EVALUATE EFFECT OF DASHAMOOLA SIDDHA KSHEERA BASTI AND DASHAMOOLA TAILA MATRA BASTI IN THE MANAGEMENT OF UDAVARTINI YONIVYAPADA- A COMPARATIVE CLINICAL STUDY

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ABSTRACT

Menstruation, a complex cyclic phenomenon, is an inevitable natural occurrence in any girl’s life. Menstrual disorders form a significant proportion of the adult female population. Discomfort during menstruation ranges from mild to severe pain that incapacitate the patient. Mild discomfort occurs in majority of women. But few suffers from severe pain. Prevalence of dysmenorrhea is 70.2% the prevalence of primary dysmenorrhea decreases with increasing age. Prevalance is the higher in the 20 to 24 year old age group and decreases thereafter. In modern medicine, Dysmenorrhea is treated by analgesics, non-steroidal anti-inflammatory drugs (NSAID) which are active inhibitor of prostaglandin synthesis. Since long term consumption of NSAID is having its own health hazards, an alternate treatment modality is tried with Ayurveda, dashamoola siddha Ksheera basti and dashamoola Taila Matra basti is administered for 2 consecutive cycles and its effects were studied according to specially designed case format, it showed that
Dashamoola siddha ksheera Basti is better than Dashamoola Taila Matra Basti in the management of Udavarta Yonivyapada (primary dysmenorrhea).

**KEYWORDS:** Udavartini Yonivyapada, Primary dysmenorrhea, Dashamoola Siddha Ksheera Basti, Dashamoola Taila Matra Basti.

**AIMS AND OBJECTIVES**
To evaluate the effect of dashamoola siddha ksheera basti in the management of udavartini yonivyapada.
To evaluate the effect of dashamoola taila matra basti in the management of udavartini yonivyapada.
To compare the efficacy of both drugs in the management of udavartini yonivyapada.

**INTRODUCTION**
Dysmenorrhea means the painful incapacitating of the woman and can be co-related with Udavartini Yonivyapad. A review of studies in developing countries performed by Harlow and Campbell (2002) has explored that about 25-50% of adult women and about 75% of adolescents experience pain during menstruation, with 05-20% reporting severe dysmenorrhoe.[1] Dysmenorrhea and pre-menstrual syndrome are the commonest gynecological disorders causing great distress to women every month but still are the least reported symptoms. These are the common symptoms of cyclic pain and discomfort to the patient. Dysmenorrhea (Greek) -dis-men-o-reap Dys/Dis–Difficult, bad, painful, disordered, men–month, Rhein–to flow.[2] In Ayurveda diseases related to the female reproductive system are described under the caption of yonivyapad in total 20 diseases are there in the classical literature. Vega vidharana causes the Vayu to move in opposite direction causing Udavart.[3] Udavarta yonivyapad is the diseases in which there is painful menstruation occurs. Vegavarodha janita case of its pathophysiology, suppression of urine, stool and flatus like natural urges leads to aggrevation of vata. They lead to pratiloma and vishma gati of apana and vyan vayu resulting into sanga as well as vimarga gamana in arthva dushti settle into the garbhashaya (Uterus). Menstrual blood flows is mainly under control of apan vayu. Vitiated Vata dosh is mainly of pain full menstruation. Udavarta is derieved from the word ‘Uttavarta’ i.e upward direction of vayu. Aahara Vihara Janita an vegavarodha janita. In the former case, due to vata vitiating dietiecs and conducts aggrevates vata (Samanvayu). Leads to the vititation of Agni. Thus the vishmagni generates a vitiated Aahara Rasa thus Rasa and Rakta Dhatus (body tissues) Raja/Artava being updhatu (by produce) of Rasa. Also gets
Denoting the healthy state of female reproductive system, menstruation is a physiological process seen in reproductive phase. Menstruation, conception and motherhood are the creative aspects of reproductive age and with the herald of high-tech era and the advent of new millennium women’s status was expected to reach new horizon socially, physically and economically. But some physiological issues can trouble the woman to drag her down the race. Among them the menstrual pain is the one of them means dysmenorrhea. Dysmenorrhea means the painful incapacitating of the woman and can be co-related with Udavartini Yonivyapad. In Ayurveda diseases related to the female reproductive system are described under the caption of yonivyapad in total 20 diseases are there in the classical literature. Udavarta yonivyapad is the diseases in which there is painful menstruation occurs.

