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COMPARATIVE CLINICAL STUDY OF KUMARIKA VATI AND MEFENAMIC ACID IN UDAVARTINI YONIVYAPAD (SPASMODIC DYSMENORRHEA)

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ABSTRACT

Menstruation is a normal physiological process when it is accompanied by pain is called Dysmenorrhea. It is one of the commonest gynaecological complaints. Dysmenorrhea is painful menstruation, which is the *pratyatma lax-ana* of *Udavartini yoni vyapad* i.e., spasmodic dysmenorrhea. It is a common cause of distress in women. Here the main reason for pain is the vitiation of *vata dosha (apana vata), viloma/pratiloma gati* leading to *vedna yukta artava munchan* and to manage this *pratiloma vata*, one needs to use drugs that have *anulomana* properties and *vedna samak*. *Kumarika vati* is used as *vedana shamaka aushadha* to give symptomatic relief. Hence the topic was selected for the study. Objectives: To compare the effect of *Kumarika Vati* with Mefenamic Acid in the management of *Udavartini Yonivyapad* (Spasmodic Dysmenorrhea). Materials & Methods: 20 patients of Group A **were** treated with *Kumarika Vati*, a dose of 250mg BD 5 days before menstruation & 5 days during menstruation. 20 patients of Group B **were** treated with a Mefenamic Acid dose of 250mg BD for 3 days during menstruation. Result: The data of both groups were collected according to the objective and subjective parameters and analyzed using the most appropriate statistical test (repeated measures of ANOVA test and Mann –Whitney U test). The efficacy is statically significant within the group at $P<0.001$ and statistically insignificant between the group at

P>0.05 among all the parameters. Interpretation and Conclusion: On comparison of *Kumarika Vati* with Mefenamic acid both have equal effectiveness in relieving the pain intensity, pain duration, site of pain, nature of pain and associated complaints.

Keywords: *Udavartini Yoni Vyapad, Dysmenorrhea, Kumarika Vati,* Mefenamic Acid.

INTRODUCTION

Ayurveda has always understood the importance of women's health and its role in society which is very clearly delineated in *Charaka Samhita*. In Ayurveda, a healthy woman is not only seen as a prerequisite for producing a healthy generation but also seen as a driver of social, economic and spiritual change in terms of *Dharma, Artha, Kama and Moksha*.[1] In this highly competitive life, women's health suffers a lot owing to the social expectation from them, limited access to health services, limited health literacy, and reproductive burden, physical, mental and financial stresses, making them more susceptible to various gynaecological disorders. Among them, dysmenorrhea is one such commonly reported menstrual disorder. According to WHO, Dysmenorrhea is the most important cause of chronic pelvic pain, and the disease burden of dysmenorrhea is estimated to be greater than any other gynaecological morbidity, in women of reproductive period regardless of age, nationality and economic status. The epidemiology of primary dysmenorrhea is 25 to 90% among women and adolescents respectably. Studies from India reported the prevalence range between 50 to 87.8 %. [2] Ayurveda must be credited with the first health science which defined the parameters of menstrual health and identified the menstrual disorders along with their aetiology, etiopathogenesis and clinical features in *Vimshati Yoni Vyapad*. *Udavartini Yoni Vyapad* is characterized *vedana yukta Artava munchan* a complaint with spasms and contraction. The *vedana yukta Artava munchan*, this condition can be easily identified with the clinical entity of dysmenorrheal in modern gynaecological parlance. Clinically it is defined as the painful menstruation of sufficient magnitude to incapacitate day to day activities of a woman.[3] The clinical picture of the dysmenorrheal include recurrent crampy suprapubic pain which may radiate to the back and thighs occurring just before or during menses and lasting two or three days, pain may radiate into the lower back and thighs and may be associated with nausea, fatigue, bloating and general malaise, nausea vomiting and diarrhoea.[4] In the present scenario, due to globalization, industrialization, and urbanization there is a rapid transition of a traditional holistic healthy lifestyle to the westernized lifestyle which promotes dietary indiscretion and stressful living leading to a higher prevalence rate of Dysmenorrhea in young adults, especially in 14-30 years of age. Additionally, the present generation of women is giving away the traditional menstrual health promotion practice of *Rajaswala Paricharya* leading to a higher incidence of menstrual disorders. Conventional western medicine offers the use of $NSAID_S$ and Ovulation inhibition with Oral contraceptive pills for the management of these disorders which come with several side effects and play havoc with the women's reproductive health. Ayurveda on the other hand can help in the management of dysmenorrhea more safely and holistically. Many research studies across the globe have identified several plant-based medicines which have analgesic, spasmolytic and anti-inflammatory effects. *Kumarika vati* is one such formulation explained in *Bhaisajya Ratnavali* in *Yoni vyapad chikitsa*. Hence to rule out the efficacy of *Kumarika vati* in *Udavartini Yoni Vyapad,*[5] this study was undertaken.

