
Family Name	Leguminosae	Euphorbiaceae	Combretaceae	Combretaceae	Myrsinaceae	----
Latin Name	<i>Acacia Catechu</i>	<i>Emblica Officinalis</i>	<i>Terminalia belerica</i>	<i>Terminalia Chebula</i>	<i>Embelia Ribes</i>	----
Rasa	Tikta, Kashaya	Madhur, Amla, Katu, Tikta, Kashay	Kashaya	Madhur, Amla, Katu, Tikta, Kashay	Katu	Madhur
Virya	Sheeta	Sheet	Ushna	Ushna	Ushna	Sheeta
Vipak	Katu	Madhur	Madhur	Katu	Katu	Madhur
Guna	Laghu, Ruksha	Laghu, Ruksha	Laghu, Ruksha	Laghu, Ruksha	Laghu, Ruksha, Tikshna	Guru, Snigdha
Karma	Stambhan, Rukshan, Shothahar, Vedanasthapak, Kaphapitt nashak	Rasayan Tridoshghna	Rasayan, Tridoshghna, Anuloman	Rasayan, Tridoshghna	Krumighna, Vranaropak, Vedanasthapak	Vatta pittakapha vinashak
Rasa Yanic Sanghatan	Catechin, Tannic Acid	Vit- C, Gelic Acid, Tannic Acid, Albumic, Cellulose	Tenin, B-Sitosterol, Gelic Acid, Elegic Acid, Chebulic Acid, Menitol	Tenin, Chebulic Acid, Corilgain Acid, 18 Amino acid, Sakisnic Acid	Embelin Acid, Tenin, Christembine	Docosahex Aenoic Acid
As per Modern Concept	Powerful astringent	Diuretic, Laxative, Astringent	Astringent tonic expectorant, Laxative	Laxative	Carminative, Anthelmintic, Stimulant, Diuretic	Antibacterial Activity, Microbial composition

Standard Ksharasutra^[23]**Drug for Standard Ksharasutra**^[24, 25]

1. *Snuhi Kshira*
2. *Apamarga Kshara*
3. *Haridra Churna*

Dravya	Snuhi	Apamarga	Haridra
Family Name	Euphorbiaceae	Amaranthaceae	Zingiberaceae
Latin Name	<i>Euphorbia neriifolia</i>	<i>Achyranthes aspera</i>	<i>Curcuma longa</i>
Rasa	Katu	Katu, Tikta	Tikta, Katu
Virya	Ushna	Ushna	Ushna
Vipak	Katu	Katu	Katu
Guna	Laghu, Snigdha	Tikshna,	Laghu, Rukska
Karma	Lekhana	Vranashodhak, Vranaropak, Shothahar, Vednasthapan	Vranaropan, Lekhana, Vranashodhak

Inclusion Criteria

- a. Patient suffering from sign and symptoms of *Bhagandara* w.s.r. to *Fistula-in-ano*.
- b. Low anal *Fistula*
- c. *Fistula* within 3.75cm from anal canal
- d. Age – 16 to 70 yrs. of age group
- e. Sex – both male and female

- f. Patient belonging to all socioeconomic group

Exclusion Criteria

- a. Multiple tract *fistula*
- b. High anal *fistula*
- c. Recurrent *fistula-in-ano*
- d. Rectal *polyp*

- e. Proctitis, Colitis
- f. *Shambukavart Bhagandara*
- g. *Unmargi Bhagandara*
- h. *Ushtragrivi Bhagandara*
- i. CA of anus and Rectum
- j. H/O Human Immunodeficiency Virus, Hepatitis B, Diabetes Mellitus, Hypertension, Tuberculosis
- k. Gangrenous Fistula
- l. Crohn's disease and Ulcerative colitis
- m. Sinus
- n. Pilonidal sinus
- o. More than 1 year Fistula

Investigations

Some of the following Investigations done.