Prevalence of dysmenorrhea in India was 70.2%. Majority of the patients complains pain for one or 1-2 days during menstruation period of menstrual cycle. 23.2% of the affected girls complains pain for 2-3 days. A very small proportion of females opt for pharmacological management (25.5%) and 83.2% opted for non-pharmacological methods. Only 14.2% had opted for medical precriptions.

Clinical study carried out on randomly selected 60 patient by Simple Randomization Method showing sign and symptoms of Udavartaa Yonivyapad, then treated with Dashamool Siddha Ksheer Basti as a trial group and dashamoola taila matra basti as a controlled in group 2. In both groups basti treatment given from 6th day of menstrual cycle till 12th day of menstrual cycle for 2 consecutive cycle. Group-I :- in this group patients were given anuvasana basti with 120 ml murchita tila taila on 1st and 7th day, and 250 ml Dashamoola siddha ksheera basti from 2nd to 6th day on 2 consecutive cycles. Group-II :- In this group patients were given 60 ml Dashamoola taila matra basti from 1st to 7th day for 2 consecutive cycles. Before starting the clinical trials on the patients of Udavartaa Yonivyapad, this topic was approved by Ethical committee and permission was granted from committee.

MATERIAL AND METHODS
The purpose of the clinical trial is primarily to establish the efficacy and demonstrate freedom from unwanted side effects in humans. Appropriate medicine plays a paramount role in the success of treatment as it is the main factor lying with the management of a disease. In other words, there is a direct proportional relationship between the success of treatment and the genuineness of the medicine. The facts established by careful investigations and observations, supported by accurate clinical data and convincing reasoning, can satisfy today’s science
about the scientific validity of Ayurveda. In the present study, Dashamoola siddha Ksheer Basti and Dashamoola siddha Tail matra Basti have been chosen to evaluate their efficacy in Udavarta Yoni Vyapada and Pre- menstrual syndrome.

In modern medicine Dysmenorrhea is treated by analgesics, non steroidal anti inflammatory drugs (NSAID) which are active inhibitor of prostaglandin synthesis. In primary dysmenorrhea the same action is got by drug used in udavarta yonivyapada i.e. Dashmool tail matra basti and Dashmool siddha ksheer basti which are Vatanulomaka and vedanastapaka. So it is a great scope of research to find out safe, potent, remedy from Ayurveda.

According to charakacharya yonidushti is not possible without vata. So, first do Chikitsa of Vatashaman then do the Chikitsa of other Doshas. Basti is the treatment modality indicated in all types of Yonivyapad specially vataj yonivyapad in Ayurveda. In Udavarta yonivypad due to vegdharan, gati of apan vayu becomes pratiloma, which obstructs the rajasrav and painful Menstruation starts, by giving Dashmool siddha ksheer basti and Dashmool tail matra basti, it regulates the gati of apan vayu and vata shaman occurs. Considering above factors this study is being selected with a hope to provide better results.

Clinical study carried out on randomly selected 60 patient by Simple Randomization Method showing sign and symptoms of Udavartaa Yonivyapad, then treated with Dashamool Siddha Ksheer Basti as a trial group and dashamiould taila matra basti as a controlled in group 2. It is a randomized controlled clinical trail where dashamoola siddha ksheera basti is compared with controlled dashamoola taila matra basti. The patients in the study were randomly divided into two groups.

Group I :- Dashmool siddha ksheer basti (Trial group).
Group II:- Dashmool tail matra basti (control group).

Determination of Dose:-in both groups basti treatment given from 6th day of menstrual cycle till 12th day of menstrual cycle for 2 consecutive cycle.
Group-I :- in this group patients were given anuvasana basti with 120 ml murchita tila taila on 1st and 7th day, and 250 ml Dashamoola siddha ksheera basti from 2nd to 6th day on 2 consecutive cycles.
Group II:- in this group patients were given 60 ml Dashamoola taila matra basti from 1st to 7th day for 2 consecutive cycles.
Duration of trial:- Two menstrual cycles.