Material and Method: The present study was a randomized open-labelled control clinical study with *Kumarika vati* and Mefenamic acid.

Collection and Preparation of Drug: The ingredient of *Kumarika vati* were obtained from authentic sources and was authenticated by the botanist from the department of Dravyaguna and Rasashastra SJGAMC Koppal and Research centre. Vati of 250

mg was prepared in the Laboratory of Dravyaguna and Rasashastra SJGAMC Koppal and it was dried in shade & stored in a glass container. Tab Mefenamic Acid 250mg (Meftal 250) were purchased from the local Market.

Table 1: Ingredients of *Kumarika Vati*

Sl. No	Sanskrit Name	Part Used	Form	Quantity
1	*Kumari*	*Aloveraghana*	Coarse Powder	50gm
2	*Ahiphena*	*Bija(khasakhas)*	Coarse Powder	50gm
3	*Agastya twak*	*Twak*	Coarse Powder	50gm
4	*Kasis*	*Bhasma*	Powder	50gm
5	*Vanga*	*Bhasma*	Powder	50gm

Source of Data:

Literary Source: All Ayurvedic texts, contemporary Ayurvedic literature, articles and internet sources about the disease and drug were reviewed and documented for the study.

Sample Source: 40 subjects fulfilling the diagnostic criteria concerning age (between age group 14-30 years) irrespective of their religion, caste, race, socio-economic status was taken from the institution, diagnosed by the Department of Prasuti Tantra and Stree Roga at S.J.G Ayurvedic Medical College & Hospital, PG Studies & Research Centre, Koppal, India.

Study Method: It is an open level comparative clinical study 14–the 30-year age group with an assessment before and after clinical study.

Diagnostic Criteria:

- Patients having painful menstruation.
- Patients between the ages of 14 to 30.
- Patients have regular menstrual cycles.

Inclusion Criteria:

- Patients between the age group of 14 to 30.
- Patients complaining painful menstruation.
- Patients have a regular menstrual cycle.
- Both married and unmarried.

Exclusion Criteria:

- Patient with fibroid uterus, malignancy, uterine polyps, PID, endometriosis, IUCD etc.
- Disease-related to the urogenital system.
- Patient with systemic disorders like DM, HTN, TUBERCULOSIS.
- Lactating mother.
- Patient on hormonal therapy OCP's.
- Diagnosed case of congenital anomaly of the uterus.

Assessment Criteria:

- Pain Intensity
- Pain Duration
- Site of Pain
- Nature of Pain
- Menstrual Flow Duration
- Associated Complaints

Research Design & Intervention:

- Forty subjects who fulfilled criteria were selected and randomized into two equal –Group A and Group B
- The nature of the study was explained to each subject in detail and written consent was taken.

Group A [Trial Group *Kumarika Vati*] -20 patients were treated with *Kumarika Vati*. 250mg of *Kumarika vati* was given 5 days before menstruation and 5 days during the menstruation in the dose of 1 BD for Two cycles.

Group B [Control Group Mefenamic Acid]-20 patients were treated with Mefenamic acid 250 mg (Tab Meftal 250) one tab BD for 3 days during menstruation for two cycles.

Study Duration: - 3 cycles.

Treatment period: -2 cycles.

Follow Up: During treatment -1st day each cycle up to 2 consecutive menstrual cycles. 1st day of next consecutive cycle after treatment.

