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## Case Study

### ROLE OF VIRECHAN KARMA BEFORE KSHARASUTRA PROCEDURE IN THE MANAGEMENT OF BHAGANDARA W.S.R. TO FISTULA IN ANO

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#### ABSTRACT

Since ages, *Bhagandara* is the challenge for surgeon. But from three decades *Ksharasutra* procedure was practised and used with great success without recurrences but it takes long duration to heal. In *Ksharasutra* procedure patient have pain, foreign body sensation, discomfort and tightness in anal region etc., So to overcome such crucial problems clinical study is required. In ancient ayurvedic texts *Bhagandara* is *Virechan Yoga Vyadhi* and advocated *Virechan Karma* in *Bhagandara Chikitsa*. So we decided to give *Panchtikta Ghrita* for *Snehan* followed *Virechan* by *Aragvadha Hima* after that *Ksharasutra* procedure is done.

The present study has been carried out to study the clinical efficacy of *Virechan Karma* before *Ksharasutra* procedure in the management of *Bhagandara w.s.r.* to fistula in ano. A pilot study was conducted, 2 patients selected randomly and divided into two same group. Group A will be treated with *Virechan Karma* before *Ksharasutra* procedure and Group B will be treated with *Ksharasutra* only. The clinical assessment will be done on the basis of grading criteria. *Virechan Karma* before *Ksharasutra* procedure showed better results in reducing pain, itching, burning sensation, pus discharge, unit cutting time and helps in healing of the tract.

**KEY WORDS:** *Bhagandhara, Ksharasutra, Virechan, Panchtikta Ghrita, Snehan.*

#### INTRODUCTION

Anorectal disorder are progressively increasing in the society due to influence of western lifestyle. 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.<sup>1</sup> Fistula in ano is called as *Bhagandara* in ayurveda according to sign and symptoms described in *Sushruta Samhita*.<sup>2</sup> It is caused due to sedentary life style, irregular & inappropriate diet and prolong seating etc.<sup>3</sup> 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 and then anorectal abscess & fistula in ano.<sup>4</sup>

In ayurvedic literature, *Bhagandara* included in *Ashtomahagada*.<sup>5</sup> About the fistula in ano there is a proverb oftenly 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."<sup>6</sup>

*Bhagandara* is critical disease of anorectal and characterised by persistent pus discharge associated with intermittent pain<sup>7</sup>, if not treated gives rise to many complication. The modern surgical treatment for fistula is unsatisfactory. Fistula in ano is the most difficult to cure. It is 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 is disturbed; its recurrence rate is very high among all the cases even after excision of tract and serious complication like incontinence<sup>8</sup>. Before the three decade to minimize above complication the scientific approach was made for fistula management with ancient *Ksharasutra* treatment. The *Ksharasutra* procedure is also popular in modern surgical literature<sup>9</sup>. The

treatment of fistula in ano was revolutionised after availability of Ksharasutra.

Due to Ksharasutra procedure recurrence rate is almost nil but it takes very long duration to cut and heal the tract. It may cause pain in patient while changing the thread. Sometimes patient may having 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<sup>10</sup>.

It is a duty of research scholar to modify the treatment to overcome the above said dimension to increase the efficacy of Ksharasutra for which we have referred ancient text and we found that before the Ksharasutra procedure Virechan Karma will be beneficial<sup>11</sup>. In Charak Samhita<sup>12</sup> and Sushruta Samhita<sup>13</sup>, Bhagandara described as Virechan Yoga Vyadhi. In the samprapti of Bhagandara Tridoshas and Rakta, Mamsa Dushyas are vitiated<sup>14</sup> and Virechan

Karma advocated in the treatment of Rakta, Mamsa Strotas Dushti.<sup>15,16</sup> Acharya Sushruta told Bhagandara is Shastrasadhya vyadhi (surgically curable) and mentioned that "Medical procedures such as oleation, etc are not contraindicated in surgically curable cases<sup>17</sup>.

According to the above references before the Ksharasutra procedure how should we improve the efficacy of Ksharasutra and how the fistulous condition overcome within short duration of time. So the Virechan karma can be added as a new aspect before the Ksharasutra procedure in the management of Bhagandara. Hence we like to select this subject "Role Of Virechan Karma Before Ksharasutra Procedure In The Management Of Bhagandara w.s.r.to Fistula In Ano."