1. Haematological CBC, ESR, Blood Urea, Sr.creatinine, Blood Sugar, Tridot, BT, CT and Hepatitis B
2. Urine Routine
3. Pus for culture and sensitivity (if needed)
4. Fistulogram (if needed)
5. Methelene Blue Dye Test.
6. Electrocardiogram (E.C.G.)
7. Physical fitness

Methods

Study Group

60 patients were observed and treated (two groups of 30 patients each).

Group A (Experimental group)

30 patients were selected and treated with *Khadiradi Kwath* and Standard *Ksharasutra* procedure.

Group B (Control group)

30 Patients were selected and treated with only *Ksharsutra* procedure.

Duration of Treatment

Up to the Fistulous tract heals.

Follow Up

Every 7th day upto completion of fistulous track healing.

Procedure

A) Experimental group (Group A)

- 1) *Khadiradi Kwath* (Orally)
- Standard *Ksharsutra* procedure (Locally)

a) For Standard *Ksharsutra* Procedure

I. Pre-operative

- 1) NBM from the previous night before the procedure.
- 2) Time of the surgical procedure in the morning.
- 3) Informed written consent.
- 4) Inj. Xylocaine sensitivity test.
- 5) Preparation of the part

- 6) Soap water enema 2 hour before procedure
- 7) Inj. T.T. 0.5 ml IM half an hour before procedure
- 8) Inj. Atropine 0.6mg IM half an hour before procedure
- 9) Tab. Diazepam 0.5mg was given to the patient in night to relieve anxiety. Position All patients were kept in Lithotomy position.

Anesthesia: Spinal anesthesia with all septic precautions and premedication given by qualified expert anesthetist which appointed for institute.

II. Operative Procedure

1. Lithotomy position was given to the patient.
2. Painting and draping and isolation of the part done.
3. Lord's dilation done.
4. Examine fistulous track by palpation method.
5. Methelene Blue Dye Test done for confirmation and direction and position of internal opening of fistula.
6. Take one standard *Ksharsutra*, one end of *Ksharsutra* with the help of copper probe, was inserted slowly from external opening of the fistula upto the internal opening inside the anorectal canal, guided by index finger of the hand.
7. Simultaneously at the same time copper probe was return outside from external opening of the fistula.
8. From anorectal canal take outside the inserted one end of *Ksharsutra* from internal opening fistula.
9. One end of *Ksharsutra* of anorectal canal and another one end of *Ksharsutra* thread of the fistulous opening. These two ends of *Ksharsutra* are tie by knots (not to be tight and not to be lose)
- 10 Dressing the wound with Betadine solution.

III. Post Operative

- 1) Strictly check TPRBP 2 hourly
- 2) NBM for 6 hours
- 3) Head low position for 12 hour
- 4) Medication for 3 days
- 5) Inj. Taxim 1gm IV/BD (Aristo)
- 6) Inj. Genta 80mg IV/BD (Abbott)
- 7) Inj. Pan 40mg IV/BD (Aknil)
- 8) Inj. Diclo 75mg IM (SOS) (Alkem)
- 9) Sitz bath with warm water regularly 2 times in a day.
- 10) Intravenous fluids (eg. NS, RL, DNS) According to clinical and Hydration status of patients.
1st day – 2.5 lit (less than 3 lit.)
2nd day – 1 lit
3rd day – Stop IVF, only Orally Diet
- 11) Patient was advised to come for changing the *Ksharsutra* after every 7 days upto complete cutting and healing of track.

Treatment on discharge

- 1) Sitz bath daily with warm water 2 times in a day.
- 2) Tab. Amoxyclave 625mg BD after meal (Acme)
- 3) Tab. Pan-D OD before meal (Morvel Lab.)
- 4) Tab. *Triphalaguggul* 500mg BD after meal (Dabur Pharma)
- 5) *Gandharav Haritakichurna* 10gm HS (Baidyanath Ayu. Pharma)
- 6) Onit. *Jatyadi Ghrita* for local application 2 times in a day (Divya Pharma).
- 7) *Khadiradi Kwath* (Orally) from 3rd post operative day *Khadiradi Kwath* starts orally.