Assessment: Visual analogue scale (VAS) for pain: The Visual analogue scale for pain is a straight line with one end meaning no pain and the other end

meaning the worst pain imaginable. Here scores are recorded on a 10 cm horizontal line to indicate their pain intensity, with 0 indicating "no pain" and 10 indicating the "worst pain".[6]

Figure 1: Showing VAS

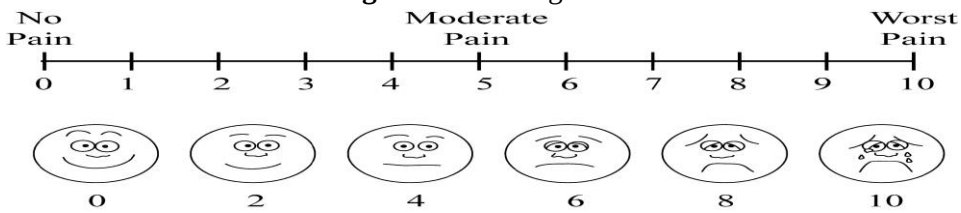

Table 2: Assessment criteria with grading:

Assessment criteria	Grade 0	Grade 1	Grade 2	Grade 3
1. Intensity of Pain	0(No Pain)	1-3(Mild Pain)	4-6(Moderate Pain)	7-10(Severe Pain)
2. Duration of Pain	No pain	Pain continues for up to 24 hrs.	Pain continues for 24 to <48 hrs.	Pain continues for 48 hrs. to <72hrs.
3. Site of Pain (Lower abdomen pain, Back pain, pain radiating to the thigh	No pain	Presence of lower abdomen pain	Presence of lower abdomen pain and back pain.	Presence of lower abdomen pain and back pain and pain radiating to the thigh
4. Nature of Pain	No pain	Occasional pain	Intermittent pain	Continuous pain
5. Menstrual flow duration	3-4 days	5-6 days	7-8 days	More than 8 days
6. Associated complaints	No complaints	1-3 complaints		

Overall Assessment: The total effect of the therapy was assessed considering the overall improvement in signs and symptoms.

Marked Improvement-65% (13 patients) in Group A and 50% (10 Patients) in Group B relief in signs and symptoms.

Moderate Improvement-30 % (6 patients) in Group A and 40% (8 patients) in Group B relief in signs and symptoms.

Mild Improvement -5 % (1 patient) in Group A and 10% (2 patients) in Group B relief in signs and symptoms.

Statistical analysis: The data generated was Statistically Analyzed by using Anova Test within the Group and the Mann-Whitney U test between the groups. Where conceded at the level of $p<0.001$as highly significant, $p<0.05$ as significant and $p>0.05$ was taken as statistically insignificant to carry out the results.

Results:

Table 3: Showing Overall Result of Group A & B after Treatment

Overall Result after Treatment							
Parameters	**Group A**			**Group B**			**Comparative**
	Mean	**±SD**	**P-Value**	**Mean**	**±SD**	**P**	**P-Value**
Pain Intensity	0.80	0.523	<0.001	0.65	0.489	<0.001	>0.05
Pain Duration	0.75	0.444	<0.001	0.65	0.489	<0.001	>0.05
Site of Pain	0.75	0.444	<0.001	0.75	0.639	<0.001	>0.05
Nature of Pain	0.80	0.523	<0.001	0.70	0.571	<0.001	>0.05
Menstrual flow Duration	0.35	0.489	<0.001	0.50	0.607	<0.001	>0.05
Changes In Associated Complaints	0.40	0.503	<0.001	0.45	0.510	<0.001	>0.05

Table 4: Showing Overall Result of Group A & B after Follow- Up

Overall Result after Follow-Up							
Parameters	**Group A**			**Group B**			**Comparative**
	Mean	**±SD**	**P-Value**	**Mean**	**±SD**	**P**	**P-Value**
Pain Intensity	0.35	0.489	<0.001	0.50	0.513	<0.001	>0.05
Pain Duration	0.35	0.489	<0.001	0.50	0.513	<0.001	>0.05
Site of Pain	0.35	0.489	<0.001	0.50	0.513	<0.001	>0.05
Nature of Pain	0.35	0.489	<0.001	0.50	0.513	<0.001	>0.05
Menstrual flow Duration	0.25	0.444	<0.001	0.40	0.503	<0.001	>0.05
Changes In Associated Complaints	0.25	0.444	<0.001	0.35	0.489	<0.001	>0.05