Follow up:- Since patients get their symptoms mainly on first day of menstruation, hence we planned follow up on first day of menstruation after completion of first cycle of Basti
FW 1- first day of menstruation (after first cycle of basti cikitsa)
FW2- first day of menstruation (after 2nd cycle of basti chikitsa)
RF1- recurrence follow up 1 (first day of menstruation 3rd month)
RF2- recurrence follow up 2 (first day of menstruation 4th month)

These recurrence follow up are for assessing any recurrence after completion of treatment.

Protocol during trial.

i. Fulfilment of inclusion criteria.
ii. Consent of patient after making her aware of the merits/demerits of the trial.
iii. Registration of the patient.
iv. Investigations done before inclusion into the trial.
v. Follow up of the patient every month for assessment and clinical evaluation.
vi. Data so available and deducted clinically was statistically analysed.

Criteria of inclusion.

i. Patient with classical signs and symptoms of Udavarta Yonivyapad
ii. Indicated for basti karma.
iii. Patient of age group between 15 to 40yr.
iv. Criteria of exclusion:-
v. Patient not willing for trial.
vii. Patients below 12 years and above 40 years.
ix. Patients with intrauterine contraceptive devices.
x. Menorrhagia
xi. Any anatomic or uterine pathology – fibroid, adenomyosis,

Laboratory investigations.

Haematological : Hb, TLC, DLC, ESR, WBC, TLC
Urine : Routine and microscopic examination.

Sonography (U.S.G.)

Method of drug intervention (Table No. 1)
CRITERIA FOR ASSESSMENT

Subjective: - Grading and scoring system was adopted for assessing each symptom before the commencement and after completion of trial.

Primary Symptoms 1. Ruja (pain) (Table no. 2) 2. Kalavadhi (Table no. 3) 3. Praseka (nausea) (Table no. 4) Shrama (fatigue) (Table no. 5)

Overall results
Markedly improved :- ≥ 75%
Moderately improved :- 51%- 75%,
Improved :- 25%- 50%,
Unimproved :- <25%

OBSERVATION AND RESULTS

In the present study, 60 patients were studied. The results have been presented after taking into account every aspect of the history of the patient. The incidence of age reveals that maximum patients were in age group 21–25 yrs with 33% (Graph no. 1). 51.66 % of the patients were unmarried and 48.33 % were married (Graph no.2). Maximum number of patients belongs to lower middle class (66.66) (Graph no.3). Total 70% of patients were of mixed diet (Graph no.4). Total 70 % of the patients in this study had menarche at the age of 11-13(Graph no.5). 85% of patients had spasmodic pain (Graph no.6). 78% patients experienced menstrual pain as in primary dysmenorrhoea, pain is experienced a few hours before and after the onset of menstruation and is relieved within 48-72 hours of onset. 75% had pain during menstruation (Graph No.7).

Effect of therapies was assessed in the patients on the basis of changes observed in the features on assessment criteria and statistical analysis was done. Pain :- Gr. I :- Mean before treatment was 2.63 which reduced to 1 after treatment. Relief was 61.9% which is statistically significant at p<0.05(t=8.428). Gr. II :- Mean score before treatment was 2.8 which reduced to 0.680 after treatment. Relief was 75.71%, which was significant at p<0.05 (t=12.730). Group I showed 19.9% more relief than Group I, but there is statistically no significant difference between the two groups at p>0.05 (t=0.0063). Duration of pain:- Gr. I :- The initial mean score 1.73 before treatment and was reduced to 0.533 after treatment. Relief was 61.19% which is highly significant at p<0.05 (t=4.208). Gr. II :- Mean score before treatment was 2.73,which reduced to 1.566 after treatment. Relief was 42%, which is significant at
p<0.05 (t=4.4823). Group I showed 16.5% more relief than group II, but there was no significant difference in two groups at p>0.05 (t=0.00962). Nausea:- Gr. I :- The mean score before treatment was 1.266, which was reduced to 0.333 after treatment. Relief was 74%, which is highly significant at p<0.05 (t=4.163). Gr. II :- The mean score before treatment was 1.9, which was reduced to 0.9 after treatment. Relief was 52.63%, which is statistically not significant at p<0.05 (t= 1.263). There was statistically no significant difference between two groups at p>0.05 (t=0.00745).Group I showed 16.44% more relief than group II. Fatigue :- Gr. I :- The mean score before treatment was 1.2, which was reduced to 0.266 after treatment. Relief was 77.83%, which is significant at p=0.05 (t=5.0292). Gr. II :- The mean score before treatment was 1.233, which was reduced to 0.667 after treatment. Relief was 45.6% which is significant at p<0.05 (t=4.163).Group I showed 32.23% more relief than group II which is not significant statistically at p>0.05 (t=0.4996).