Dose- 20ml---0---20ml after meal.

Duration- Upto the complete fistulous track heals.

Patients advised to come for changing the thread after 7th day.

Procedure of Changing the Ksharsutra thread

Preparation

- 1) Sitz bath with warm water.
- 2) Local shaving and clean area antiseptic solution (Betadine, H2O2).
- 3) Local application of Xylocaine jelly.

Procedure: Changing of thread was done after 7th day of primary threading. A fresh *Ksharsutra* was tied around the thread lateral side of the knots. The thread was grasped by an artery forceps medial to the knot and cut in between. Traction on the artery forceps pull the plain thread out and *Ksharsutra* replaces in it entirely. It was approximate at the external opening as earlier, dressing done with *Anutaila*. The *Ksharsutra* was thus change every week till it cuts through the fistulous track.

B) Control Group (group B) Only *Ksharsutra* procedure done.

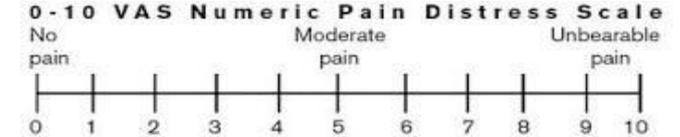
For only Ksharsutra procedure

- 1) Preoperative
- 2) Operative procedure
- 3) Post operative

Same as mentioned in Experimental group (group A)

OBSERVATION PARAMETERS

1) Pain Assessment was done by Visual analog scale.



2) **Pus Discharge**

- 0- No Discharge
- 1- Very negligible pus discharge was present
- 2- Scanty pus discharge was present without squeezing
- 3- Profuse pus discharge came out while squeezing the cavity
- 4- The cavity was filled with pus and continuous flowing of pus without squeezing the cavity.

3) **Burning Sensation**

- 0- No complaints of burning sensation
- 1- Negligible burning sensation
- 2- Occasional and tolerable burning sensation, relieved by oleation.
- 3- Constant but tolerable burning sensation slightly relieved by oleation.
- 4- Intolerable burning sensation makes the patient uncomfortable and makes the patient to go for help.

4) **Itching**

- 0- No complain of Itching
- 1- Negligible Itching, Occasional in a day
- 2- Occasional itching, with 4-6 hrs gap
- 3- Frequent Itching, with 2-3 hrs gap
- 4- Continuous itching sensation

5) **UCT (Unit Cutting Time)**

Total No. Of days taken to cut through
 UCT = -----
 Days/cms Initial length of track in cms

Response in the treatment was observed and recorded on case paper and data collection by clinical study. Percentage of relief in symptoms and signs with respect to each of the patients was followed and percentage of improvement was classified as on the basis of sign and symptoms.

Table 2: Assessment Criteria for Result

Class	Percentage of improvement (total relief in symptoms)
Not improved (Unchanged)	00-25 %
Improved	26-50 %
Markedly Improved	51-75 %
Cured	76-100%

Observation and Result

Table 3: Observations of 60 patients according to Age Group

Age in years	No. of patients of Group A	No. of Patients of Group B	Total no. of Patients	Percentage
20-30	7	6	13	21.66%
30-40	8	7	15	25%
40-50	15	17	32	53.33%
Total	30	30	60	100%

Graph no.2

In the Present Study out of 60 patients most of the patients i.e. 32 patients (53.33%) were of 40-50yrs age group and lowest no. of patients i.e. of 13 (21.33%) were of 20-30yrs of age group.