DISCUSSION

Discussion on the selection of Problem

Dysmenorrhea has high a highly variable prevalence ranging from 45 to 93% of women of reproductive age.[7] As menstrual pain is considered a normal part of the menstrual cycle and generally tolerated, and women do not report it. The available treatment modalities for the management of Dysmenorrhea include non-steroidal anti-inflammatory drugs, Oral contraceptive agents and progestins with limited success in combating the disorder completely. It is therefore needed of the hour to develop an Ayurvedic treatment modality that can effectively control and prevent the sign and symptoms, complications associated with Dysmenorrhea along with optimizing women health. The ayurvedic approach differs from the conventional medical approach which targets only pain and sees ovulation as a cause of the pain. Ayurveda addresses the subtle and holistic mechanisms of digestion, metabolism, formation of the menstrual fluid and process of its expulsion which all are interconnected and can create an inflammatory environment in which pain is manifested. Thus, the focus of Ayurvedic management of Dysmenorrhea is to correct *Agni*, neutralization of *Ama* leading to the formation of *Shuddha Artava* which is easy to be expelled from the unobstructed channels by the coordinated activity of *Vayu.*

Discussion on Drug Review

Mode of Action of *Kumarika Vati*: *Kumarika vati* contains *Kumari (Musbbar), Ahifena (Khasakhasa), Agastya twak, Kasis bhasm, Vanga bhasm.*

Rasa Panchaka: *Rasa- Tikta, Kashaya, Madhura, Amla Rasa. Guna- Laghu, Ruksha, Snigdha, Guru. Virya*-most of the drugs have *Ushna Virya Vipaka*-most of the drugs have *katu vipak.*

It is having the property of *Agnivardhaka* because of *tikta rasa, ushna virya* and *katu Vipak*. These properties improve digestion as their *Agnidipana* leads to *uttarottara dahtu poshana* whereby *aartava* being *updhatu* of *rasa* is optimally formed. *Udavartini yonivyapad* is because of arrhythmic uterine contraction and upward movement of *artava* and *artava munchana* is painful, because of this *Kumarika vati* having *ushna virya, katu vipaka* makes the clots liquefied and by this expulsion of *artava* is painless. *Ushna virya* is having *Vata Kapha hara, raktavardhaka* and *Agnivardhaka* properties.[8, 9]

Individual Properties of Drug:

Kumari (musbbar) has *Katu rasa, tikshna, laghu, ruksha guna, ushna virya, katu vipaka* and *karma-kapha vata samaka*. It contains anthraquinones and related compounds such as barbaloin and aloe-emodin in sufficient quantities to act as false substrate inhibitors blocking prostaglandin synthesis as they have a similar chemical structure to prostaglandin substrates.[8]

Ahiphena Beeja (Khashkhash) due to the ethical issue of the availability of *Ahiphen, Khaskhas* was taken for preparation of *Kumarika Vati*. It also has *tikta, kashaya rasa, laghu, ruksha guna, Vipaka- katu, Virya- Ushna, kapha vata samaka* and analgesic properties.[10]

Agastya Twak has *Tikta rasa, Guna-ruksha, laghu, Vipak-Katu, Virya- sheeta. Tikta rasa* has the property of *lekhana, kanta sodhana*. It helps to reverse the pathophysiology of *udavartini yoni vyapad* as it is

having the properties of analgesic and anti-inflammatory. [8, 9]

Kasis bhasma has *Vatakapha samaka, Tikta, Amla, Kashaya rasa, katu vipaka, Ushna virya and Artava-janana* properties. It is having a property of *Rakta Dhatu Vriddhi* which improves the uterine blood circulation (reduced blood circulation is a cause for dysmenorrheal).[11]

