Effect of Ksharsutra in the management of Arsha - A Case Study

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ABSTRACT

There are several anorectal disorders facing by large number of population with diverse group of pathologic conditions. Among them anorectal disorders like Arsha (haemorrhoids), Parikartika (fissure) and Bhagandar (fistulas) are among the most common anorectal conditions. These conditions are the cause of significant discomfort and disability to the patient and can impair a person’s quality of life. Ayurveda is playing important role and contributing to modern technology with its own originality with authenticity. Advantage of Ksharsutra therapy in the management of Arsha is that it is a minimally invasive surgical procedure and can be performed under local anaesthesia and have good results in wound healing. In the presented study, Ksharsutra ligation was performed on a patient aged 23 years suffering from Arsha on 3 ‘o’ clock position prolapsed without bleeding but with irritation, pruritis ani and mild mucous discharge. Ksharsutra has been found to be effective, economic, easy to prepare and use. Moreover the daily routine of the patient is not disturbed. As this study performed on a single patient, more such trials are required to reach concrete conclusions.

Key words: Arsha, Ksharsutra, Yashthimadhu Ghrita

INTRODUCTION

In this fast changing world, Ayurveda is playing important role and contributing to modern technology with its own originality with authenticity. Various lifestyle disorders are being faced by large number of inhabitants with diverse group of pathologic conditions which significantly impair a person’s quality of life. Among them anorectal disorders like Arsha (haemorrhoids), Parikartika (fissure) and Bhagandar (fistulas) are among the most common anorectal conditions.

Arsha (haemorrhoids) are dilated veins within the anal canal in the sub-epithelial region formed by radicals of superior, middle and inferior rectal veins and often described as varicose veins of the anus and rectum which is considered as common disease mostly due to lifestyle disorder especially during advancing age.[1] Despite the fact that many treatments are available for the disease, but satisfactory solution to this is still being explored by medical fraternity. Four methods for the treatment of Arsha, that is Bheshaja (medicinal), Kshara (chemical cautery), Agni (thermal cauterization) and Shastra (surgery) has been described by Acharya Sushruta.[2] Ksharsutra, a medicated thread prepared by using plant based ingredients, is widely used because of its easy adoptability, cost-effectiveness and curative results. Ksharsutra therapy can be performed with less bleeding, no incontinence, without hospital stay and bed rest.

Advantage of Ksharsutra therapy is that it is a minimally invasive surgical procedure and can be performed under local anaesthesia, have good results in wound healing and prevent infection due to its alkaline pH (pH-10.3) that works as antibacterial at site of ligation. Ksharsutra is a medicated thread prepared by using plant based ingredients. The Standard Ksharasutra is prepared by 11 coatings of Snuhi latex
(Euphorbia nerifolia), 7 coatings of Snuhi latex and Apamarga Kshara (Achyranthes aspera) and last 3 coatings of Snuhi latex and Haridra Churna (Curcuma longum). The pH of Apamarga Ksharasutra is 9.72. The thread helps in cutting, draining and healing. Ayurveda since ancient time emphasizes the preventive and curative aspects of about all the disease with minimum side effects and complications. Father of surgery ‘Sushruta’ explained piles and fistula treatment by Kshar and Agnikarma therapy.[3]

Drugs used in the preparation of Ksharsutra along with the mechanical pressure of tying the thread heal anorectal disorders gradually. In the presented study, Ksharsutra ligation was performed on a patient aged 23 years suffering from Arsha on 3’o clock position prolapsed without bleeding but with irritation, pruritis ani and mild mucous discharge. Ksharsutra has been found to be effective, economic, easy to prepare and use. Moreover the daily routine of the patient is not disturbed. As this study performed on a single patient, more such trials are required to reach concrete conclusions.

Clinical Presentation

The most common clinical presentations of symptomatic haemorrhoids include painless bleeding along with defecation. The patient complains that it splashes in the pan as the stool comes out (where streak of blood may be seen on the stool fissure-in-ano,). This may continue for months or even years. As the veins become larger and heavier, partial prolapse will occur with each bowel movement gradually stretching the mucosal suspensory ligament at the dentate line until the 3rd degree haemorrhoid results. Pruritus, soilage, perianal irritation by mucus discharge. Blood loss can be substantial which can lead to iron-deficient anaemia.[4] A patient complaining of bleeding associated with pain should bring to mind an alternative explanation, such as acute or chronic anal fissure, abscess, Crohn’s disease, irritated external haemorrhoids or anal cancer. Thrombosed or engorged external haemorrhoids may present with pain without bleeding.

