**KSHARASUTRA - AN EFFECTIVE TREATMENT MODALITY FOR ARSHAS (HAEMORRHOIDS)**

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**KEYWORDS:** Arsha, Haemorrhoids Apamarga, Ksharasutra ligation.

**ABSTRACT**

Arsha is one of the prime important disease from Asthamahagada, a group of disease which is to be treated with great difficulty. Arsha is the gift of busy life style with main etiological factor Mithyaaahar-vihar. In modern medical science many techniques like sclerotherapy, cryosurgery, Rubber band ligation, Infrared photo coagulation, Laser therapy, stapled haemorrhoidectomy etc. are in practice where in the result was found to be in less satisfactory. In this regard to determine a solution for satisfactory cure, the Ksharasutra ligation method in Arsha was studied. In the present study the Apamarga ksharasutra ligation was done on different sizes, shapes and degrees of Arsha. Apamarga ksharasutra was prepared as per standard method described in Ayurvedic texts. A total of 30 patients were selected by simple random sampling method with the complaints of Vibhanda, Raktaasrava, Kandu, Pandu. The study revealed the better result of Ksharasutra ligation. It was found that Ksharasutra ligation procedure of Arsha is better alternative because of advantages like minimum hospital stay, no bleeding during or after operation, more acceptability, low cost effective, no post-operative complications etc. Statistically, Ksharasutra ligation for Arsha was found to be highly significant and effective treatment. No adverse effects were noted during follow up period.

**INTRODUCTION**

Amongst of the prevailing medical sciences, Ayurveda is the oldest of all and is comprised of eight different disciplines. Acharya sushruta, the father of surgery, in his writing, Sushruta Samhita -a treatise on shalya tantra, which is claimed to be the foremost of other branches has a broad classification of diseases. One of such classification is "Asthamahagada"¹ - a group of diseases which is to be treated with great difficulty. One of prime important disease from Asthamahagada is 'ARSHA'. Arsha have been known to mankind for a long time and one of the commonest diseases to affect human beings. The diseases Arsha is mentioned in Ayurvedic samhitas like Charaka, Sushruta and Ashtang sangraha etc. But Acharya Sushruta has described in detail all about Arsha in Sushruta Samhita.²³ The study of the medical history reveals that a comparative entity to the disease Arsha is available with the modern medical text, haemorrhoid. Haemorrhoids are very common anorectal condition defined as symptomatic enlargement and distal displacement of the normal anal cushions. Multiple factors have been claimed to be etiologies of haemorrhoidal development, including constipation and prolonged straining. The abnormal dilatation and distortion of vascular channel, together with destructive changes in the supporting connective tissue within the anal canal cushions, is a paramount finding of haemorrhoidal disease⁴. The prevalence of haemorrhoidal has been estimated 4.4% of U.S adults with the highest prevalence in those between 45-65 yrs of age⁵. According to Acharya sushruta the management of Gudarshas is of four types: Aushadi chikitsa (conservative), Kshara karma, Agni karma, Shastra karma (surgical)⁶. There are so many modes of treatment available for Arshas. The treatment can be classified into surgical, parasurgical, and medicinal management. But none is perfect to their associated disadvantages. Without any doubts, the surgical response is very much disappointing, as there are post-operative complications; like pain, acute retention of urine, reactionary haemorrhage, secondary haemorrhage, anal stricture, anal fissure, watery discharge etc. Bleeding pain, anal strictures are among the complications that makes life of the patient much more troublesome than before. Over and all, long hospitalization is most undesirable drawback from economic view point. In modern medical sciences, new techniques; like sclerotherapy, cryosurgery, Rubber band ligation, Infrared photo coagulation, Laser therapy, stapled haemorrhoidectomy, Open haemorrhoidectomy etc. are now a days in practice⁷.⁸ However all these techniques have got one or other type of limitation and have not been proven free from operative complications. Taking
into consideration, the gravity of disease and various postoperative limitations and complications, Ksharasutra therapy is taken in present research work. Ksharasutra treatment is found to be suitable and acceptable as compared with prevalent methods in modern medical science. Hence, in the present research work, the efficacy of Apamarga kshara sutra ligation in the management of Arsha were studied clinically and results were studied statistically. The entire study is conducted in one group. The group consists of 30 patients suffering from internal and interno-external Arshas. All the patients were subjected to Ksharasutra ligation.