## MATERIAL AND METHODS

**DRUG STUDY** - The drugs required for the study are

### 1) Panchatikta Ghrita

**Table No.1 - The ingredients in Panchatikta Ghrita<sup>18</sup>**

Dravya	Vrusha <sup>19</sup>	Nimba <sup>20</sup>	Amruta <sup>21</sup>	Vyaghri <sup>22</sup>	Patol <sup>23</sup>	Goghrita <sup>24</sup>
<b>Family Name</b>	Acanthaceae	Meliaceae	Menispermaceae	Solanaceae	Cucurbitaceae	
<b>Latin Name</b>	Adhatoda vasica	Azadiracta indica	Tinospora cordifolia	Solanum surattense	Trichosanthes dioica	
<b>Rasa</b>	Tikta, Kashaya	Tikta, Kashaya	Tikta, Katu, Kashaya	Tikta, Katu	Tikta	Madhur
<b>Virya</b>	Sheeta	Ushna	Ushna	Ushna	Ushna	Sheeta
<b>Vipak</b>	Katu	Katu	Madhur	Katu	Katu	Madhur
<b>Guna</b>	Laghu, Ruksha	Laghu,	Guru, Snigdha	Laghu,	Laghu, Snigdha	Guru, Snigdha
<b>Karma</b>	Shothahar, Vedanasthapak, Jantughna, Kaphapittnashak	Putihar, Vranadhavan, Jantughna, Raktashodhan	Vedanasthapak, Vranaropak, Raktashodhak	Vedanasthapak, Shothahar, Krumighna	Vranashodhak, Vranaropak, Vedanasthapak, Krumighna	Vattapittak aphavinashak

### Method of preparation of Panchatikta Ghrita<sup>18</sup>

Panchatikta Ghrita prepared as per mentioned in Sharangdhar Samhita.

### 2) Aragvadha Hima

#### The ingredients in Aragvadha Hima<sup>25</sup>

- Aragvadha Phalmajja - 40 gm (1 part)
- Water - 240 ml (6 part)

**Table No.2 - Ingredient property of Aragvadha Hima**

DRAVYA	FAMILY NAME	LATIN NAME	RASA	VIRYA	VIPAK	GUNA	KARMA
Aragvadha <sup>26</sup>	Leguminosaeae. Sub family- Caesalpiniodeae	Cassia fistula	Madhur	Sheeta	Madhur	Guru, Snigdha, Mrudu	Virechaniya, Kushtaghana, Kandughna, Adhobhaghara

**Method of Preparation of Aragvadha Hima<sup>25</sup>**

*Aragvadha Phalamajja* of 40gm was dipped in 240ml of water at night then at morning water is filter after crushing the *Phalamajja* in to it.

**3) Standard Ksharasutra****The ingredients of Standard Ksharasutra<sup>27</sup>**

1. *Snuhi Kshir*
2. *Apamarga Kshara*
3. *Haridra Churna*
4. Surgical linen thread no.20
5. *Ksharasutra Cabinet*
6. Gloves
7. Cotton gauze piece
8. Test tube

**Table 3: Ingredients properties of Ksharasutra**

Dravya	Family name	Latin name	Rasa	Virya	Vipak	Guna	Karma
<i>Snuhi</i> <sup>28</sup>	Euphorbiaceae	Euphorbia nerifolia	Katu	Ushna	Katu	Laghu, Snigdha	Lekhana
<i>Apamarga</i> <sup>29</sup>	Amaranthaceae	Acaranthus aspera	Katu, Tikta	Ushna	Katu	Tikshna,	Vranashodhak, Vranaropak, Shothahar, Vednasthapan
<i>Haridra</i> <sup>30</sup>	Zinzibera ceae	Curcuma longa	Tikta, Katu	Ushna	Katu	Laghu, Ruksha	Vranaropan, Lekhana, Vranashodhak

**Method of Preparation of Standard Ksharasutra<sup>27</sup>**

Preparation of *Ksharasutra* will be done according to P.J. Deshpande procedure as follows

Operator hand should be gloved before doing smear and all aseptic precautions will be observed. The surgical linen thread of size 20. is spread throughout the length and breadth of the hanger of the specially designed cabinet known as *Ksharasutra Cabinet*. The thread is smeared with latex, uniformly and carefully, all around the thread, with the help of clean cotton gauze piece soaked in *snuhi ksheer*. After smearing all the threads on the hanger. The hanger is placed in the *ksharasutra cabinet* for drying.