Vanga bhasma has *Tikta, kashaya rasa, ruksha guna*. *Tikta rasa* has property of *deepana, pachana. Ruksha guna* normalizes the *kapha. Vangabhasma* has *rasayana* properties that give strength to uterine muscles by decreasing pain during dysmenorrhea.[12] In *Kumarika vati* most of drugs have *ushna veerya, katu vipaka, tikta kashaya rasa, ruksha guna. Ruksha guna* normalizes the *kapha, tikta rasa* of drug clear the *shrotovarodha. Katuvipaka* and *ushna virya* pacify the *vata* and it has *vatanulomana* property which helps in normalizing the function of *Apanvayu.* In *udavartini* there is *urdhvagamana* of *rajas.* Normal downward movement of *rajas* is obstructed, and it moves in the reverse direction. *Udavartha yonivyapad* means painful menstruation in which *yoni* discharges frothy menstrual blood with difficulty. Relief of pain is obtained immediately after the proper discharge of menstrual flow. The whole mechanism depends upon the proper functioning of *Apana* and *Vyana vayu* where in *apana vayu* is responsible for *Raja pravritti* while *Vyana Vayu* is accountable for blood circulation. This *Kumarika vati* helps to normalize the *vata* and *kapha* which is responsible for *udavartini yoni vyapad.*

Mefenamic Acid: It is an analgesic, anti-pyretic and weaker anti-inflammatory drug which inhibits COX as well as antagonizes certain actions of PG's. This is an anthranilic acid derivative useful in chronic and dull aching pains. **Mechanism of action:**

Involvement of PG_S in dysmenorrheal has been Cleary demonstrated level of PG_S in menstrual flow, endometrial biopsy, and that of PGF_{2alpha} metabolite in circulation are raised in dysmenorrhoeic women. Intermittent ischemia of the myometrium is probably responsible for menstrual cramps. Mefenamic acid lower uterine PG levels-afford excellent relief in 60-70% and partial relief in remaining. Ancillary symptoms of headache, muscle ache and nausea are also relieved. Excess flow may be normalized.[13]

Discussion on Results

Discussion on Pain Intensity

Within the group discussion on the Pain Intensity parameter:

After treatment in group A, the mean value reduced from 2.05 to 0.80, which means the pain intensity was decreased by 61%, wherein in group B it reduced from 2.20 to 0.65, which means the pain intensity decreased by 70.5%. After following up in group A, the mean value reduced from 2.05 to 0.35, which means the pain intensity decreased by 82.9%, whereas in group B, it was reduced from 2.20 to 0.50, which means the pain intensity was decreased by 77.3%.

Interpretation- This shows there was a decrease in pain intensity after treatment in the group which still decreases till the follow-up.

Between the group discussion on Pain Intensity parameter:

After treatment in group A, the mean value was 0.80, but in group B, it was 0.65, but after follow up the mean value in group A was 0.35 whereas in group B it was 0.50 that result shows an insignificant result at $p>0.05$.

Interpretation- This shows the treatment was highly significant within the groups and insignificant between the groups. It means the treatment was highly potent in both the groups and both are equally potent to reduce pain intensity. But based on Mann Whitney ranks group A is better than group B.

Discussion on Pain Duration

Within the group discussion on the Pain Duration parameter:

After treatment in group A the mean value reduced from 1.30 to 0.75, which means the pain duration was decreased by 42.3%, wherein in group B it reduced from 1.35 to 0.65, which means the pain duration decreased by 51.9%.

After follow up in group A, the mean value reduced from 1.30 to 0.35, which means the pain duration decreased by 73.1%, whereas, in group B, it was re-

duced from 1.35 to 0.50, which means the pain duration was decreased by 63%.

Interpretation- this shows there was a decrease in pain duration after treatment in both groups, which still decreases till the follow-up.

Between the group discussion on Pain Duration parameter:

After treatment in group A, the mean value was 0.75, but in group B it was 0.65, but after follow up the mean value in group A, was 0.35 whereas in group B it was 0.50, that result shows the insignificant result at $p>0.05$.

Interpretation- This shows the treatment was highly significant within the groups and insignificant between the groups. It means the treatment was highly potent in both the groups and both are equally potent to reduce pain duration. But the basis of Mann Whitney ranks group A is better than group B.

Discussion on Site of Pain

Within the group discussion on Site of Pain parameter:

After treatment in group A the mean value reduced from 2.10 to 0.75, which means the site of pain was decreased by 64.3%, wherein in group B, it reduced from 2.25 to 0.75, which means the site of pain decreased by 66.7%.

After follow up in group A the mean value reduced from 2.10 to 0.35, which means the site of pain decreased by 83.3% whereas in group B it was reduced from 2.25 to 0.50, which means the site of pain was decreased by 77.8%.