AIMS AND OBJECTIVES
To evaluate the efficacy of Kshara sutra in the management of Arshas w.r.t. to haemorrhoids.

MATERIAL AND METHODS
Material: Standardised Apamarga kshara sutra was used for ligation.

Material required for Kshara sutra preparation:
1. Drugs used for preparation for kshara sutra
   1) Apamarga kshara (Achyranthus aspera)
   2) Haridra churna (curuma longa)
   3) Snuh ksheer (Euphorbia nerifolia)
2. Surgical linen thread no.20
3. Kshara sutra hanger
4. Kshara sutra drying chamber

For the preparation of Ksharasutra, surgical linen thread guage no. 20 was manually coated eleven times with latex of Euphorbia nerifolia, followed by seven coatings of latex and alkaline powder of Achyranthus aspera alternatively and dried. In the final phase, three coating of latex and powder of Curcuma longa were given alternatively. The thread was sterilized by UV radiation and placed in glass tube.

CLINICAL STUDY
Sources of data: Patients fulfilling criteria for selection were registered and grouped by simple random method from OPD and IPD of PG department of Shalya tantra JIAR & Hospital, Jammu, irrespective of gender, occupation, religion and caste.

Method of collection of data
Sample size: 30

Inclusion Criteria
1. Patient of haemorrhoids between the ages of 20-60yrs.
2. Patient with second, third degree haemorrhoids and interno external haemorrhoids.
3. Thrombosed and strangulated haemorrhoids.
4. Patient of haemorrhoids suffering from diabetes, hypertension whose diseases is well under control were included.

Exclusion criteria
1. Patients of haemorrhoids associated with malignancy of anus and rectum.
2. Pregnancy.
4. Positive cases of HIV, VDRL, TB, uncontrolled DM, HTN and Hepatitis B.

Assessment criteria: Patients were assessed based on subjective and objective criteria. The subjective parameters of Vibhandha, Raktasrava, Kandu, Pandu and objective parameters of degree and size of haemorrhoids are adopted with grading (0, 1, 2, 3, 4).

PROCEDURE
Pre-operative: The written informed consent was taken before the procedure. Patient was kept nil orally for six hours before surgery. The perianal part was prepared and soap water enema 10PM at night and 8AM in the morning was given. Inj. T.T 0.5ml I/M and Inj. Xylocaine 2% I/D for sensitivity test insured before surgery.

Operative: After giving suitable anaesthesia, patient was laid down in lithotomy position, painting and drapping of perianal area was done. By proctoscopic examination position of masses were confirmed. Pile mass was held with the help of pile holding forceps and was transfixed by passing curved round body needle with Kshara sutra at the base of Arsha ankura. There after the ligated pile mass was replaced inside the anus and thread was allowed to suspended. After sterilized dressing T-bandage was done and finally the patient was shifted to the ward.

Post-operative: The patient was laid down in head low position for three hours and then allowed to take liquids. Appropriate antibiotics and analgesics were given for initial three days and hot sitz bath with Tankana was advised three times a day. Post operating dressing was done with instillation of 10ml of Jatyadi taila per rectum once a day till removal of Kshara sutra ligated pile masses. After removal of all pile masses insertion of 5ml Jatyadi taila per rectum was continued till the healing is completed.

Duration of treatment: 15 days or complete healing of wound and follow up for one month.

