Clinical Research

The role of Apamarga Kshara in the treatment of Arsha

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Abstract

As per the available treatment modalities of Arsha, the Kshara karma modality is the best one, taking into the consideration its convenience, easy adoptability, cost-effectiveness and curative results. Under this parasurgical procedure, various forms of external kshara application are used in treating the Arsha. These are Ksharasutra Ligation (KSL), ksharapatan, etc. KSL is a surgical procedure, while ksharapatan vidhi is local application and seems to be effective with an easy procedure. Several studies of ksharapatan had been conducted; so the time has come to specify the study of ksharapatan, e.g., according to degree of pile mass and different symptoms and signs. In this present study, apamarga (Achyranthus aspera Linn.) kshara, one among the best qualitative ksharas, was locally applied directly on the different sizes, shapes and degrees of Arsha, to find out its effectiveness with or without any untoward effect. A total of 30 patients were treated by local application of Apamarga kshara. The ksharapatan was done every day, for 7 days in 3 g dose, and the result was assessed thoroughly on the basis of observation according to the specially designed proforma. Apamarga kshara was prepared as per the standard method described in Ayurvedic texts. Patients suffering from Arsha were selected by simple random sampling method, with the complaints of bleeding per rectum, Vedana, Srava, kandu and prolapse. Lastly, it was concluded that ksharapatan had shown significant improvement in 1st and 2nd degree of pile masses without any side effect.

Key words: Apamarga, Arsha, hemorrhoids, kshara, ksharapatan, Ksharasutra Ligation (KSL), parasurgical, pratisaraniya.

Introduction

Kshara chikitsa has been in practice since 500 BC. As per Sushruta, the kshara is prepared from 22 plants such as Achyranthus aspera,[1] Euphorbia nerifolia, Cassia fistula, Holarrhena antidysenterica,[2] Adhatoda vasica, Calotropis gigantea, Sesamum indicum, etc. There are two types of kshara preparation: one is paniya kshara for internal use while the other one is the pratisaraniya kshara for external use. The pratisaraniya kshara is further divided into three types, i.e., Mridu (mild in action), madhya (moderate in action) and tikshna[3] (strong in action). In this study, tikshna kshara was taken into consideration for local application directly on the Arsha. The wide descriptions of Arsha including its treatment are available in the classics. But to emphasize its graveness, Arsha is enumerated under the heading of ashtomahagada[4] and occurs in guda pradesh, the seat of sadyapranahar Marma[5] which requires delicate management.

Modern system of treatment has adopted a variety of methods like sclerotherapy (injection of sclerosent agent in submucous spaces of piles), rubber band ligation, infra red coagulation (IRC), cryosurgery (using N2O gas), hemorrhoidectomy, etc., according to the nature and degree of pile mass, but these procedures have their own merits and demerits with limitations.

Charaka has given more emphasis on the conservative treatment and prescribed suitable dietary regimes with drugs to the patients for curing of Arsha by improving deepan and pachan[7] karmas of the agni (enhancement of digestive capacity) in the body. Further, he has also advised kshara treatment for different types of Arsha. However, every system of medicine has given its own way of treatment for treating the Arsha.

Sushruta has basically mentioned four types of treatments, i.e., bhashaja, ksharakarma, agnikarma and Shastrakarma for Arsha and he has given more emphasis on ksharakarma[8] modality.
Drugs and methods

**Aims and objectives**

1. To check the efficacy of *apamarga ksharapatan* in cases of *Arsha*.
2. To find out an alternative herbal remedy as an office procedure in the management of *Arsha*.

**Materials and Methods**

**Drug review**

*Tikshna apamarga* (kshara) was prepared according to the classical views. The preparation of kshara has been described in detail and pharmaceutical analysis is given below.

**Pharmaceutical analysis**

The pharmaceutical study of *apamarga kshara* was done in the pharmacetics department of IPGTRA, Jamnagar, and the findings are as follows:

- Loss on drying at 110°C: 7.25% w/w
- pH of 5% by pH paper: 10
- Ash value: 67.75% w/w
- Water soluble extractive: 78% w/w

**Organoleptic characters**

- Color: Dull white
- Touch: Smooth
- Taste: Alkaline

**Quantitative estimation**

- Magnesium: Not 0.092-1.045% w/w
- Sodium: Not <1.000% w/w, not >28.844% w/w
- Potassium: Not <0.05% w/w, not >30.54% w/w
- Chloride: Not <15.09% w/w, not >19.81% w/w
- Carbonate: Not <13.82% w/w, not >25.583% w/w
- Sulfate: Not <12.4755% w/w, not >21.280% w/w
- Calcium: Not <1.685% w/w, not >3.5185% w/w
- Phosphate: Not <4.211% w/w
- Iron: Not >0.263% w/w
- Moisture: Not >1.414% w/w
- pH value: Not <10.1, not >11.8

**Clinical study**

In this study, a total of 30 patients of *Arsha* were selected by adopting simple random sampling method, from OPD and IPD of the Department of Shalyatantra, I.P.G.T. & R.A., Hospital, Gujarat Ayurved University, Jamnagar, Gujarat. All the patients had completed the course of treatment with *apamarga ksharapatana*.