Interpretation- This shows there was a decrease in the site of pain after the treatment in the group which still decreases till the follow-up.

Between the group discussion on Site of Pain parameter:

After treatment in group A, the mean value was 0.75, but in group B it was 0.75, but after follow up the mean value in group A, was 0.35 whereas in group B it was 0.50 that result shows an insignificant result at $p>0.05$.

Interpretation- This shows, the treatment was highly significant within the groups and insignificant between the groups. It means the treatment was highly potent in both the groups and both are equally potent to reduce the site of pain. But the basis of Mann Whitney ranks group A is better than group B.

Discussion on Nature of Pain

Within the group discussion on the Nature of Pain parameter:

After treatment in group A the mean value reduced from 2.40 to 0.80, which means the nature of pain was decreased by 66.7%, wherein in group B it reduced from 2.45 to 0.70, which means the nature of pain decreased by 71.4%. After follow up in group A the mean value reduced from 2.40 to 0.35, which means the pain duration decreased by 85.4%, whereas in group B it was reduced from 2.45 to 0.50, which means the nature of pain was decreased by 79.6%.

Interpretation- this shows there was a decrease in pain after the treatment in both groups, which still decreases till the follow-up.

Between the group discussion on Nature of Pain parameter: After treatment in group A the mean value was 0.80, but in group B it was 0.70, but after follow up the mean value in group A was 0.35 whereas in group B it was 0.50, that result shows the insignificant result at $p>0.05$.

Interpretation- This shows the treatment was highly significant within the groups and insignificant between the groups. It means the treatment was highly potent in both the groups and both are equally potent to reduce the nature of pain. But the basis of Mann Whitney ranks group A is better than group B.

Discussion on Menstrual Flow Duration

Within the group discussion on Menstrual Flow Duration parameter:

After treatment in group A the mean value reduced from 0.85 to 0.35, which means the menstrual flow duration was decreased by 58.8%, wherein in group B it reduced from 0.80 to 0.50, which means the menstrual flow duration decreased by 37.5%. After follow up in group A the mean value reduced from 0.85 to 0.25, which means the menstrual flow duration decreased by 70.6%, whereas in group B, it was reduced from 0.80 to 0.40, which means the menstrual flow duration was decreased by 50%.

Interpretation- this shows there was a decrease in menstrual flow duration after treatment in both groups, which still decreases till the follow-up.

Between the group discussion on Menstrual Flow Duration parameter:

After treatment in group A, the mean value was 0.35, but in group B it was 0.50, but after follow up the mean value in group A was 0.25 whereas in group B it was 0.40 that result shows an insignificant result at $p>0.05$.

Interpretation- This shows the treatment was highly significant within the groups and insignificant between the groups. It means the treatment was highly potent in both the groups and both are equally potent to reduce menstrual flow duration. But the basis of Mann Whitney ranks group A is better than group B.

Discussion on Associated Complaints

Within the group discussion on Associated Complaints parameter:

After treatment in group A the mean value reduced from 1.00 to 0.40, which means the associated complaints was decreased by 60%, wherein in group B it reduced from 1.00 to 0.45, which means the associated complaints decreased by 55%.

After follow up in group A the mean value reduced from 1.00 to 0.25, which means the associated complaints decrease by 75%, whereas in group B it was reduced from 1.00 to 0.35, which means the associated complaints was decreased by 65%.

Interpretation- this shows there was a decrease in associated complaints after treatment in the group which still decreases till the follow-up.

Between the group discussion on Associated Complaints parameter:

After treatment in group A, the mean value was 0.40 but in group B it was 0.45 but after follow up the mean value in group A was 0.25 whereas in group B it was 0.35 that result shows the insignificant result at $p>0.05$.

Interpretation- This shows the treatment was highly significant within the groups and insignificant between the groups. It means the treatment was highly potent in both the groups and both are equally potent to reduce associated complaints. But the basis of Mann Whitney ranks group A is better than group B.