OBSERVATIONS AND RESULTS
The present study revealed that the incidence of haemorrhoids was more in age group of 40-50yrs i.e. 40% followed by 30% in 31-40yrs. Maximum patients were males 23 i.e. 76.7%, 63.3% of the patients were Hindus. Maximum number of patients were government employee i.e. 46.7% followed by businessmen i.e. 23.7%. Socioeconomic status of patients revealed that maximum number of patients belongs to lower middle class i.e. 43.3% followed by middle class i.e. 33.3%. 70% of patients belonging to urban area. 90% of patients were married. Incidence of addiction showed 36.7% of patients were smokers. Maximum number of patients had vata-Pitta prakruti. i.e.43.3% followed by vat-Kapha i.e. 30%. Maximum number of patients found to have Krura koshtha 70%. Maximum were suffered from third degree haemorrhoids i.e. 73.3% followed by second degree i.e. 26.70% having maximum size between 1-2cm i.e. 73.3%, 36.7% pile masses situated at 11’o clock and 23% at 3’o clock. 46.7% of patients were having Lakshanas of Vataja arsha and 30% were Pittaja. All 100% of the patients in the present study reported...
The presence of pile mass. Bleeding per rectum was observed in 76.6% of patients. Pain in ano was observed in 56.6% of patients. Constipation was observed in 23.3% of patients and Pandu was observed in 36.6% of patients. The result of study, showed highly significant effect on bleeding per rectum, pain in ano, constipation, Kandu, as 100% patients were clinically improved. Regarding the result of Pandu, as no special treatment was given for Pandu and duration of treatment was not long enough to make a significant change in Pandu. The average days for the removal of haemorrhoidal masses were approximately 5 days. All haemorrhoidal masses were shed off.

<table>
<thead>
<tr>
<th>Group</th>
<th>Follow Up</th>
<th>B.T</th>
<th>1st</th>
<th>3rd</th>
<th>5th</th>
<th>7th</th>
<th>10th</th>
<th>15th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibandha</td>
<td>N=30</td>
<td>Mean</td>
<td>1.53</td>
<td>0.33</td>
<td>0.1</td>
<td>0.033</td>
<td>0.033</td>
<td>0.033</td>
</tr>
<tr>
<td>Bleeding</td>
<td></td>
<td></td>
<td>1.067</td>
<td>0.633</td>
<td>0.4</td>
<td>0.033</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kandu</td>
<td></td>
<td></td>
<td>0.367</td>
<td>0.367</td>
<td>0.367</td>
<td>0.233</td>
<td>0.1</td>
<td>0.067</td>
</tr>
<tr>
<td>Pandu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2: Effect of Therapy on Different Signs and Symptoms**

<table>
<thead>
<tr>
<th>Mean B.T</th>
<th>Mean A.T</th>
<th>Mean Diff.</th>
<th>Mean %</th>
<th>N</th>
<th>S.D</th>
<th>S.E</th>
<th>T</th>
<th>Diff.</th>
<th>Inf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of pile mass</td>
<td>2.10</td>
<td>0</td>
<td>2.10</td>
<td>100%</td>
<td>30</td>
<td>0.47</td>
<td>0.085</td>
<td>31.7</td>
<td>29</td>
</tr>
<tr>
<td>Size of pile mass</td>
<td>2.10</td>
<td>0</td>
<td>2.10</td>
<td>100%</td>
<td>30</td>
<td>0.48</td>
<td>0.088</td>
<td>23.92</td>
<td>29</td>
</tr>
<tr>
<td>Vibandha</td>
<td>1.53</td>
<td>0.03</td>
<td>1.5</td>
<td>98.0%</td>
<td>30</td>
<td>0.73</td>
<td>0.133</td>
<td>11.23</td>
<td>29</td>
</tr>
<tr>
<td>Bleeding</td>
<td>1.07</td>
<td>0</td>
<td>1.07</td>
<td>100%</td>
<td>30</td>
<td>0.827</td>
<td>0.151</td>
<td>7.06</td>
<td>29</td>
</tr>
<tr>
<td>Kandu</td>
<td>0.37</td>
<td>0.03</td>
<td>0.34</td>
<td>91.89%</td>
<td>30</td>
<td>0.661</td>
<td>0.120</td>
<td>2.76</td>
<td>29</td>
</tr>
<tr>
<td>Pandu</td>
<td>0.53</td>
<td>0.43</td>
<td>1.10</td>
<td>18.09%</td>
<td>30</td>
<td>0.305</td>
<td>0.05</td>
<td>1.74</td>
<td>20</td>
</tr>
</tbody>
</table>