Table 4: Observation of 60 patients according to Koshtha

<i>Koshtha</i>	No. of patients	Percentage (%)
<i>Mridu</i>	06	10%
<i>Madhyama</i>	16	26.66%
<i>Krura</i>	38	63.33%

Table shows that maximum number of patients had *Krura Koshtha* i.e. 38 (63.33%) and 6 (10%) minimum number of patients had *Mridu Koshtha*

Table 5: Observation of 60 patients according to Agni

<i>Agni</i>	No. of patients	Percentage (%)
<i>Samanagni</i>	0	0.00%
<i>Vishmagni</i>	04	06.66%
<i>Tikshnagni</i>	03	5%
<i>Mandagni</i>	53	88.33%

Table has shows that maximum number of patients had *Mandagni* i.e. 53 (88.33%), 03 (5.00%) had *Tikshnagni*.

Table 6: Effect of Therapy on Cardinal Symptoms of Bhagandara (Fistula in Ano) in Group A

Cardinal Symptoms	N	Mean B.T.	Mean A.T.	S.D.	S.E.	't' cal.	P value	Result	% Of Relief
Pain	30	1.98	0.99	0.39	0.090	17.85	P<0.001	H.S	56.13%
Discharge	30	2.99	2.0	0.29	0.08	08.93	P<0.001	H.S.	61.02%
Induration	30	1.75	0.6	0.38	0.061	20.97	P<0.001	H.S	57.31%
Foul smell	30	1.99	1.29	0.59	0.057	5.91	P<0.001	H.S	58.66%
Burning Sensation	30	2.58	1.47	0.50	0.059	11.34	P<0.001	H.S.	55.04%
Itching	30	1.92	1.33	0.43	0.049	5.47	P<0.001	H.S.	58.03%

Table 7: Effect of Therapy on Cardinal Symptoms of Bhagandara (Fistula in Ano) in Group B

Cardinal Symptoms	N	Mean B.T.	Mean A.T.	S.D.	S.E.	't' cal.	P value	Result	% of Relief
Pain	30	2.0	1.33	0.40	0.080	9.03	P<0.001	H.S	59.21%
Discharge	30	1.99	1.05	0.39	0.18	03.90	P<0.001	H.S.	62.89%
Induration	30	1.91	0.99	0.49	0.047	10.99	P<0.001	H.S	61.86%
Foul smell	30	2.01	1.11	0.51	0.055	4.97	P<0.001	H.S	50.34%
Burning Sensation	30	1.79	0.8	0.65	0.067	6.57	P<0.001	H.S.	50.21%
Itching	30	01.87	0.9	0.41	0.073	21.11	P<0.001	H.S.	51.11%

Result according to disease relief**Table 8: Result of 60 patients according to disease relief**

S.No	Disease relief	No. of patient in Group A	Percentage	No. of patient in Group B	Percentage of Result
1	Cured	21	70%	18	60%
2	Markedly Improved	08	26.66%	06	20%
3	Improved	00	0%	04	13.33%
4	Not Improved	01	3.33%	02	06.66%

Discussion on Khadiradi Kwath Action

Contents of *Khadiradi Kwath* are having *Tiktakashaya ras*, and having *Sheet Veerya* and

Katuvipaka, then drugs are having *Laghu* and *Ruksha Guna*. Hence a property of *Khadiradi Kwath* is;

Rasa: Tikta Kashaya

Veerya: Sheeta

Vipaka: Katu

Guna: Laghu, Ruksha

Among the ingredients of *Khadiradi Kwath*, drugs are having *Tikta, Kashya Rasa, Ruksha, Laghu* and *Sheet Veerya*, so these drugs are very effective to break the pathogenesis of *Bhagandara* as well by virtue of these properties. It separates the vitiated substances from *Dhatus* and reaches to minute cell level. It plays important role to perform the *Doshapak* of vitiated *Doshas*, which fascinates to separate and eliminate the vitiated *Doshas* along with debris from *Dhatus*. It also works as *Krumighna* and *Kledpachaka*; So, *Ghruta* works as removing sloughs and absorbs discharge (*Shodhana*) and enhances the process of healing (*Ropana*). Thus *Khadiradi Kwath* Support to *Ksharasutra* therapy to break pathogenesis of *Bhagandara*.

