

Clinical Research

Role of *Uttara Vasti* with *Trivrit* and *Lasuna* oil in the management of primary dysmenorrheaShabnam Jahan, N. Sujatha¹, NeelamDepartments of Prasuti Tantra, ¹Kayachikitsa, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India.

Abstract

Dysmenorrhea is one of the most common clinical entities encountered in regular practice by the gynecologists. Dysmenorrhea means painful menstruation. Fifty percent of the women suffer from dysmenorrhea. Primary dysmenorrhea is correlated with *Udavartini yonivyapad* in *Ayurveda*. No successful advances have been made in the line of management till today by western medicine. Therefore, a complete, comprehensive and holistic approach toward its understanding and treatment is the need of the age. In this series, *Uttar Vasti*, a unique *panchakarma* procedure, is studied for its role in *yonivyapads*. A research study was conducted to evaluate the efficacy of *Uttar Vasti* with *Trivrit* and *Lasuna* oil in Primary dysmenorrhea. Thirty-six diagnosed cases of *Udavartini Yonivyapad*, viz., primary (spasmodic) dysmenorrhea, were selected and randomly allocated into two groups. The effect of *Uttar Vasti* was compared with the commonly used non steroidal anti inflammatory drug (control group). *Uttar Vasti* with *Operculina turpethum* (*Trivrit*) and *Allium sativum* (*Lasuna*) oil has shown encouraging results in *Udavartini yonivyapad*. Statistically significant relief was seen in the intensity of pain and the successive cycles were less painful in the treated group as compared to control group. The mode of action can be attributed to anti-inflammatory (*vatahara*), vasodilatory (*ushna virya*) antispasmodic and laxative (*anulomana*) properties of the trial drugs. The present study shows *Uttar Vasti* as a safe and easy technique to treat dysmenorrhea like conditions without any side effects.

Key words: *Lasuna*, primary dysmenorrhea, *Trivrit*, *Udavartini yonivyapad*, *Uttar Vasti*.

Introduction

Dysmenorrhea means painful menstruation which can be correlated with *Udavartini* of *yonivyapad Charaka* or *Udavartaa* of *Susruta*. It occurs in 50% of post-pubescent females. It is of two types: (i) primary dysmenorrhea refers to menstrual pain without pelvic pathology and (ii) secondary dysmenorrhea is defined as painful menses associated with an underlying pathology. Clinical features of primary dysmenorrhea are (i) onset shortly after menarche; (ii) usual duration of 48–72 hours, often starts before or just after the menstrual flow; (iii) cramping or labor like pain; and (iv) often unremarkable pelvic examination findings.^[1] *Udavarta* is explained in *Ayurveda* as a *Nanatmaja Vata vyadhi* by *Charaka* where there is abnormal movement of

vayu in *pakwashaya* (Cha.Su. 20/11). *Udavartini yonivyapad* is characterized by painful menstruation (Su. Utt. 38/9).^[2a] According to *Charaka*, *Rajas* is pushed in upward direction by the aggravated *Apana vayu* due to obstruction in its normal flow (*anuloma gati*) in *pakwashaya*, the chief site of *Apana vayu* being the *pakwashaya* (colon and pelvic organs)^[3a] (Cha.Chi.30/25-26).

Though modern medicine has made an unbelievable progress in understanding “dysmenorrhea”, no new progress has been made in the line of management. Moreover, the principal drugs, i.e., NSAIDS, used have many side effects in sensitive individuals, which restrict their use. An attempt has been made here to treat this condition with Ayurvedic drugs mentioned in Ayurvedic classics.

Aims and objectives

The aims and objectives of this study were

1. to study the concept of *Udavartini yonivyapad* in terms of modern parameters and
2. to evaluate the efficacy of *Uttara Vasti* with *Trivrit* and *Lasuna* oil in “primary dysmenorrhea”.

Address for correspondence: Dr. N. Sujatha, Department of Kayachikitsa, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India.

E-mail: n.dr.sujatha@rediffmail.com

DOI: 10.4103/0974-8520.72405

Materials and Methods

Study population

A total of 36 married young adults with or without issue, diagnosed cases of primary dysmenorrhea, were enrolled from the Department of Prasuti Tantra OPD/IPD of S.S. Hospital, after obtaining informed consent from them. Of them, only 31 cases completed the clinical trial.

Study design

This was a randomized, controlled clinical trial conducted in Department of Prasuti Tantra, after obtaining permission from the Institutional Ethical Review Committee of IMS, BHU, Varanasi.

All the 36 diagnosed cases of primary dysmenorrhea were randomly allocated into two groups. The selected patients had undergone complete general and radiological examinations (USG of abdomen with special attention to pelvic organs) to rule out any gross abnormalities and to confirm the diagnosis.

Grouping

I – Control group (n = 8): Tablet Meftal-Spas twice a day during periods, for 3 days; the sample was less as the Ethical Committee did not approve of equal or large sampling.

