Role of Aloe Vera Ksharasutra in the Management of Arsha: A Case Study

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CASE STUDY

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ABSTRACT

Arsha (Haemorrhoids) is one of the serious major anorectal diseases affecting large number of world population. Arsha can be manage by various para-surgical measures of ayurveda such as; Agnikarma, Ksharakarma & Ksharasutra. Generally Snuhi Kshira Ksharasutra employed for ligation purpose but it also suffers with some adverse effect such as; pain, irritation and burning sensation. Therefore it was required to evaluate efficacy of some other Ksharasutra in the management of Arsha. Considering this fact present study was carried out to measure efficacy of Aloe vera Ksharasutra in the management of Arsha. Study observes reduction in clinical symptoms such as pain, irritation and burning sensation after ligation with Aloe Vera Ksharasutra. Two patients were included in the study and one patient was treated with Aloe vera Ksharsutra ligation while other was treated with Snuhi Kshira Ksharsutra ligation. Study observed that Aloe Vera Ksharasutra ligation offers relief in pain and burning sensation. Reduction in discharge was also observed with Aloe vera Ksharsutra as compared to Snuhi Kshira Ksharsutra. The present finally concluded that there is a need of further study on large population to establish results of current study.

Keywords: Arsha, Aloe Vera Ksharasutra, Snuhi Kshira Ksharsutra, Ligation, Haemorrhoids.

1. Introduction

Anorectal disorders are very painful pathological condition affecting quality of life and incidences of these diseases increases day by day due to the adverse effect of current life style. Anorectal disorders are embarrassing for patient since these disorder affect anal region of body. Arsha is one of the anorectal disorder also termed as ‘Durnam’ in Bhaishajyaratnavali,(1) while Yogaratnakaram has defined Arsha as Mansakalika which obstructs Gudamarga (2).

Ayurveda classified different types of Arsha including; Vataja, Pittaja, Kaphaja, Sannipataja, Raktaja and Sahaja (3,4). Various factors may leads Arsha such as; sedentary life style, irregular diet, physiological disturbances, anxiety, consumption of junk food and lack of exercise. Ayurveda also described some other factors for Arsha including cold water, continuous seating & riding, suppression of normal urge of micturition & defecation (5).

Haemorrhoids are abnormal mass of dilated engorged blood vessels occurs internally in the anal canal or around the anus (6). Haemorrhoids may be classified as per their location i.e; external, internal and intero-external haemorrhoids. According to prolapse it may also divided into four category; first degree, second degree, third degree and fourth degree (7). According to WHO 40% of people suffer from Haemorrhoids globally and (8).

Sushruta described that Kshara is standard procedure for managing anorectal problems since it possesses qualities like; Chhedana (Excision), Bhedana (incision and drainage) and Lekhana (scraping) etc (9). Ashtanga Hridaya mentioned that Kshara is easily applicable even perform when Agnikarma and Shashtrkarmas are contraindicated. Ksharakshikitsa is considered important approach for the management of Arsha by almost all ayurveda classic (10-12). Various study proved efficacy of Ksharasutra treatment, however standardization on Ksharasutra is still need for ligation procedure (13,14).

The ancient text of ayurveda clarifies that Ksharasutra ligation procedure offers radical curing property in Arsha due to its herbo-chemical cauterization effect. Considering these all facts the present research work was planned to evaluate effect of Aloe Vera Ksharasutra ligation in the management of Arsha.
2. Material and Methods

Objectives

- To evaluate the effect of Aloe Vera Ksharsutra on sign and symptoms of Arsha.
- To compare the effect of Aloe Vera Ksharsutra against Snuhi Kshira Ksharsutra with respect to specific symptoms of Arsha; pain and burning sensation.

Study protocol

The present case study was carried out in two diagnosed patients of Arsha. One patient was treated with Aloe Vera Ksharsutra ligation while another patient was treated with Snuhi Ksheera Ksharsutra ligation. Patients were observed on alternate days up to 9 days.

Drug review

Kumari, Apamarga and Haridra were used to prepare Aloe Vera Ksharsutra while Snuhikshira Kshar Sutra was prepared by using Snuhi Kshir, Apamarga and Haridra. Table 1 presented ayurveda properties of these ingredients.

