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

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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 Ksharasutra 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 Ksharasutra and second is control group i.e. only Ksharasutra. 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 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 Ksharsutra 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, Mannsa, Med Dhatu Dushties are vitiates[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 Snigdha in Meda Dhatu is suppresses by its Rukshan and Stambhan property.[18] In Bhagandara Rasadhata Kshay is filled by Tripahla by its Rasayan property, Mannsdhatu Agni Dushiti is cure by Ghrita[19] by improving the activity of Jatharaggni 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.r.t. 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) Ghrita – 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, Agniwardhak properties. It will try to prove its efficacy in Bhagandara (Fistula-in-ano)
Table 1: Concise ingredients of *Khadiradi Kwath*

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

**Standard Ksharasutra**[23]

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

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

<table>
<thead>
<tr>
<th>Dravya</th>
<th>Snuhi</th>
<th>Apamarga</th>
<th>Haridra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Name</td>
<td>Euphorbiaceae</td>
<td>Amaranthaceae</td>
<td>Zingiberaceae</td>
</tr>
<tr>
<td>Latin Name</td>
<td><em>Euphorbia neriifolia</em></td>
<td><em>Achyranthes aspera</em></td>
<td><em>Curcuma longa</em></td>
</tr>
<tr>
<td>Rasa</td>
<td>Katu</td>
<td>Katu, Tikta</td>
<td>Tikta, Katu</td>
</tr>
<tr>
<td>Virya</td>
<td>Ushna</td>
<td>Ushna</td>
<td>Ushna</td>
</tr>
<tr>
<td>Vipak</td>
<td>Katu</td>
<td>Katu</td>
<td>Katu</td>
</tr>
<tr>
<td>Guna</td>
<td>Laghu, Snigdha</td>
<td>Tikshna,</td>
<td>Laghu, Ruksha</td>
</tr>
<tr>
<td>Karma</td>
<td>Lekhana</td>
<td>Vranashodhak, Vranaropak, Shothahar, Vedanasthapak</td>
<td>Vranaropan, Lekhana, Vranashodhak</td>
</tr>
</tbody>
</table>

**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. Electrocardigram (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 Ksharasutra 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  

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. Methlene 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 up to 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. Amoxycloven 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 to ---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

<table>
<thead>
<tr>
<th>Class</th>
<th>Percentage of improvement (total relief in symptoms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not improved (Unchanged)</td>
<td>00-25 %</td>
</tr>
<tr>
<td>Improved</td>
<td>26-50 %</td>
</tr>
<tr>
<td>Markedly Improved</td>
<td>51-75 %</td>
</tr>
<tr>
<td>Cured</td>
<td>76-100%</td>
</tr>
</tbody>
</table>

Observation and Result

Table 3: Observations of 60 patients according to Age Group

<table>
<thead>
<tr>
<th>Age in years</th>
<th>No. of patients of Group A</th>
<th>No. of Patients of Group B</th>
<th>Total no. of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>7</td>
<td>6</td>
<td>13</td>
<td>21.66%</td>
</tr>
<tr>
<td>30-40</td>
<td>8</td>
<td>7</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>40-50</td>
<td>15</td>
<td>17</td>
<td>32</td>
<td>53.33%</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100%</td>
</tr>
</tbody>
</table>

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- Occasional 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

<table>
<thead>
<tr>
<th>Class</th>
<th>Percentage of improvement (total relief in symptoms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not improved (Unchanged)</td>
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</tr>
<tr>
<td>Cured</td>
<td>76-100%</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Koshtha</th>
<th>No. of patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrudu</td>
<td>06</td>
<td>10%</td>
</tr>
<tr>
<td>Madhyaama</td>
<td>16</td>
<td>26.66%</td>
</tr>
<tr>
<td>Krura</td>
<td>38</td>
<td>63.33%</td>
</tr>
</tbody>
</table>