It is manifested due to improper diet, prolonged standing and faulty habits of defecation causing derangement of Tridosha, mainly Vata Dosha. Vitiated Dosha localizes in Guda Vuli, Pradhana Dhamani and Mansdhara Kala and vitiates Twak, Mansa, Meda and Rakta, resulting in the Annavaha Sroto Dushti.[5] Modern management of Arsha, mainly, a surgical approach, i.e., hemorrhoidectomy, wherein the result was found to be less satisfactory.

Anatomy of Guda

According to Acharya Sustrata, there are 107 Marma (vital parts) and out of these 19 are Sadyopranhara (immediate death)[6] and Guda Marma is one of them. Guda, chief site of Apana Vayu, is a passage through which Mala (waste) and Vata (flatus) of our body are excreted. Length of Guda is of 4.5 Angula and there are three Valis in Guda namely Pravahin (Proximal), Visarjini (Middle) and Samvarni (Distal Sphincter) (Figure 1). They are located at an interval of 1½ Angula, one above the other. They are positioned as Sankhavarta Nibha (spiral form) and bear a resemblance to the colour of palate of an Gajatalu (palate of elephant).[7]

Classification

Classification of Hemorrhoids according to Ayurveda is as below
1. Acc. to Aetiology: Sehaj Uttarkalaj
2. Acc. to Clinical: Shuska (Dry), Ardra (Wet)
3. Acc. to Dosha: Vata, Pitta, Kapha, Sannipataj, Raktaj, Dwandwaj
4. Acc. to origin: Bahaya Valli; Madhyam Valli; Abhyantar Valli
5. Acc. to prognosis: Sadhya; Kastha Sadhya; Yapya; Asadhya

Classification of Hemorrhoids according to modern science

Classification in relation to pathological anatomy

a) Primary haemorrhoids
b) Secondary haemorrhoids

(i) Primary haemorrhoids - are 3 in number, seen at 3, 7 and 11'o clock position as the rectal artery which divides in to right and left main branches. The left branch continues as a single vessel and terminate at 3'o clock position(left), whereas the right branch divide in two branches, one terminates at 7'o clock (right posterior) and other terminate at 11'o clock position (right anterior).

(ii) Secondary haemorrhoids - Presence of additional haemorrhoids in between the primary piles is known as the secondary haemorrhoids.

Degree of haemorrhoids - mucosal haemorrhoid along with the prolonged dilatation of internal haemorrhoid may also cause 3rd degree or prolapsed haemorrhoids. e.g.

- First degree haemorrhoids - haemorrhoids does not come out of the anus.
- Second degree haemorrhoids - Haemorrhoids comes out only during defecation and is reduced spontaneously after defecation.
- Third degree haemorrhoids - comes out only during defecation and does not return by themselves but need to be replaced manually and then they stay reduced.
- Fourth degree haemorrhoids - are permanently prolapsed at this stage. There is feeling of heaviness in rectum.

Causes

The exact causes of symptomatic haemorrhoids are unknown. A number of factors are believed to play important role including; Irregular bowel habits (constipation or diarrhoea), lack of exercise, nutritional factor (a low-fibre diet), increased intra-abdominal pressure, prolonged straining, ascites, an intra-abdominal mass, or pregnancy, genetics, absence of valves within the haemorrhoidal veins, aging. Other factors that are believed to increase the risk include obesity, prolonged sitting, chronic cough, pelvic floor dysfunction. Evidence for these associations, however, is poor. During pregnancy, pressure from the foetus on the abdomen and hormonal changes cause the haemorrhoidal vessels to enlarge. Delivery also leads to increased intra-abdominal pressure. Surgical treatment is rarely needed in those who are pregnant, as symptoms usually resolve post delivery.

Causes of Haemorrhoids are also classified as

(i) Idiopathic causes.
(ii) Secondary causes

(i) Idiopathic causes

a) Hereditary: often seen in members of the same family.

b) Anatomical:
1. Absence of valves in superior haemorrhoidal veins.
2. The veins pass through the rectal musculature, about 10 cm above the anus, will cause occlusion of the vein and congestion during defecation.
3. The radicals of superior rectal vein lie unsupported in loose submucous connective tissue of the rectum.

c) Exciting causes
1. Straining to expel constipated stool caused dilatation of the venous plexus
2. Diarrhoea and dysentery)
3. Enteritis

3. Physiological causes

Hyperplasia of the corpus cavernosum rectum, which may result from failure of mechanism controlling the arterio-venous shunts producing superior haemorrhoidal veins varicosity and haemorrhoids

(ii) Secondary causes

1. Carcinoma of rectum - Compresses on the superior rectal vein and give rise to haemorrhoids.
2. Pregnancy - Compress superior rectal vein as also cause’s secondary laxity of smooth muscle of the veins.

