

**CLINICAL STUDY ON EFFECT OF SHULAPRASHAMANA MAHAKASHAYA ON
UDAVARTINI YONIVYAPAD VIS-À-VIS PRIMARY DYSMENORRHEA**Rani.B.Patil¹, Shreevathsa²¹PG Scholar, Dept of Ayurveda Samhita Siddhanta, Government Ayurveda Medical College Mysuru.²Professor & Head, Dept of Ayurveda Samhita Siddhanta, Government Ayurveda Medical College Mysuru.Corresponding Author: ranipatil1996patil@gmail.com<https://doi.org/10.46607/iamj0511122023>

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**ABSTRACT**

‘Sama Dosha Samaagnischa Sama Dhatu Malakriya.....’ are the *lakshanas* of *swastha purusha*. Any deviation from these *lakshanas*, impairment in *dosha*, *dhatu*, *mala*, etc will definitely lead to *Vyadhi*. Every *vyadhi* has its own characteristic feature, among which *Shula* is one of the *pradhana lakshana*. The synonym of *Shula* is *roga*, which signifies the importance of this *lakshana* in every *vyadhi*. *Shula* is the *atmaja lakshana* of *vata dosha*, and without the involvement of *vata dosha*, *shula* cannot manifest. *Udavartini yonivyapad* is one with *Shula* as its *pradhana lakshana* and can be correlated to Primary dysmenorrhea in contemporary science. The concept of *shula* needs to be understood as there are other terms like *vedana*, *toda*, and *ruja* which also convey a similar meaning. *Panchashan mahakasaya* of *Charaka Samhita* is a unique classification of *dravya* based on the *pradhana karma*. *Shulaprashamana* is one among those groups which help in relieving *Shula*. *Shula prashamana mahakasaya* is not used as a whole in any of the formulations in classics, while as individual *dravyas* are used in *chikitsa*. With this background, a conceptual and applied study of *shulaprashamana gana* and an evaluation of its efficacy in the subjects of *udavartini* was selected.

Keywords: *Shula*, Pain, *Shulaprashamana karma*, Antispasmodic, *Shulaprashamana mahakashaya*

INTRODUCTION

Ayurveda is the science of life that focuses both on maintaining the swasthya of healthy individuals and curing diseased ones. A disease is characterized by the symptom of pain which can be correlated to the concept of *shula* in Ayurveda. Shula is defined as 'Shula *rujayam*¹'. The concept of *Shula* is an unexplored area where the information is scattered, and understanding the mechanism behind this helps in curing the *vyadhi*.

Udavartini is one such *vyadhi*, which is characterized by *shula* and can be related to primary dysmenorrhea of contemporary science, which is characterized by painful menstruation or *Kastartava*. Due to its high prevalence and commonest gynaecological complaint, it reduces the work efficiency of women in every cycle; hence there is a need to address this disease with proper remedies. There are some unique concepts in terms of practical applicability, among which classification of *aushadha dravya* in Charaka Samhita is one. A group of ten dravyas which are similar in karma are classified in chapter four of *sutrasthana* termed as *mahakashaya*, among which *Shula prashamana mahakasaya*² is one which has karma on *Shula* hence *udavartini*, a *shula pradhana vyadhi* was selected.

Considering the above factors, the present study is undertaken to conceptually analyze *Shula* in different conditions and to evaluate its efficacy on *udavartini yonivyapad*³.

Objectives:

- ✓ To study the concept of *shulaprashamana Mahakashaya*
- ✓ To clinically assess the efficacy of *shulaprashamanamahakasaya* in the subjects of *udavartini yonivyapad* (primary dysmenorrhea).

Materials and Method:

Approval from the IEC was taken before the commencement of the trial and consent was also taken from all the participants of the study. Ethical clearance No- [Ref No: IRC-EC/SS (2)/2020-21].

CTRI Registration:

The trial has been registered with Clinical Trial Registry of India. Reference No- CTRI/REF/2023/07/070701

Selection criteria:

A sample size of 80 subjects were taken from the OPD and IPD with respect to age (16-30 years) and irrespective of caste, religion, and socio-economic status. Sampling was done through a simple random sampling method, and statistical analysis was done by applying sample t-tests and chi-square tests.

Administration of Drug:

Shulaprashamana vati 2 BD before food for 7 days starting from 2 days before onset of cycle and 5 days during cycle with *ushna Jalapana* for two consecutive cycles.