After 11 such coatings with *Snuhi Ksheer*, 12<sup>th</sup> coating of *Snuhi Ksheer* is done and wet thread is then passed through a heap of finely powdered *Apamarga Kshara* immediately. After smearing all the thread with *Kshara*, the hanger is shaken gently allowing the excess particles of *Kshara* to fall down. This process is repeated till 7 coatings with *Snuhi Ksheer* and *Apamarga Kshara* is achieved, thus completing 18 coatings on the thread. The remaining 3 coatings are performed with *Snuhi Ksheer* and fine powder of

*Haridra* as per above mentioned procedure making a total 21 coatings on thread.

**Ksharasutra cabinet<sup>27</sup>**- It is used for sterilization and drying the *Ksharasutra*. The threads are placed on metal hangers specially design for this purpose and these threaded hangers are put into cabinet. The ultra violet lamp which is already fitted in the cabinet should be lighted for 20-30 min every day in order to have good sterilization of the thread. When 21 coatings are complete, each threaded measuring about 10 inches should be cut away from the hangers and sealed in the glass test tube with aseptic precautions. In the preparation of *Ksharasutra* skill hand is very important. As it require equal thickness of thread.

In the present study, preparation will be carried out in Pharmacy of *Ras Shastra* and *Bhaishajya Kalpana* of S.V.N.H.T's Ayurved Mahavidyalaya, Rahuri.

**METHOD OF STUDY****Group A : Experimental group**

1 Patient selected & treated with *Virechan Karma* before *Ksharasutra* procedure.

**Group B : Control group**

1 Patient selected & treated with *Ksharasutra* procedure only.

**Duration of Treatment:** upto the Fistulous tract heals.

**Follow Up:** 45 days after completion of fistulous tract healing.

**Place of Work :** OPD and IPD of *Shalyatantra* Department, SVNHT's Ayurved college and Hospital

Shri Shivaji Nagar, Tal: Rahuri, Dist: Ahmednagar.

**Criteria of Selection**

**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 & female
- f) Patient belonging to all socioeconomic group

**Exclusion Criteria**

- a) Multiple tract fistula

- b) High anal fistula
- c) Rectal polyp
- d) Proctitis, Colitis
- e) CA of anus & Rectum
- f) H/O Human Immunodeficiency Virus, Hepatitis B  
Diabetes Mellitus, Hypertension, Tuberculosis
- g) Gangrenous Fistula
- h) Crohn's disease and Ulcerative colitis
- i) Sinus
- j) Pilonidal sinus

**Investigations**

Some of the following Investigations done before and after *Virechan Karma* in experimental group.

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

**Table No.4 - Procedure**

Experimental group	Control group
<i>Virechan Karma</i> before <i>Ksharasutra</i> procedure	Only <i>Ksharasutra</i> procedure done
<p><b>for <i>Virechan Karma</i> <i>Snehapan</i></b>  <i>Snehapan</i> of <i>Panchatikta Ghrita</i> will be given to the patient in the morning after complete digestion of food taken by the patient last night. It starts from 30 ml and increases day by day till upto the <i>Samayak Snehana Lakshan</i> appears.  <i>Koshna jala</i> will be given as <i>Anupana</i>. After that <i>Sarvanga Snehana</i> and <i>Swedan</i> will be given for 3 days. Then on the previous day of <i>Virechan</i>, patient is advised to take easily digestible food. On the day of <i>Virechan</i> the patient is restricted from any food till the main procedure ends.</p> <p><b><i>Virechan karma</i></b>  <i>Aragvadhya Hima</i> about 80ml for <i>Virechan</i> is administered on empty stomach in the morning. Observe the <i>Virechana Vegas</i>.</p> <p><b><i>Samsarjana Krama</i></b>  After that <i>Samsarjana Krama</i> i.e. <i>Peya, Vilepi</i>, etc., will be given to the patient as per <i>Shudhi</i> by <i>Virechan Karma</i>.</p>	<p><b>FOR <i>Ksharasutra</i> Procedure- Pre operative-</b>  NBM 12hrs before procedure.  Written Consent,  Xylocaine sensitivity test,  Preparation of part,  Inj T.T 0.5ml IM half an hour before procedure  Soap Water Enema 2 hrs before procedure</p> <p><b>Anaesthesia</b>  With all aseptic precaution and premedication spinal anaesthesia with Lox heavy 2% given by anaesthetist.</p> <p><b>Procedure</b></p> <ol style="list-style-type: none"> <li>1. Lithotomy position given to the patient.</li> <li>2. Painting and drapping and isolation of the part done.</li> <li>3. Lord's dilation done.</li> <li>4. Examine fistulous track by palpation.</li> <li>5. Methelene Blue Dye Test done to check the position of internal opening.</li> <li>6. Through external opening insert probe along with <i>Ksharasutra</i> and comes out through internal opening.</li> <li>7. Two ends of the thread are tied by knots and dressing the wound with Betadine solution.</li> </ol>