Excellence of *Ksharsutra*

1. Minimal trauma as compared to surgical excision
2. Less bleeding in *Ksharsutra* application as compared to huge bleeding in fistulectomy.
3. Anaesthesia is seldom requires.
4. The patient is ambulatory and perform his daily activities.
5. Minimal Hospital stay: in most of cases not even a day.
6. No dressing as in huge wound of fistulectomy.
7. No incontinence
8. Therapy costing is very less
9. Very narrow and fine scar in comparison to surgery.
10. No anal stricture if properly treated.
11. The recurrence rate is practically (3-5 %) nil.

CONCLUSION

- Fistula-in-ano is an important, commonest disease due to crypto glandular infection (anal glands) and has a complication of ano rectal abscess.
- All the cases of fistula-in-ano should undergo *Ksharasutra*, as it is associated with less chances of incontinence, has significantly less incidence of post-operative complications and is associated with less hospital stay duration.
- *Khadiradi kwath* with *Ksharsutra* application increases pain threshold, *Shodhan, Kaphghna, Krumighna, Medoghana, Kledaghana* and *Raktashodhaka* which decreases severity of *Bhagandara*. So it gives quick and improved effect of *Ksharsutra* and can be a permanent cure for *Bhagandara* as it breaks *Samprapti* of disease.

- The overall discharge is also less in the patients treated with *Ksharsutra* with *Khadiradi kwath* as compared to plain *Ksharsutra* management.
- In *Khadiradi Kwath* having *Krimighna* and *Rukshan, Stambhan, Shodhana, Agnivardhan, Dipan* properties along with *Kaphaghna, Medpachak, Raktashodhak, Vranshodhak* and *Vranropak* properties so disturbing *Bhagandara Samprapti* and the fistulous tract heals fast.
- The average duration is found less in patients treated with *Khadiradi Kwath* and Standard *Ksharsutra* as compared to only *Ksharasutra* management.
- The highly increasing response of standard *Ksharasutra* with *Khadiradi Kwath* in the management of *Bhagandara* (fistula-in-ano), opens a new chapter for the research scholars to help the patients suffering with *Bhagandara* (fistula-in-ano).

REFERENCES

- 1) Dr. Anantram Sharma, Shushrut Samhita (Sutrasthan), Shushrut vimarshini Hindi Commentary Vol 1, Chuakhamba Subharati Prakashan Varanasi, Edition 2015, Shu.Su. 33/4-5, page no.259.
- 2) Dr. Anantram Sharma, Shushrut Samhita (Nidansthan), Shushrut vimarshini Hindi Commentary Vol 1, Chuakhamba Subharati Prakashan Varanasi, Edition 2015, Shu.Ni. 4/4-5, page no.489.
- 3) Bailey and Love's, Short Practice of Surgery, Arnold Publisher a member of Hodder headline group, London, 23rd Edition, Page No.1136.
- 4) Dr. Anantram Sharma, Shushrut Samhita (Nidansthan), Shushrut vimarshini Hindi Commentary Vol 1, Chuakhamba Subharati Prakashan Varanasi, Edition 2015, Su.Ni. 4/9, Page No. 490.
- 5) K.K.Sijoria, Praveen Kumar, Dagnosis and Management of Anorectal Diseases, Chaukhamba Sanskrit Sansthan, Dehli, 1st Edition, Page No. 5.
- 6) Somen Das, A concise textbook of sugery, S. Das publisher, Calcutta, 3rd Edition, 2001, Page No.1052,1053.
- 7) Dr. Anantram Sharma, Shushrut Samhita (Nidansthan), Shushrut vimarshini Hindi Commentary Vol 1, Chuakhamba Subharati Prakashan Varanasi, Edition 2015, Su. Su. 33/4-5, Page No.259.
- 8) K.K. Sijoria, Praveen Kumar, Diagnosis and Management of Anorectal Diseases, Chaukhamba Sanskrit Sansthan, Dehli, 1st Edition, Page No. 6.