Diagnostic criteria:

ACC TO ICD 10⁴

- Pain begins before one or two days of menstruation and lasts for one to two days.
- Pain in lower abdomen and supra-pubic region.
- Pain radiates to thigh and lower back associated with nausea, vomiting, headache, diarrhoea, constipation, irritability.

Inclusion criteria:

- Subjects who had chief complaint of painful menstruation for at least 3 cycles or more.
- Age group between 16 to 30 years.
- Pain with scanty blood flow.

Exclusion criteria:

- Subjects with other systemic disorders that interfere with study.
- Subjects on Oral contraceptive pills.
- Causes of secondary dysmenorrhea.
- Other menstrual irregularities.
- Psychogenic dysmenorrhea.

Assessment criteria:

Assessment was done before intervention on 0th day and after intervention on 8th day of second cycle of intervention.

Table 01: Assessment was done by using VAS scale⁵.

None	0
Mild	1-3
Moderate	4-6
Severe	7-10

Assessment was done by using WaLIDD Scale⁶.

Working ability	Location	Intensity	Days of pain
0: None	0: None	0: Does not hurt	0:0
1: Almost never	1: 1 site	1: Hurts a little bit	1:1-2
2: Almost always	2: 2-3 site	2: Hurts a little more-Hurts even more	2:3-4
3: Always	3: 4 sites	3: Hurts a whole lot-hurts worst	3:>=5

Dysmenorrhea:

Score 0	Without dysmenorrhea
Score 1-4	Mild dysmenorrhea
Score 5-7	Moderate dysmenorrhea
Score 8-12	Severe dysmenorrhea

To assess the relief from associated symptoms grades were provided based on Relief in number of clinical symptoms.

Grade 1- No improvement all signs and symptoms persisting.

Grade 2- Mild improvement at least two symptoms brought to lower grade than before.

Grade 3- Moderate improvement at least four symptoms brought to lower grade than before.

Grade 4- Marked improvement all signs and symptoms brought to lower grade than before.

Grade 5- Maximum improvement all signs and symptoms relieved.

Observations:

1. Observations on Demographic Data

In the present study, 23(28.8%) subjects were in the age group of 16-20 years, 21 (26.3%) were in 21-25 years, 36(45.0%) were in the age group of 26-30 years, In the present study, 22(27.5 %) subjects were belonging to Hindu religion, and 58(72.5 %) were belonging to the Muslim religion, In the present study 46(57.5 %) subjects were unmarried and about 34(41.3 %) were married, In the present study 4 (5 %) subjects were illiterate, 23(28.8 %) subjects completed primary education, 17 (21.3 %) subjects com-

pleted Highschool education, 36 (45 %) were having other degrees, In the present study 59 (73.8 %) subjects were belonging to Urban locality, and about 21 (26.3 %) were belonging to a rural area, In the present study 10(12.5 %) subjects were of poor class, 68 (85 %) were of middleclass and 2 (2.5 %) were belonging to rich SES, In the present study 29 (36.3 %) subjects were housewives, 24(30.0 %) were students and 27(33.8 %) were belonging to other occupation.

2. Observation on Disease

In the present study about 34(42.5 %) subjects were vegetarian and 46(57.5 %) were consuming mixed diet, In the present study about 10(12.5 %) subjects were consuming Madhura pradhana ahara and 70(87.5 %) subjects were consuming katu pradhana ahara, In the present study 34(42.5 %) subjects have regular bowel habits, loose stools in 2(2.5 %) subjects and constipated stools were observed in 44(55.0 %) subjects, In the present study family history was present in 47(58.8 %) subjects and absent in 33 (41.3 %) of subjects, In the present study about 52(73.8 %) subjects were doing mutra vegadharana and about 28 (35.0 %) were not doing Mutravega dharana, In the present study about 59(73.8 %) subjects were having sound sleep and 21(26.3 %) subjects had disturbed sleep, In the present study about 26(32.5 %) subjects