**Inclusion criteria**

Patients presenting with complaints of *Arsha* (1st, 2nd and 3rd degree piles), i.e., bleeding per rectum, prolapse of piles, pain, discharge and pruritus, irrespective of age, sex, religion, education and socioeconomic status, were included in this study.

**Exclusion criteria**

Patients suffering from carcinoma of rectum, hypertension, diabetes mellitus and cardiac disorders were excluded.

**Diagnostic criteria**

Diagnosis was made on the basis of physical examinations by performing thorough P/R examinations, i.e., inspection, palpation digital and proctoscopic examination.

**Investigations**

Routine hemogram, blood sugar, routine and microscopic examination of urine and stool were carried out.

**Ksharapatana Vidhi (Method of Kshara application)**

*Kshara* application was done locally on the piles mass as per the classical technique called “ksharapatana vidhi.” It was conducted according to the principles of *trividhakarma*.

**Pre-operative procedure**

1. Routine investigations were insured.
2. Fitness of patient was checked.
3. Written consent of patient was taken.
4. Cleaning of bowel was done by *Erand bhrishta haritaki* 5 g at night.
5. Shaving and cleaning of the perianal area was done.

**Operative procedure**

1. The patient was laid down in lithotomy position.
2. The perianal part was painted and draped with a sterilized cut sheet.
3. Then, a lubricated proctoscope with cut aperture was introduced in the anal canal.
4. The pile mass was fixed at the suitable place into the aperture.
5. After cleaning the pile mass with gauze pieces, *tikshna apamarga kshara* was applied.
6. Applied *kshara* was kept for 2 minutes or till the time taken to count up to the 100.
7. The *kshara* was then washed away with *takra* (buttermilk).
8. After application of the *kshara*, the pile mass changed to *tikshna* (*Jambu phalavat*, i.e., the fruit of *Syzygium cumini* Linn.) in appearance.
9. Madhu and ghrita were applied to overcome *gudadaha* (burning sensation).
10. This procedure was repeated for each pile mass separately at the same sitting.

**Post operative procedure**

1. Light diet was allowed by the evening.
2. *Erand bhrishta haritaki* 5 g at night was administered.
3. *Aragaha sweda* (warm water sitz bath) with *panchavalkal kwatha* 8 hourly was advised from the next day morning.

**Duration of treatment**

*Apamarga kshara* was applied on each pile mass daily in 3 g dose for 7 days.
Follow-up of the patient
It was done weekly for 2 months to see for recurrence of the symptoms and any adverse effect.

Assessment criteria
Complete relief: 76–100% relief in symptoms, with complete reduction of pile mass
Marked improvement: 51–75% relief in symptoms with or without reduction in pile mass
Improvement: 25–50% relief in complaint of patient
No improvement: No relief in symptoms or reduction in pile masses

Assessment of results
Assessment of results was done based on relief of sign and symptoms, i.e., bleeding per rectum, pain, pruritus, discharge and reduction of size in pile mass on the basis of scoring pattern.

Results and Observations
In this study, male patients were more in number [Table 1]. Maximum incidences of Arsha were observed in patients of Pitta Prakriti, i.e., vatapittaja (43.33%) and kaphapittaja (33.33%), as per Table 2. Bleeding is directly related with Pitta Dosha, so more incidence of Arsha had been found in Pitta pradhan Prakriti. In Table 3, the breakdown of the symptoms and signs according to the number of cases is shown. It shows that the maximum patients (90%) had raktasrava (P/R bleeding) as it was the cardinal symptom of Arsha and also vibandha (constipation) (83.33%) in the form of causative factor and symptom found in the patients. Mahamulani type of Arsha (broad base of pile) was observed in 61.42% patients, which proves the predominance of Kapha Dosha [Table 4]. Maximum numbers (51% of pile mass) of pile mass had been observed in the 2nd degree [Table 5]. Maximum number of pile masses was situated in 7 o’clock position [Table 6]. Table 7 shows the overall result, markedly improved result was in 56.66% of patients, whereas 16.66% of patients showed no improvement and 26.66% patients had shown improvement.

Table 8 shows that ksharapatan therapy had provided 84.33% relief in raktasrava and Vedana, which was found statistically significant. Relief in gudadaha was observed to the extent of 82.00%, whereas 75.33% relief was seen in Pichhila Srava. 73.33% relief was recorded in arshabhransha, while 77.66% relief was recorded in gudakandu.

In a few patients, burning sensation was observed during and after the ksharapatan, which was managed with takra and local application of Yashtimadhu ghrita. Some patients complained of watery discharge and slight oozing of dark colored blood after the application of kshara, which was self-controlled, in due course of time.