- 9) Norman L. Browse, An introduction to the symptoms and signs of surgical disease, Arnold Publisher, 3rd edition, 2001, Page No. 435,436.
- 10) Peter J. Morris, William C Wood, Oxford textbook of surgery, 2nd Edition, 2000, Page no. 1587.
- 11) Dr.Rajgopal Shenoy K, Manipal Manual of Surgery, CBS Publisher, Delhi, 2nd Edition, Page No. 531.
- 12) Dr.Anantkumar V. Shekokar, Textbook of Shalyatantra, Part 2Shantanu Prakashan, Pune, 1st Edition, 2008, Page No. 334.
- 13) Acharya Shriradhakrushnaparashar Ayurveeda charya, baidyanath Ayurvedbhavan, Nagpur, 4th edition 1994, Sharangdhar Samhita Madhyam Khand 2/134, Page no.216.
- 14) Dr. Ganesh Krushna Garde, Sartha Vagbhatta, Part 1, Raghuvanshi Prakashan, Pune, 8th Edition, 1996, A.Hri.U.28/1-3, Page No.438.
- 15) Dr. Anantram Sharma, Shushrut Samhita (Sutrasthan), Shushrut vimarshini Hindi Commentary Vol 1, Chuakhamba Subharati Prakashan Varanasi, Edition 2015, Shu.Su. 33/4-5, page no.259.
- 16) Dravyagun Vigyan (2nd Volume), Chukhamba Bharati Academy, Varanasi, P.V.Sharma,4th Edition, page no.503
- 17) Dravyagun Vigyan (2nd Volume), Chukhamba Bharati Academy, Varanasi, P.V.Sharma, 4th Edition, page no.159.
- 18) Dravyagun Vigyan (2nd Volume), Chukhamba Bharati Academy, Varanasi, P.V.Sharma, 4th Edition, page no.758.
- 19) Ashtang Sangrah (Sutrasthan), Dr.Ravidatta tripathi, choukhamba Sanskrit pratisthan, Delhi, edition 2001,page no.102.
- 20) Dravyaguna Vigyan (2nd Volume), Chukhamba Bharati Academy, Varanasi, P.V.Sharma, 4th Edition, page no.753.
- 21) Dravyagun Vigyan (2nd Volume), Chukhamba Bharati Academy, Varanasi, P.V.Sharma, 4th Edition, page no.931.
- 22) Acharya Shriradhakrushna parashar Ayurvead acharya, baidyanatha yurvedbhavan, Nagpur, 4th edition 1994, Sharangdhar Samhita Madhyam Khand 2/134, Page no.216.
- 23) Dravyagun Vigyan (2nd Volume), Chukhamba Bharati Academy, Varanasi, P.V.Sharma, 4th Edition, page no.672.
- 24) Colorectal Diseases and Kshar Sutra Surgery, Chaukhamba Publications, New Delhi, Dr. Lalta Prasad, Dr.Sanjeev Prakash, Dr.Abhay Prakash, 1st Edition 2013, Page no.64,65.
- 25) S.K. Sharma, K.R. Sharma, Kulwant Singh, Kshara Sutra Therapy in Fistula In Ano and Other Anorectal Disorder, R.A.V. Publication, Delhi, 1994-95, Page No. 58.

Cite this article as:

Shekokar Anantkumar, Borkar Kanchan, Kulthe Bharat. Study the Efficacy of Khadiradi Kwath in the Management of Bhagandara w.s.r. to Fistula in Ano International Journal of Ayurveda and Pharma Research. 2018;6(6):18-25.

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

***Address for correspondence**

Dr.Kulthe Bharat

P G Scholar,

Dept of Shalyatantra,

S.V.N.H.T'S Ayurved

Mahavidyalaya, Rahuri Factory,

Maharashtra.

Ph: +919130813593

Email:

kulthebharat89@gmail.com

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.