had *Atimaitihuna nidana* and 54(67.5 %) were not doing *Atimaitihuna*, In the present study about 50(62.5 %) subjects developed complaints since menarche and 30(37.5%) did not had complaints since menarche, In the present study 27(33.8 %) subjects have *Vatapitta prakruti*, 19(23.8 %) have *pitta-kapha prakruti* and about 34(42.5 %) subjects have *vata-kapha prakruti*, In the present study about 8(10.0 %) subjects had *pravara satwa*, 63(78.8%) subjects had *madhyama satwa* and 9(11.3 %) had *avara satwa*, In the present study about 1(1.3 %) subject had *pravara sara*, 76(95.0 %) had *madhyama sara* and 3(3.8 %) had *avara sara*, In the present study about 1(1.3 %) subject had *pravara sara*, 76(95.0 %) had *madhyama sara* and 3(3.8 %) had *avara sara*, In the present study 13(16.3 %) subjects had *pravara aharashakti*, 38(47.5 %) had *madhyama* and 29(36.3 %) had *avara aharashakti*, In the present study 4(5.0 %) subjects had *pravara*, 68 (85.0 %) has *madhyama vyayama shakti* and 8(10.0 %) subjects had *avara vyayama shakti*, In the present study about 52(65.0 %) subjects were Normosthenic, 18(22.5 %) were hyposthenic and 10 (12.5 %) were hypersthenic, In the present study about 40(50.0 %) subjects were moderately built, 30(37.5 %) were over nourished and 10 (12.5 %) were undernourished, In the present study 77 (96.3 %) of subjects were having pain abdomen complaint and 3(3.8 %) were not having pain abdomen, In the present study 7 (8.8 %) subjects were having pain at suprapubic region and about 73(91.3 %) were not having pain in this region, In the present study about 62 (77.5%) subjects were having pain at lowback region and absent in 18 (22.5 %) subjects, In the present study 28(35.0 %) subjects were having pain at thigh region and absent in 52 (65.0 %) subjects, In the present study pain with scanty blood flow was present in 13 (16.3 %) subjects and absent in 67 (83.8 %) of subjects, In the present study about 52(65.0 %) subjects were having nausea and about 28(35.0 %) were not having nausea, In the present study about 13 (16.3 %) were having vomiting and about 67(83.8 %) were not having vomiting, In the present study 30 (37.5 %) were having headache and about 50 (62.5 %) were not having head-

ache, In the present study about 29 (36.3 %) subjects were having diarrhea and about 51 (63.8%) were not having diarrhea as a symptom, In the present study about 14 (17.5 %) subjects were having constipation and 66 (82.5 %) were not having constipation, In the present study about 31 (38.8 %) subjects were having irritability and about 49(61.3%) were not having irritability.

Results:

Results of *Shulaprashamana mahakashaya* on *udavartini yonivyapad*(primary dysmenorrhea) were assessed based on VAS scale, WaLIDD scale and overall assessment.

1. Results based on VAS scale.

Before intervention, among 80 subjects, 14(17.5%) were having mild pain (1-3), 58(72.5%) were having moderate (4-6) pain and 8(10 %) subjects were having severe pain (7-10). After intervention 18(22.5 %) of the subjects had complete relief in pain, 51(63.8%) had mild improvement in pain, and 11 (13.7 %) subjects had moderate improvement in pain.

The intervention was significant with a p-value of 0.001.

2. Results based on the WaLIDD scale.

Before intervention, among 80 subjects 6(7.5%) subjects had mild dysmenorrhea (score 1-4), 54(67.5) subjects had moderate dysmenorrhea (score 5-7) and 20(25.0 %) subjects had severe dysmenorrhea.

After intervention, among 80 subjects, 10(12.5 %) subjects were relieved completely, 45 subjects were having mild dysmenorrhea and 25(31.3 %) subjects had moderate dysmenorrhea.

The intervention was significant with a p value of 0.001.

3. Results based on overall assessment.

After intervention, among 80 subjects, 1(1.3%) subject did not have any improvement, 19(23.8%) subjects had mild improvement, 35(43.8%) subjects had moderate improvement, 16(20.0%) subjects had marked improvement, 9(11.3%) subjects had maximum improvement in symptoms.

DISCUSSION

Assessment of results has been done using VAS scale and WALIDD scale and overall assessment was done by using gradings. The discussion on outcome of the

study has been done based on *anumana pramana* and *uhya Tantrayukti*. Justifications have been given for the obtained results based on *karmukata* of *dravya* and pharmacological activities of the drugs.

Table no 1: shows *rasa, guna, virya, vipaka and karma of dravya*.