Table 1 Description of Kshar Sutra ingredients

| Drug name               | Rasa     | Vipaka | Virya | Guna                      | Dosha Karma                      | Karma                                    |
|-------------------------|----------|--------|-------|---------------------------|----------------------------------|-----------------------------------------|
| Kumari (Aloe Vera)      | Tikta-Madhur | Madhur | Sheeta | Guru, Snigdha, Picchil | Tridoshaghna                     | Vedanasthapana, Shothahar, Vranashodhan, Ropana, Deepana, Pachana, Bhedana, Balya, Bruhan |
| Snuhi (Euphorbia nerifolia)| Katu, Tikta | Katu  | Ushna  | Laghu, Ruksha            | Kapha-Vataghna  - Lekhan, Vedanasthapana, Shothahar, Raktashodhana, Vishaghna |
| Apamarga (Achyranthus aspera) | Katu, Tikta | Katu  | Ushna  | Laghu, Ruksha            | Kapha-Vataghna  - Deepana, Pachana, Vatanulomana, Kaphavilayan, |
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Haridra (Curcuma longa)\textsuperscript{18} Tikta, Katu Ushna Ruksha, Laghu Kapha-Pittaghna Shothahar, Vedanasthapana, Vranapachana, Shodhana, Ropana, Sadnyasthapana, Deepana, Vishaghna

Method of preparation \textit{Ksharsutra}

\textit{Aloe Vera Ksharasutra} and \textit{Snuhi Kshir Ksharsutra} were prepared according to \textit{Ksharsutra} method described in \textit{Sushruta}.

Table 2 Method of preparation of \textit{Aloe Vera Ksharasutra}

| S. No. | Ingredients combination for \textit{Aloe Vera Ksharasutra} | No. of coatings | Total coatings |
|--------|-----------------------------------------------------------|-----------------|----------------|
| 1      | Aloe vera                                                 | 11              | 21             |
| 2      | Aloe vera + Apamarga Kshara                              | 7               |                |
| 3      | Aloe vera + Haridra Churna                               | 3               |                |

| S. No. | Ingredients combination for \textit{Snuhi Kshira Ksharasutra} | No. of coatings | Total coatings |
|--------|-----------------------------------------------------------------|-----------------|----------------|
| 1      | SnuhiKshira                                                     | 11              | 21             |
| 2      | SnuhiKshira + ApamargaKshara                                    | 7               |                |
| 3      | SnuhiKshira + HaridraChurna                                      | 3               |                |

Method of Ligation of \textit{Ksharasutra}

\textit{Ksharasutra} ligation procedure was carried out in operation theaters under aseptic condition in three phases; pre-operative, operative and post-operative (19).

Gradation of parameters

Subjective parameters were graded for assessment of results as mentioned in table 3.

Table 3 Gradation of parameters

| S. No. | Symptom | Description                                                                 | Grade |
|--------|---------|------------------------------------------------------------------------------|-------|
| 1      | Pain    | No pain                                                                      | 0     |
|        |         | Dull pain and no requirement of medicine                                     | 1     |
|        |         | Pain requires oral medication                                                | 2     |
|        |         | Unbearable pain requires injectable drug                                      | 3     |
| 2      | Discharge| No discharge/bleeding                                                        | 0     |
|        |         | Discharge/Bleeding along with defecation only                                 | 1     |
|        |         | Discharge/Bleeding in the forms of drops after defecation also               | 2     |
|        |         | Continuous discharge/bleeding                                                 | 3     |
| 3      | Irritation| No irritation                                                                | 0     |
|        |         | Irritation only during defecation                                            | 1     |
|        |         | Irritation on movements                                                       | 2     |
|        |         | Continuous, unbearable irritation                                             | 3     |
| 4      | Cutting | Pile mass not cut                                                            | 0     |
3. Results and Discussion

CASE NO. 1

Clinical Details of Patient
Male patient, aged 45 years, occupation as driver having no past history of major illness.

General Examination
Pulse – 78/min, BP – 130/80 mm of Hg, Weight – 76 kg, Prakriti – Vata-Kapha, Agni – Vishama, Koshta – Krura.

Samprapti Ghatak: (20,21)
Dosha: Apana Vayu, Pachak Pitta, Kledak Kapha
Dushya: Tvak, Rasa, Rakta, Mansa, Meda
Strotas: Annavaha, Purishavaha, Raktavaha

Udbhavasthana: Aampakvashaya
Adhishthan: Gudavalis
Vyadhimarga: Abhyantar

Diagnosis: Abhyantara Arsha (Haemorrhoids IIIrd degree).

Treatment Given: Aloe Vera Ksharsutra ligation.

CASE NO. 2

Clinical Details of Patient:
Male patient, aged 51 years, occupation as shopkeeper, having no past history of major illness.