<p><b>For Ksharasutra Procedure</b> Ksharasutra procedure done after one week of Virechan Karma.</p> <p><b>Pre- operative, operative procedure, post-operative</b> -Same as mentioned in control group.</p>	<p><b>Post operative</b> Check all vital signs (TPRBP) 2 hrly NBM For 6 hrs Head low position IV Fluids according to hydration status of patient. Medication for 3 days Inj. Monocef 1gm IV BD (ceftriaxone)(Aristo) Inj. Genticyn 80mg IV BD (gentamycin)(Abbott) Inj. Aldigesic 75mg IM SOS (diclofenac sodium)(Alkem) Sitz bath regularly with warm water</p>
<p>Patient advice to come for changing the thread after 7 days.</p>	<p>Patient advice to come for changing the thread after 7 days.</p>

## DISCUSSION

*Bhagandara* (Fistula in ano) is one of the most common and notorious disease among all anorectal disorder. It is recurrent in nature which makes it more and more difficult for treatment. It produces inconveniences in routine life. It causes discomfort and pain that creates problem in day to day activity. *Ksharasutra* has been proved as a big revolution in the treatment of *Bhagandara*.

In the modern surgery also there are various types of management for fistula in ano but there are demerits. In the *Ksharasutra* procedure also some demerits observed like long duration required for the treatment, pain and produces psychological discomfort. Therefore it is the need of time to do further research to achieve faster recovery by the *Ksharasutra* procedure. Hence, we performed *Virechan Karma* before *Ksharasutra* procedure in the management of *Bhagandara* w.s.r to Fistula in ano

In our study, we selected patient having fistulous tract of 8cm in experimental group and patient having fistulous tract of 5cm in control group it is observed that,

**Pain:** Pain occurs in the fistula in ano because of accumulation of pus in the cavity due to the property of *Virechan* karma, it helps to drain the pus and this lead to cleaning the cavity subsequently subsides the pain.

**Itching:** According to Ayurveda text *Kapha* and *Pratiloma Vayu* is responsible for itching. *Virechan* is *Kaphashodak* and *Vatanulomak* thus helps in reducing itching effectively.

**Burning Sensation:** Burning is due to *Pitta Dosh*a and *Virechan* helps to reduce vitiated *Pitta Dosh*a, it leads to reduce the burning sensation.

**Discharge:** Property of *Virechan*, which causes *Shodhan* of ripe *Vranashopha*. By the *Shodhan*

quality it slough away the debridement of necrosed tissue from the fistulous tract thus it helps in formation of healthy granulation tissue consequently it reduces pus discharge. Thus, pain, itching, burning sensation, pus discharge are better reduced in Experimental group as compared to Control group. Also unit cutting time is drastically decreased which results in fast healing of the fistulous tract.

Common problems associated with fistula in ano on the basis of *Dosha* predominance.

*Vata - Ruja, Pitta - Daha, Kapha- Strava, Kandu.* *Virechan* helps to reduce vitiated *Tridosha* and helps in wound healing of *Bhagandara*.

In the pathogenesis of *Bhagandara Tridoshas* and *Rakta, Mamsa, Meda Dushyas* are vitiated. Their *Shodhan* is achieved by the *Virechan Karma* which helps to break the pathogenesis of *Bhagandara*. Consequently it reduces the pus discharge and unit cutting time resulting in short duration of treatment. Hence *Virechan Karma* is effective before *Ksharasutra* procedure in the management of *Bhagandara* w.s.r to Fistula in ano.

## CONCLUSION

On the basis of finding and observations obtained after completion of pilot study it can be concluded that, Experimental group required 6 weeks to cut and heal the fistulous tract completely hence *Virechan Karma* is supportive to break the pathogenesis of *Bhagandara* due to this we can achieve better results in cutting and healing process of *Ksharasutra* in the management of *Bhagandara* w.s.r to fistula in ano.

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