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

Table 5: Observation of 60 patients according to Agni

<table>
<thead>
<tr>
<th>Agni</th>
<th>No. of patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samanagni</td>
<td>0</td>
<td>00%</td>
</tr>
<tr>
<td>Vishmagni</td>
<td>04</td>
<td>06.66%</td>
</tr>
<tr>
<td>Tikshnagni</td>
<td>03</td>
<td>5%</td>
</tr>
<tr>
<td>Mandagni</td>
<td>53</td>
<td>88.33%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Cardinal Symptoms</th>
<th>N</th>
<th>Mean B.T.</th>
<th>Mean A.T.</th>
<th>S.D.</th>
<th>S.E.</th>
<th>'t' cal.</th>
<th>P value</th>
<th>Result</th>
<th>% Of Relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>30</td>
<td>1.98</td>
<td>0.99</td>
<td>0.39</td>
<td>0.09</td>
<td>17.85</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>56.13%</td>
</tr>
<tr>
<td>Discharge</td>
<td>30</td>
<td>2.99</td>
<td>2.0</td>
<td>0.29</td>
<td>0.08</td>
<td>08.93</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>61.02%</td>
</tr>
<tr>
<td>Induration</td>
<td>30</td>
<td>1.75</td>
<td>0.38</td>
<td>0.06</td>
<td>0.02</td>
<td>20.97</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>57.31%</td>
</tr>
<tr>
<td>Foul smell</td>
<td>30</td>
<td>1.99</td>
<td>0.59</td>
<td>0.05</td>
<td>0.07</td>
<td>5.91</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>58.66%</td>
</tr>
<tr>
<td>Burning Sensation</td>
<td>30</td>
<td>2.58</td>
<td>0.50</td>
<td>0.05</td>
<td>0.09</td>
<td>11.34</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>55.04%</td>
</tr>
<tr>
<td>Itching</td>
<td>30</td>
<td>1.92</td>
<td>0.43</td>
<td>0.04</td>
<td>0.09</td>
<td>5.47</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>58.03%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Cardinal Symptoms</th>
<th>N</th>
<th>Mean B.T.</th>
<th>Mean A.T.</th>
<th>S.D.</th>
<th>S.E.</th>
<th>'t' cal.</th>
<th>P value</th>
<th>Result</th>
<th>% Of Relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>30</td>
<td>2.0</td>
<td>1.33</td>
<td>0.40</td>
<td>0.08</td>
<td>9.03</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>59.21%</td>
</tr>
<tr>
<td>Discharge</td>
<td>30</td>
<td>1.99</td>
<td>1.05</td>
<td>0.39</td>
<td>0.18</td>
<td>03.90</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>62.89%</td>
</tr>
<tr>
<td>Induration</td>
<td>30</td>
<td>1.91</td>
<td>0.99</td>
<td>0.49</td>
<td>0.04</td>
<td>10.99</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>61.86%</td>
</tr>
<tr>
<td>Foul smell</td>
<td>30</td>
<td>2.01</td>
<td>1.11</td>
<td>0.51</td>
<td>0.05</td>
<td>4.97</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>50.34%</td>
</tr>
<tr>
<td>Burning Sensation</td>
<td>30</td>
<td>1.79</td>
<td>0.8</td>
<td>0.65</td>
<td>0.06</td>
<td>6.57</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>50.21%</td>
</tr>
<tr>
<td>Itching</td>
<td>30</td>
<td>01.87</td>
<td>0.9</td>
<td>0.41</td>
<td>0.07</td>
<td>21.11</td>
<td>P&lt;0.001</td>
<td>H.S.</td>
<td>51.11%</td>
</tr>
</tbody>
</table>

Result according to disease relief

Table 8: Result of 60 patients according to disease relief

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

Discussion on Khadiradi Kwath Action

Contents of Khadiradi Kwath are having Tiketakshaya 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
Vipakka: 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 Ksharasutra
1. Minimal trauma as compared to surgical excision
2. Less bleeding in Ksharasutra 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 Ksharasutra application increases pain threshold, Shodhan, Kaphghna, Krumighna, Medoghana, Kledaghana and Raktaabshodhaka which decreases severity of Bhagandara. So it gives quick and improved effect of Ksharasutra 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 Ksharasutra with Khadiradi kwath as compared to plain Ksharasutra management.
• In Khadiradi Kwath having Krimighna and Rukshan, Stambhan, Shodhana, Agnivardhan, Dipan properties along with Kaphaghna, Medpachak, Raktaabshodhak, 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 Ksharasutra 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.
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