3. Difficulty in micturition - stricture of urethra or enlarged prostate will cause increase intra abdominal pressure and will raise the venous pressure in the superior haemorrhoidal veins to cause haemorrhoids.

4. Portal hypertension - the superior haemorrhoidal vein is tributary to the portal venous system so portal obstruction due to any cause can cause haemorrhoids.\(^4\)

**Diet:**

Low roughage western diet may excite haemorrhoids formation.

**AIMS AND OBJECTIVES**

The objective of the study was to evaluate the efficacy of the *Ksharsutra* in cutting and healing time of *Arsha* and post-operative complications.

**MATERIALS AND METHODS**

**Investigations**

Blood: Hb%, TLC, DLC, ESR, FBS, BT, CT, Blood urea, S. Creatinine

Urine: Routine and microscopy.

HBsAg, HIV

Chest X-Ray

**Preoperative Procedure**

- Consent of patient was taken.
- Cleaning of bowel was done at prior night.
- Part preparation of the perianal area was done.
- Xylocaine sensitivity was done.
- Inj. T.T 0.5 ml was given by I.M. route.

**Presentation of Case**

On initial examination, there was *Arsha* on 3’o clock position (Figure 2) prolapsed without bleeding but with irritation, pruritis ani and mild mucous discharge.

**Operative Procedure**

Patient was kept in lithotomy position on the operation table. The part was cleaned with aseptic solutions and after then local anaesthesia was given with 2% xylocaine and adrenalin injection and draping was done. Position of pile mass was assessed. The pile mass was hold with the help of pile holding forceps. A semicircular groove was made. Pedicle of pile mass was crushed and pile mass was transfixed with the help of *Ksharsutra* and curved needle and was ligated. Its colour was changed quickly to *Jambuphal Nibh* (purple colour) (figure 3). Warm water irrigation was done followed by T bandaging with *Yasthimadhu Ghrita*.

**Paschata Karma**

The patient was advised to take sitz bath twice a day and was asked to remain mobile as soon as possible. The patient was also advised to take easily digestible
diet. *Triphala Guggulu* 2 tabs TDS along with *Abhyarishta* 30 ml BD and *Avipatikara Churna* 5gm HS.

**Follow-up of the Patient**

The patient was asked to attend the OPD on 3rd, 7th, 15th and 30th days after *Ksharasutra* ligation, then every fortnightly for 3 months. There was burning type of pain for first three days which may probably be due to reaction of *Ksharsutra* with local tissues. *Kshara*, *Snuhi Ksheer* and turmeric said to be unique drug formulation for cutting of *arsha* pedicle as well as healing of wound. The adjuvant therapy like sitz bath and local application of *Yashtimadhu Ghrita* play important role in local hygiene, *Shodhan* (cleaning) and *Ropan* (healing) of the post-operative wound.

*Figure 4: After seventh day*

*Figure 5: After 21 days*

The *Avipatikar Churna* prescribed for the *Anuloman*. *Triphala Guggulu* has anti-inflammatory action so in this case post-operative pain and swelling get relieved. Most of the ingredients used in *Yashtimadhu Ghrita* are *Shothahara* (anti-inflammatory), *Vedanasthapana* (analgesic) and *Ropaka* (healing) which helped in wound healing. To avoid the anal stricture dilatation was advised. Hence along with *Ksharasutra* ligation in *Arsha* these adjuvant drugs play role in early healing of the post-operative wound. After 21 days patient was free from all symptoms of *Arsha* with normal scar of wound without any complications (figure 4).

**DISCUSSION**

In modern science there are many treatment options for piles/haemorrhoids like sclerosant injection therapy, rubber band ligation, cryosurgery, infra-red therapy and haemorrhoidectomy. These treatments have more recurrence rate and post-operative complications like hemorrhage, post-operative pain, delayed healing and stricture. *Ksharasutra* ligation therapy is said to be better as it has minimum complications. In this case there was no post-operative hemorrhage or other complications after *Ksharasutra* ligation. The delayed complications like anal stricture and fecal incontinence were not observed in this case.

**CONCLUSION**

In the presented study, *Ksharsutra* ligation was performed on a patient aged 23 years suffering from *Arsha* on 3’o clock position prolapsed without bleeding but with irritation, pruritis ani and mild mucous discharge. Results were encouraging in both in cutting as well as in healing time. Complications were negligible and were well accepted by the patient with minimal complaints. *Ksharsutra* has been found to be effective, economic, easy to prepare and use. Moreover, the daily routine of the patient is not disturbed. As this study performed on a single patient, more such trials are required to reach concrete conclusions.

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