Dravya	Rasa	Guna	Virya	Vipaka	Karma
Pippali	Katu	Laghu, Teekshna	Ushna	Madhura	Marutahara, Rasayani Vata-kaphahara
Pippalimula	Katu	Laghu, Ruksha	Ushna	Madhura	Anahahara, Rochani, Deepana Vata-kaphahara
Chavya	Katu	Laghu, Ruksha	Ushna	Katu	Anahahara, Shulahara Vata-kaphahara
Chitraka	Katu	Laghu, Teekshna Ruksha	Ushna	Katu	Pachana, Deepana Vata-kaphahara
Nagara	Katu	Snigdha, ushna	Ushna	Madhura	Vibandahara, Anahahara, Shulajit Vata-kaphahara
Maricha	Katu	Laghu, sukshma Teekshna	Ushna	Katu	Ruchya, Vatahara Vata-kaphahara
Ajamoda	Katu	Laghu, ruksha Teekshna	Ushna	Katu	Adhmana, Aruchihara Vata-kaphahara
Ajaji	Katu	Laghu, Ruksha	Ushna	Katu	Pachana, Ruchya, Jvaraghna Vata-kaphahara
Ajagandha	Katu	Teekshna	Ushna	Katu	Anahahara, Shulahara Vata-kaphahara
Gandira	Katu	Laghu, Teekshna	Ushna	Katu	Shulahara, Adhmanahara Vata-kaphahara

1. Assessment of results based on VAS scale.

In patients with moderate pain, pain was reduced to mild, in patients with mild score of dysmenorrhea after treatment they were almost free from pain but in severe cases of pain scoring the result was not that appreciable. Another observation made during treatment was the result was better observed in *marga-varodhajanya samprapti* where there was involvement of both *vata kapha* rather than *vata* alone. The drugs present in *shulaprashamana mahakashya* are having *vatanulomana, shulahara, ushna virya, teekshna* guna and are *vata kaphahara* these *gunas* of *dravya* might be helpful in correcting *gati* of *apanavata* by doing *srotoshodhana*. The drugs also had anti-spasmodic, analgesic and anti-inflammatory properties which helped in relieving pain.

2. Overall assessment of symptoms

In overall assessment gradings were provided from 1 to 5 based on relief of number of symptoms after treatment. There was marked relief in associated symptoms like nausea, diarrhea, constipation which were due to *apanavata dusti* and the *dravyas* present in *shulaprashamana gana* act at the level of *agni* and *rasa* and are having *deepana, pachana, anahahara, aruchihara* and *bhedana* properties and there by relieve these symptoms. Other associated symptoms like headache and irritability in primary dysmenorrhea are because of involvement of *vata* and the *dravyas* of *shulaprashamana gana* are having *vatahamana karma*.

Other observations were made during the intervention.

It was observed that in *pitta prakruti* patients when intervention was given there were aggravation of symptoms and bleeding was increased while in patients with PCOD, scanty menstruation, passing of clots and sticky blood there was very good improvement.

CONCLUSION

Shula is a *vata pradhana* and mainly *Dhatukshajanya vyadhi* involving *rasa* as *dushya* and *sanga* type of *srotodusti*. *Shulaprashamana karma* in *udavartini yonivyapad* is achieved by *ushna*, *teekshna*, *sukshma guna* of *dravyas* which relieves *sanga* and are *vata-kaphahara* in action, there by correct the *gati* of *apana vata* which helps in proper expulsion of *vata* and was effective in relieving *shula*. The intervention was statistically highly significant with 'p' value of 0.001.

REFERENCES

1. Raja Radha Kanth Deva, Shabdakalpadruma, 5th Volume, Varanasi, Chowkhamba Sanskrit Series office, 1961, Page no:130
2. Acharya Yadavji Trikamaji (Editor), Charaka Samhitha of Agnivesha. Reprint Edition, Chowkhamba Surbharati Prakashan, Varanasi, 2011, Page no:
3. Acharya Yadavji Trikamaji (Editor), Charaka Samhitha of Agnivesha. Reprint Edition, Chowkhamba Surbharati Prakashan, Varanasi, 2011, Page no:
4. <https://www.icd10data.com/ICD10CM/Codes/N00-N99/N80-N98/N94-/N94.6>
5. <https://assessment-module.yale.edu/impalliative/visual-analogue-scale>
6. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5775738/table/t1-ijwh-10035/?report=objectonly>

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