General Examination:
Pulse – 74/min, BP – 120/80 mm of Hg, Weight – 71 kg, Prakriti – Kapha-Vata, Agni – Tikshna, Koshta – Krura.

Table 4 Effect of Aloe Vera Ksharasutra

| S. No. | Parameter     | Follow ups (Days) |
|--------|--------------|------------------|
|        |              | D1   | D3   | D5   | D7   | D9   |
| 1      | Pain         | 3    | 2    | 1    | 1    | 0    |

Effect of Therapy

Study observed that both patients received good relief in sign & symptoms of disease; pain, discharge & irritation were found to be absent while cutting and healing also observed in both cases. Aloe Vera Ksharasutra was found more effective than Snuhikhsha Ksharsutra in terms of reduction in severity of symptoms such as; pain, discharge and irritation. Cutting was observed more rapid by Snuhikhsha Ksharsutra thus it may be advise that Arsha can be successfully treated with Aloe Vera Ksharasutra therapy without any adverse effect or complications.

Effect of Aloe Vera Ksharasutra

All symptoms were relieved up to good extent and healing effect was also observed while pile mass was cut on 7th day (Table 4).
Effect of Snuhi Kshira Ksharasutra

Pain and discharge symptoms were relieved but mild irritation was observed, pile mass cut down and incomplete healing recorded, pile mass was cut on 5th day.

Table 5 Effect of Snuhi Kshira Ksharasutra

| S. No. | Parameter | Follow ups (up to 5 day) |
|--------|-----------|-------------------------|
|        |           | D1 | D3 | D5 | D7 | D9 |
| 1      | Pain      | 3  | 2  | 2  | 1  | 0  |
| 2      | Discharge | 3  | 2  | 2  | 1  | 0  |
| 3      | Irritation| 3  | 3  | 2  | 1  | 1  |
| 4      | Cutting   | 2  | 1  | CUT | NA | NA |
| 5      | Healing*  | NA | NA | 2  | 1  | 1  |

Rational of the study

The Kshara Sutra ligation having acceptability due to its efficacy but still there is need of standardization of Kshara Sutra ligation procedure W.S.R. to its efficacy. Patients preferring non-surgical process of Kshara Sutra but irritability are the major drawback hence; here is a need to develop such Kshara Sutra which is less painful and less irritant. Considering this fact present study was planned to measure effect of Kshara Sutra by modifying materials of Kshara Sutra preparation.

Recently various research scholars studied effect of Kshara Sutra prepared by conventional method using Snuhi Kshira; which may be corrosive, irritant and painful to the patients. Therefore present study involve use of Aloe Vera pulp instead of the Snuhi Kshira, to overcome the problems created by the Snuhi Kshira Ksharasutra i.e. corrosive, irritant and painful. Aloe Vera possesses Sheet Viryatmak effect thus offers cutting, healing, antiseptic and antibiotic properties. Aloe Vera is easily available and may be prepared in all climates and help in the removal of piles.

Mode of action of Aloe Vera Ksharasutra

Aloe Vera Ksharasutra offers chemical cauterization which help in cutting of pile. Ksharasutra created pressure on muscle mass which helps in cutting and healing process. The antimicrobial property of Ksharasutra prevents further chances of infection/sepsis. Aloe Vera does not affect properties of Apamarga Kshara and provides synergistic effect with Apamarga Kshara. Aloe Vera Ksharasutra having Sheet virya, Ushna and Tikshna properties which help in removing of piles without irritation as compare to Snuhi Kshara. Aloe Vera specifically possesses properties like; Shothahara, Bhedana, Vedanasthapaka and Vranaropana which removes pile-mass with minimum pain. Aloe Vera has antimicrobial effect hence chances of post removal infection decreases. The overall effect of Aloe Vera Ksharasutra was found to be satisfactory towards the management of Arsha.

Limitation of study

- This was case study and carried out in only two patients; randomized controlled clinical trials recommended further.
- Study in large representative sample from large population will provide more authentic results.

4. Conclusion

Finally it was concluded that Aloe Vera Ksharasutra is more effective than Snuhi Kshira.
Ksharásutra with respect to reduction in parameters such as; pain, discharge, irritation and healing. However cutting is observed more effective in Snuhi Kshira Ksharasutra. Aloe Vera Ksharasutra was found to be effective, economic, easy to prepare & use with minimal adverse effects for the management of Arsha.

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Conflicts of Interest

The author declares that there are no conflicts of interest.

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