Patient who received Dashamoola siddha ksheera basti cured 16.33 % patients after 2 cycles of basti, 53% got maximum improved, 16% got moderate improvement and 13.33% got mild improvement(Graph no.8). Patients who received Dashamoola siddha Taila basti cured 10% of total patients, 30 % maximum improvement, 43.33% got moderate improvement, 10 % got mild improvement and there were 2 patients who didn't get any improvement(Graph no 9).

**DISCUSSION**

General management of apanavata dusti mentioned by Charaka is for anulomana of apana vata, basthi can play a significant role. On the basis of this concept may be charaka have mentioned, Basti is considered as paramaushadha for the management of vata.[4] It is the treatment modality indicated in all types of yonivyapad. Since we did used basti for both the study groups, both groups showed significant results in Udavarta yonivyapada, and Dashamoola is best vatakaphahara drug, so it increased the efficacy in both the groups. Because of jivaniya, bruhaniya property of ksheera, and even ksheera is tridosha hara, we got better results in group 1, where we used Dashamoola siddha ksheera basti. Probable mode of action of basti according to modern science, the gastrointestinal tract has a nervous system called the enteric nervous system. It lies entirely in the wall of gut, beginning in the esophagus and extending all the way to anus. The sigmoidal, rectal and anal regions of large intestine are considerably better supplied with parasympathetic fibers than other portions, they are mainly stimulatory in action and function especially in the defecation reflexes.[5]
Absorption through the gastrointestinal mucosa occurs by active transport and by diffusion. The rectum has rich blood and lymph supply and the drugs can cross the rectal mucosa like other lipid membranes. Thus, unionized and lipid soluble substances readily absorbed from the rectal mucosa. The active principles of basti drugs may also be absorbed because they are mainly water soluble. It may be considered that niruha basti is hyper osmotic which facilitates absorption of morbid factors into the solution. Gut is a sensory organ consisting neural, immune & sensory detectors and cells, and provide direct input to local (intramural) regulatory systems and information that passes to CNS or other organs. Basti can stimulate the ENS (Enteric nervous system) and thus, it can influence to central nervous system and all bodily organs. Basti can act on the neurohumoral system of body by stimulating CNS through ENS, by restoring the physiology at molecular level and it can also act on the inflammatory substances like prostaglandins & vasopressin etc. by its various contents (after their absorption) which have anti-inflammatory property after getting absorbed. Visceral afferent stimulation results in activation of the hypothalamus pituitary adrenal axis and ANS, involving the release of neurotransmitters and hormones. Thus, it normalizes the neuro-transmitters, hormonal & neural pathways and relieves all the symptom complex emerged as a result of neuro-hormonal imbalances in the patients of dysmenorrhea. Basti is having two actions, expelling the doshas and nourishing the body. First, potency of the drugs gets absorbed to have its systemic action. Its second major action is related with the facilitation of excretion of morbid substances responsible for the disease process into the colon, from where they are evacuated. On the other hand, Dashamoola is having Analgesic, Anti-inflammatory properties according to various researches and the chemical constituents of most of Dashamoola drugs contain steroids like sitosterol (Sitosterol is a plant substance which is similar to cholesterol. Sitosterol bind to the prostate to help reduce swelling (inflammation)). All these may work together and helps in reducing the pain. The latest concept of system biology believed that all the organs are interconnected at molecular level. This makes clearer how Basti can act on the organ systems. Any molecular incident is transformed at cellular level, then tissue level and ultimately at organ level. Thus, whatever the effects of basti are on Gastro-intestinal system, it will definitely affect another system and helps to get the bodily internal homeostasis. Probable mode of action according to ayurved: Udavartaa Yonivyapad is primarily caused due to Vata dosha vitiation, specially Apana vayu. This vitiated Apana vayu produces symptoms at lower abdomen & back. Snehana and Swedana as poorvakarma is carried out before many panchakarma procedures. Both of these karmas cause Vata anulomana & relaxation of abdominal muscles, due to which dharana (retention) of Basti is
properly takes place. Also, swedana helps in pain reduction. Though Basti is administered in
the pakvashaya, it reaches the whole body and draws the Dosha / Mala (morbid matter) from
all over the body by the virtue of its Virya. This Basti process leads to Vata anulomana &
normalizes the condition of vimarga gamana of Apana vayu. Dashamoola by virtue of its
Swadu, Tikta, Kashaya rasa, Ushna virya is a potent Vatashamaka drug. Also, go-dugdha acts
as Vata anulomaka & Vata shamaka. So, in synergism both the drugs cause samprapti bhanga
of Udavartaa Yonivyapad. No any side effect of Basti is observed.