**DISCUSSION**

The incidence of diseases was more in young middle aged patients. It can be said that, they bear more responsibility. Junk and spicy food consumption becomes routine diet to spare time or fulfilling their responsibility. More male patients might be due to more awareness about the disease among males in comparison to females, females patients are also hesitate to consult a surgeon, but there is no any such reason mentioned in the text of proctology or surgery. The prevalence was more seen in Hindus. This might be due to geographical distribution of communities around the OPD and IPD of JIAR. The people of all religion are susceptible to this disease. Observation pertaining to occupational status of the patients in the present study strongly suggested that patients with sedentary life style are more susceptible to this disease. Because this type of work leads to improper digestion which in turn lead to improper bowel habit and also creates pressure on the anal region by sitting long time in one posture. Addiction of smoking was observed maximum. Smoking leads to weakness of blood vessels. The weakened blood vessels of haemorrhoids plexus situated in the anal mucosa cannot with stand the pressure thus resulting into Arsha. In Kruura koshtha patient, evacuation of mala is always difficult and leads to accumulation of faecal matter in the rectum, which in turn creates pressure on the valve less rectal veins and ultimately manifested as Arsha. Statistically highly significant results were obtained in the chief complaints in Vibhanda (constipation), Gudagata raktsrava (bleeding per rectum), and Kandu which were cured by 100%. All the pile masses were sloughed off. It is viewed that the effect of Kshara sutra ligation method is about cent percent effective.

**Probable mode of action of Kshara sutra**

Kshara sutra contains Apamarga kshara, Snuhi ksheer and Haridra churna and prepared with a standard method described in Ayurvedic pharmacopeia of India. The surgical thread supports the strength of ligation, while the Snuhi latex being the binding agent forms the basis of each coating. It holds the fine particles of Kshara so that resultant debriding action is potentiated. Apamarga kshara has the property of incision, excision, debridation, scrapping, dissolution etc. simultaneously. It cauterizes the tissue indirectly, by its Ksharana guṇa (corrosive properties). Haridra has the property of wound healing. It also possess bactericidal action, anti-inflammatory, anti-histaminic property. It is also supposed to provide the normal lusture to skin. Since the Kshara powder as such was found to be hygroscopic which catches moisture, when exposed to atmosphere. It is thought that the final few coating of turmeric powder will prevent the contact of the Kshara coating to the atmospheric air. All these drugs do not contradict each other in their actions rather supports by equal effects. Hence Ksharasutra has the ability to perform incision with excision slowly by virtue of its control chemical cauterization action. The mode of action starts immediately after contact with the tissue. The pressure effect made by Kshara sutra ligation mechanically strangulates the blood vessels, which in fact causes the local necrosis of pile mass and ultimately resulting in falling out of the pile mass with in a week's time. Kshara sutra also coagulates the proteins of the tissues. Due to
this property during cutting of the mass, the chance of bleeding is minimized. The antibacterial action of Kshara decreases the chance of infection. After removal of pile mass the anal wound heals within one to two weeks.

CONCLUSION

Observations, analysis and result of the present study entitled “Kshara sutra- An effective treatment modality for Arshas/ Haemorrhoids” can be concluded as follows:

1. Kshara sutra by its chemical cauterization and mechanical strangulation of blood vessels causes local gangrene of the pile mass and pile mass sheds off within 5 to 7 days.
2. No effort should be made to pull out the Kshara sutra or pile masses. The healing of the resulting wound takes a week's time.
3. Kshara sutra ligation procedure can be conducted at OPD level, takes less time. The patient can perform his/her daily routine work from next day.
4. In post-operative period, the patient feels less pain, the wound heals quickly and smoothly.
5. It takes less hospitalization and there is least possibility of recurrence.
6. It needs minimal expenditure and all pile mass; both primary as well as secondary can be ligated at one sitting.
7. There is no adverse effect during post-operative period like anal stenosis/stricture, incontinence, bowel irregularities etc.

Hence, from present clinical study, it can be concluded that Kshara sutra ligation procedure treatment of Arsha, can be considered as a better alternative in place of modern techniques of management or haemorrhoid because it has more acceptability, easy procedure, can be done at OPD, cost effective, minimal invasive, short hospital stay, patient can carry out day to day work and better wound healing property after shedding of the pile mass.

REFERENCES


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