Role of Aragvadhadi Sutra in the Management of Fistula-in-Ano

P. HEMANTHA KUMAR and M. SAHU
Department of Shalya Shalakya, Institute of Medical Sciences
Banaras Hindu University, Varanasi – 221 005

Received: 15.1.99                                      Accepted: 18.12.99

ABSTRACT: Traditional Medicine has its own importance for the treatment of various medical and surgical diseases irrespective of tremendous development of modern medicine. There are number of diseases were after repeated surgery. Fistula-in ano is one such condition which is prone to recurrence even after repeated surgery and can be effectively treated by Ayurvedic medicines. An extensive work has been done on the treatment of Bhagandara by Kshara sutra exploring various aspects of the problem and finding our the solution to them. The present study is related to similar type of medicated thread known as ARAGVADADISUTRA which has been mentioned by sushruta in Bhagandara. It consists of Aragvadha (Cassia fistula), Haridra (Curcuma longa), Agaru (Aquilaria agalocha), Madhu (Honey) and Ghrita (Ghee). This is the first non-caustic thread being tried on different types of Bhagandara. Especially it is a painless thread, non-irritant and very useful in sensitive patients like children, females and elders.

INTRODUCTION

Fistula-in-ano is a track with an external opening in the skin of the perianal region and an internal opening in the modified skin or mucosa of the anal canal or rectum. The importance of this disease as first realized by Sushruta, the father of Indian surgery who dealt with it most elaborately in his treatise.

In Ano-rectal specialty clinic of Shalya Shalakya Department, S.S. Hospital (I.M), B.H.U has reported fistula-in-ano constitute 2.34% of all surgical attendance during the period of 1990-19952.

Kshara Sutra therapy was practiced and used in since long with great success 3,4. Some of the problems are faced during preparation and also in the course of Kshara sutra therapy viz, collection and preservation of snuhi (Euphorbia nerifolia) latex is very difficult and time taking process, Kshara produces much burning pain, local irritation and skin reactions.

Considering the above problems, a non-irritant preparation i.e., ARAGVADADISUTRA (Aragvadha, Haridra, Aguru, Madhu and Ghrita) was tried in the management of Fistula-in-ano.

MATERIAL AND METHOD

The use of Aragvadhadi Varti/Sutra in Bhagandara has been mentioned by most of well known Ayurvedic authors. Aragvadhadi sutra is a medicated non-caustic thread used in this study and its ingredients containing Aragvadha, Haridra, Aguru, Madhu and Ghrita have mentioned in Sushruta samhita in the chapter of Bhagandara5.
Table -1 pH of Different Drugs in Apamarga Kshara Sutra and Aragvadhadi Sutra

| S.No. | Drugs                  | pH  |
|-------|------------------------|-----|
| 1.    | Apamarga Kshara sutra  |     |
|       | • Aparmarga Kshara     | 9.72|
|       | • Haridra              | 9.7 |
|       | • Snuhi Ksheera        | 6.2 |
|       |                        | 5.6 |
| 2.    | Aragvadhadi Sutra      |     |
|       | • Aragvadha fruit Pulp | 6.5 |
|       | • Aguru                | 7.0 |
|       | • Madhu                | 6.6 |
|       |                        | 3.6 |

PREPARATION OF ARAGVADHADISUTRA

A surgical linen thread number 20 is spread out lengthwise to the Kshara Sutra Hangers. The paste of Aragvadha fruit pulp, Madhu and Ghrita were smeared on the thread on its whole length and dried in Kshara sutra cabinet, the dried thread was again smeared with the same paste, this process was repeated for 7 times. Then the thread was again smeared with same paste and in wet condition, the thread was spread over the haridra and Aguru powder alternately for 3 days each.

In this way a thread had a total of 13 coatings of paste of Aragvadha, Madhu and Ghrita and 3 coatings of Haridra and 3 coatings of Aguru powder. The treads were prepared in the department of shalya-shalakya read for clinical application.

RESULTS AND DISCUSSION

The efficacy of Aragvadhadi Sutra and standard Apamarga Kshara sutra have been studies in 100 patients, attended in Ano-rectal clinic, S.S. Hospital, BHU., Divided into two groups, Control and treated and 50 patients were kept in each group. In control group (G!), standard Apamarga Kshara sutra as applied. While in treated group (GI), the Aragvadhadi sutra was applied after an established diagnosis of Bhagandara (Fistula-in-ano).

All 100 patients of Fistula-in ano have been analysed for doshic prakriti, type of Bhagandara, type of Fistula-in-ano, age and sex incidence, chronocity of the disease, position of the external openings length of fistulous track and recurrent cases.

The length of the Aragvadhadi Sutra was measured after each change and was noted in every case. After few days of therapy, this sutra comes out wit the knot intact. This stage is known as CUT THROUGH. The Unit cutting Time (U.C.T) means the time taken by Aragvadhadi sutra to cut one cm of fistulous track in days. This was calculated using the formula.

Unit cutting Time = Total number of days taken for cut through
                  Initial length of track in cms
The average unit cutting time of treated group (*Aragvadhadi sutra*) was calculated and compared with control group (*Apamarga Kshara Sutra*). The analysis of average unit cutting time was noted in relation to age, length of track, previous history of operation and different O’clock position in each group.

The process of healing was started with the cutting of the track during the course of treatment. However, the small area was still remained to heal completely at the end of total cut through, which took 1-2 weeks in both the groups incomplete closure of the wound.

The total average U.C.T. was less in Aragvadhadi Sutra (6.32 days/cm) in comparison to standard *Apamarga Kshara Sutra* (8.58 days/cm).

The pH of drugs of standard *Apamarga Kshara sutra* is aragvadhadi sutra were measured in Table-1 The Apamarga Kshara sutra is Alkaline and its pH is 9.72 Where as in Aragvadhadi sutra is weak acidic in nature and its pH is 6.5 So, the Aragvadhadi sutra is least irritant and better acceptability in comparison to standard Apamarga kshara sutra.

**CONCLUSION**

The aim of present study is to find out the efficacy and applicability of Aragvadhadi sutra in the management of Bhagandara. Based on the clinical statistical data, it may be concluded as follows:

- The total duration of the treatment can be greatly reduced in comparison to standard *Apamarga kshara sutra*
- Burning pain and irritation during the primary application and successive changes of aragvadhadi sutra is quite less
- Preservatory problem of drugs and its preparation have been trespassed b the present method
- It is economical as well as minimise the problems of preparation and application of Kshara sutra therapy.
- No recurrence cases were reported during the last 10 months of follow up.

So, it can be considered as the ideal preparation in the management of *Bhagandara* (Fistula-in-ano).

**REFERENCE:**

1. Despande, P.J. and Pathak, S.N. : The Treatment of Fistula-in ano with Kshara sutra, Nagarjuna, 361-367, (Jan. 1965)
2. Annual reports of S.S. Hospital (Indian Medicine), I.M.S., B.H.U., Varanasi (1990-1995)
3. Despande, P.J. and Sharma, K.R: Successful Non-operative Treatment of High rectal fistula, Amer. J. Procto, 39-47 (Feb 1976)
4. Sharma K.R. : Role of Kshara sutra in the treatment of Bhagandara (Fistula-in-ano), D. Ay.M. Thesis, BHU (1968).
5. Sushruta samhita with Nibandha sangraha commentary of Dalhana,edited by jadvaji Trikumji Acharya, chaukhambha surbharati prkashan, varanasi, chikisa sthana 8th chapter/30th sloka, pate no 352 (1994).