Special Observation: Some patients complained that after taking *Kumarika Vati* amount of menstrual cycle bleeding and duration of bleeding has reduced as compared to their previous menstrual cycle bleeding. So, this *Kumarika Vati* can take for further study in diseases like *Asrigdara* (DUB)

CONCLUSION

Ayurveda being a holistic medicine offers potential remedies which are proved beyond doubt in solving the problem successfully. *Udavartini yonivyapad* which has been described in our ancient Ayurveda matches all the symptoms of dysmenorrhea. As the Acharya has mentioned pain during menstruation get immediately relived after menstrual blood discharge resembles spasmodic dysmenorrheal. Discharge of clotted blood mentioned by *Indu matches* with a special form of spasmodic dysmenorrheal characterized by the expulsion of big blood clots. According to *Ayurveda, Aartava* or menstruation is a phenomenon, which is controlled and governed by *Vata* and specifically the *Apana vayu*, the subtype of the *Vata dosha*. Due to the suppression of natural urges their vitiation of *Apana Vata* and this vitiated *Apana Vata* moves upward which is against *Prakrut avastha*. This is *Urdhva gamana* of *Rajas* hence it means that *Udavartini* aggravated *Apana vayu* moves in the *Urdhva gati* and they're by this *viloma gati* of *vayu* causes clist or *toda* during *aartava munchna* and the pain subside patients feel comfortable after *Artava munchana.* Acharya Charaka says that during normal menstruation pain should not be present, so the pain during menstruation is abnormal and hence it should be cured. In the present clinical case, the patient's *Agni* is in a depleted condition causing *Dosha* equity, especially *Apana vata*. Here the main treatment plan should be aimed toward correction of *Anuloma gati* of *vata. Kumarika vati* is used 5 days before menstruation as it has *deepan, pachana* properties and 5 days during menstruation has *Vata samak* properties. The results show there is significant within the group there for the drug shows improvement in parameters

before treatment to after follow up and between-group comparison shows insignificant differences in both groups in all parameters.

REFERENCES

1. Bramhanand Tripathi, Charak Samhita, Chaukambha Sansakrit Sansthan, Varanasi, edition 2010, Pg No 78.
2. Nahal Habibi, Mary Soo, Lee Hung, Wan Ying Gan, Rajaji Zulida, Sayyed Morteza Safavi, Prevalence of Primary dysmenorrhea And Factors Associated with Its Intensity Among Undergraduate Student, A Cross-Sectional Study, https//doi.org/10.1016/j.pmn.2015.07.001.
3. DC Datta, Textbook of Gynecology Including contraceptive, Edited by Hiralal Konar, Jaypee Brothers Medical Publishers (P) Limited, New Delhi, 6th Edition 2013, Pg No178.
4. Shashikalakaranth, S R Liya, Prevalence and Risk Factors for Dysmenorrhea Among Nursing Students and Its Impact on Their Quality of life, International Journal of Reproductive, Contraception, Obstetrics and Gynecology, July 2018, Pg No 2661-2667.
5. Ambika Datta Sastri, Bhaisajya Ratnavali, Choukhambha Surabharati Prakashana, Varanashi, Edition 2014, Pg No 370.
6. Www.Medscape.Com.
7. Bernadi M, Lazzeri L, Perelli F, Reis FM, Petraglia F, Dysmenorrhea and related disorders, 2017 Sep 5, 6:1645, Doi:12688/f1000research, PMID:2894448, PMCID: PMC5585876.
8. P V Sharma, Dravyaguna Vijanana, Chaukhambha Bharti Academy, Varanashi, Vol-II, Reprint- 2009, Pg No- 448/290.
9. Prakash L Hegde, Harini A, Dravyaguna Vijanana, Chaukhambha Sanskrit Sansthan, Varanashi, Vol II, Reprint 2017, Pg No-504/ 4.
10. K C Chunekar, Bhavprakash Nigantu, Shri Bhavmishra Commentary, Chaukhambha Bharti Academy, Varanashi, Reprint- 2010, Pg No-140.
11. Acharya Sri Madhva, Ayurveda Prakash, Edited by Gulraj Sharma, Chaukhambha Bharti Academy, Varanashi, Reprint-2017, Pg No-325.
12. Pandit Kashinath Sastrina, Rastarangini, Chaukhambha Bharti Academy, Varanashi, Reprint-1994, Pg No-443.
13. K D Tripathi, Essentials of Medical Pharmacology, Jaypee Brothers Medical Publishers New Delhi, 8th edition Pg No 211, 218.

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