Discussion
The number of patients of lower economic status was found to be more, which may be due to their irregular dietary habits. It is also observed that labor class patients were more affected because of their style of work like sitting in utkatasan which leads to vitiation of apan vayu vigorously, a prominent etiological factor for causing Arsha. Tobacco addiction was noted in most of the patients and this was responsible for developing the Agnimandya which was also one of the causative factors for Arsha. The Agnimandya was found in 60% of patients and this proved again the observation of the learned writer of the Astang Hridaya, i.e., Vagbhatta.[12] This hypothesis has been further

Table 1: Sex of patients (n = 30)

| Sex      | No. of patients | Percentage |
|----------|-----------------|------------|
| Males    | 23              | 76.66      |
| Females  | 07              | 23.33      |

Table 2: Prakriti of patients (n = 30)

| Prakriti     | No. of patients | Percentage |
|--------------|-----------------|------------|
| Vatapittaja  | 13              | 43.33      |
| Vatakaphaja  | 07              | 23.33      |
| Kaphapittaja | 10              | 33.33      |

Table 3: Symptoms and signs according to the number of patients (n = 30)

| Symptoms       | No. of patients | Percentage |
|----------------|-----------------|------------|
| Vibandha       | 25              | 83.33      |
| Raktasrava     | 27              | 90.00      |
| Aruchi         | 20              | 66.66      |
| Vedana         | 17              | 56.66      |
| Gudadaha       | 22              | 73.33      |
| Pichchila Srava| 19              | 63.33      |
| Gudakandu      | 18              | 60.00      |
| Arsha bhrinsha | 4               | 13.33      |

Table 4: Base of pile masses (n = 70)

| Base          | No. of patients | Percentage |
|---------------|-----------------|------------|
| Mahamulani    | 43              | 61.42      |
| Tanuni        | 27              | 38.57      |

Table 5: Degree of pile masses (n = 70)

| Degree        | No. of pile masses | Percentage |
|---------------|--------------------|------------|
| 1st degree    | 23                 | 32.85      |
| 2nd degree    | 36                 | 51.42      |
| 3rd degree    | 11                 | 15.71      |

Table 6: Clockwise position of pile masses (n = 70)

| Position     | No. of piles masses | Percentage |
|--------------|---------------------|------------|
| 3 o’clock    | 23                  | 32.85      |
| 7 o’clock    | 34                  | 48.57      |
| 11 o’clock   | 13                  | 18.57      |
Table 7: Percentage of relief

| % of relief | Effect         | No. of patients | Percentage |
|-------------|----------------|-----------------|------------|
| ≥ 76        | Cured          | 00              | 00         |
| 51–75       | Markedly improved | 17            | 56.66     |
| 26–50       | Improved       | 8               | 26.66      |
| <25         | Not improved   | 5               | 16.66      |

Table 8: Effect on symptoms of Arsha

| Symptoms      | BT Mean | AT Mean | IMP % | SD | SE | t value | P value |
|---------------|---------|---------|-------|----|----|---------|---------|
| Raktasrava    | 03      | 0.46    | 84.33 | 0.63| 0.16| 15.33   | <0.001  |
| Vedana        | 03      | 0.46    | 84.33 | 0.63| 0.16| 15.33   | <0.001  |
| Gudadaha      | 03      | 0.53    | 82.00 | 0.74| 0.19| 12.85   | <0.001  |
| Picchila Srava| 03      | 0.73    | 75.33 | 0.79| 0.20| 10.98   | <0.001  |
| Gudakandu     | 03      | 0.66    | 77.66 | 0.61| 0.15| 14.64   | <0.001  |
| Arshabhransha | 03      | 0.73    | 73.33 | 0.79| 0.20| 10.98   | <0.001  |

BT: Before treatment; AT: After Treatment; IMP: Improvement

proven by the concept of koshtha and total 53.33% patients were found with mrudu koshtha which was also possible due to the weakness of agnibala. Family history of Arsha was found in 56.66% of patients, which was another important hereditary causative factor.

Symptoms of Arsha like bleeding per rectum, gudadaha, gudasrava, gudakandu, etc., subsided by treatment with ksharapatan (local application of Pratisaraniya Kshara on Arsha) satisfactorily. Kshara has properties of mainly ehdedan, bhedhan and lekhan,[13] and by virtue of these properties, kshara produced shrinking effect on pile masses. Gudadaha also subsided. Daha is caused due to vitiation of Pitta and Rakta dosha having Amla(acidic) property, which gets neutralized by Lavana anurasa of Kshara.[14]

Statistical analysis also proves that apamarga ksharapatan has a significant effect in 1st degree and 2nd degree of piles, whereas insignificant result was obtained in 3rd degree piles.

Conclusion

It can be concluded that the pile masses shrunken out with Apamarga Ksharapatan, without complete disappearance of pile masses. Hence, it could be stated that Apamarga ksharapatan was an effective method for the treatment of 1st and 2nd degree piles. The important notable point was that there were no side effects or adverse effects shown after the treatment.

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