CONCLUSION

Udavarta Yoni-Vyapada can be compared with primary dysmenorrhoea. Pre-menstrual
syndrome can be correlated with Ritu-vyatita Kala. 50% menstruating women suffer from
dysmenorrhoea, 10% are incapacitated for 1-3 days each month. Only 5-8% seek medical
advice. 75-95% women suffer from features of premenstrual syndrome. The ingredients of
formulation are easily available, cheap, easy to prepare and use. Thus, the drug is used in the
trial. Both method of drug administration are acceptable and found effective. Trial drug
Dashmoola siddha ksheera Basti was given in group I and the results were highly statistically
significant in Pain intensity, duration of pain, nausea and fatigue with p <0.001. GROUP II
Dashmoola taila matra Basti was given in group II. Results in group II were highly significant
for pain intensity, duration of pain, nausea and fatigue p<0.001. Inter-group comparison
shows both group showed improvement if symptoms like pain, duration of pain, nausea and
fatigue. Although therapies in both groups were equally effective and satisfactory, group I
had 19.9 % more relief in pain, 16.5 % more relief in Duration, 16.44 % more relief in nausea
and 32.23 % more relief in fatigue as compared to group II. Group I:- 5 patients were cured,
16 patients got maximum improvement, 5 patients got moderate improvement and 4 patients
were mild improved. Group II: - 3 patients were cured, 9 patients got maximum improvement,
13 patients got moderate improvement and 3 patients were mild improved. 2 patients not
improved (graph no.10). From the above discussion, we can say that both therapies had
statistically highly significant results and were very effective. In comparison of both
therapies, trail drug Dashmoola Ksheer Basti in group I was more effective than controlled
Dashmoola Tail Matra Basti in group II, in all four cardinal symptoms of Udavarta.

Table No. 1

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<tr>
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<td>Intervention</td>
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3. Route: Through anus
4. Dose: 250 mL
5. Treatment Duration: 7 days
6. Follow up: 1st day of next menstruation
7. Treatment Follow up: 6th Day of next menstruation

Table No. 2

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</tr>
<tr>
<td>3</td>
<td>Menstruation is painful –routine work will be affected.</td>
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</tr>
<tr>
<td>4</td>
<td>Menstruation is severe painful-missed her routine work.</td>
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<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Pain persists for 12-24 hr</td>
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</tr>
<tr>
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<td>2-3 times/day</td>
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</tr>
<tr>
<td>3</td>
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<tr>
<td>4</td>
<td>&gt;5 times/day</td>
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Table no. 5

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<td>2</td>
<td>Fatigue induced by having extra work in addition to routine work</td>
<td>1</td>
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<tr>
<td>3</td>
<td>Fatigue by normal daily routine.</td>
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</tr>
<tr>
<td>4</td>
<td>Severe fatigue even without work.</td>
<td>3</td>
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</tbody>
</table>
Graph no. 1.

Graph no. 2

Graph no. 3
REFERENCES


2. Dorland’s illustrated Medical Dictionary.