II – Treated group (n = 28): Uttar Vasti was administered for 3 days from the 9th day of menses for three menstrual cycles.

Drop outs

Two cases in control group did not turn up for third follow-up, while three cases in Uttar Vasti group dropped out in the third follow-up as they refused Vasti procedure.

Inclusion criteria

1. Married, nulli or multiparous women, with complaint of painful menstruation, but without pelvic pathology
2. Women in the age group 20–35 years

Exclusion criteria

1. Unmarried women
2. Women suffering from systemic diseases, with organic lesion (benign or malignant growth of reproductive tract), any degree of prolapsed and hypoplastic uterus, polycystic ovarian disease (PCOD), any congenital abnormality of genital tract

Selection of trial drug

“Trivrit Sukhavirechananam Sreshtam” (Cha.S.Su. 25/40) Charaka had explained the use of Trivrit in the treatment of Udavartini yonivyapad, along with different other drugs (C.Chi. 30/110-111). It is a laxative and removes the obstruction and normalizes Apana Vata in pakwashaya. Lasuna is a vatahara drug with potential anti-inflammatory properties. Uttar Vasti is the unique panchakarma procedure specially indicated for Yonivyapad (S. Utt.38/21).

Follow-up

Follow-up was done once in a month for 3 months. Not any specific medication was advised during the follow-ups as pain was present only during menstruation.

Assessment criteria

1. Symptomatic relief in pain (lower abdomen, thigh, back)

2. Decrease in the intensity of pain
3. Decrease in the duration of pain
4. Relief in associated symptoms

Response was graded as (i) improved: relief was found in at least three of the above criteria; (ii) unchanged: if no change was observed.

Procedure of Uttar Vasti

Instruments required

Sim's posterior vaginal wall speculum, anterior vaginal wall retractor, vulsellum, uterine sound, sponge holding forceps, disposable syringe 5 ml, rubber catheter No. 3 were required.

Purva karma

Patients were called on 9th day of menstruation, with a light diet in the morning hours. Before giving uttarbasti, blood pressure (BP), temperature and pulse were carefully recorded and noted. Abhyanga was done with Bala oil for 30 minutes in lower abdomen, loin, groin, thigh, buttocks and back, followed by hot water fomentation for 10 minutes.

Pradhana karma (procedure of uttarvasti)

The patient was placed in lithotomy position. Genital parts were cleaned with Savlon solution. Per vaginal examination was done to find out the size, shape and position of the uterus. Sim's speculum with anterior vaginal wall retractor was applied, cervix visualized and properly held with vulsellum and uterine sound passed. Then, with the help of (5 ml) syringe and No. 3 rubber catheter, 5 ml of autoclaved trial drug was introduced in the uterus slowly over 5–10 minutes.

Pashchat karma

The patient was observed for 1–2 hours for any complaint of pain, bleeding, or discomfort, and also for changes in the pulse, BP, temperature, etc.

Statistical analysis

Students “t” test was applied to assess the significance of the assessment criteria while repeated measure analysis of variance (ANOVA) was used to assess the significance in different follow-ups.

Results and Observations

The results are shown in Tables 1–6.

Discussion

Primary dysmenorrhea in one of the common complaints seen in 50% of post-pubescent females. Current evidence suggests that the pathogenesis of primary dysmenorrhea is due to PGF₂ alpha, a potent myometrial stimulant and vasoconstrictor in the secretory endometrium^[4]. The Udavartini yonivyapad had been described by various authors as the following: Udavartini by Charaka, udavarta by Sushruta, Madhav and Vagbhatta. According to Charaka, due to vegavarodha (natural urges), the Apana Vata is aggravated and moves in reverse direction and fills the entire Yoni. This Apana vayu pushes the Raja upward and causes pain and discomfort in menstruation. The lady feels comfortable after discharging the menstrual blood. Vata Dosha is the chief culprit and is vitiated due to faulty dietary

Table 1: Scoring of intensity of pain and duration of pain during menstrual period

Variable	Mild (+)	Moderate (++)	Severe (+++)
Intensity of pain	No need to take any drug	When pain interferes in the physical activity of the individual, there is need for rest or analgesics some times	Always in need of rest and analgesics
Duration	Pain occurs only for less than 8 hours with menses	Pain persists for 12–24 hours with menses	Pain persists for >24 hours with menses with associated symptoms

Table 2: Incidence of age, gravidity and parity

Variable	Mean	±SD
Age	28.61	5.00
Gravidity	1.58	2.13
Parity	1.19	1.47

Table 3: Incidence of occupation and socioeconomic status in total cases

Occupation	No. of cases (35)
Housewife	30
Service	5
Socioeconomic status	
Upper	3
Middle	19
Lower	13

Table 4: Findings of per vaginum examination in total cases

Cervix (size)	
Normal	28
Hypertrophied	4
Subnormal	3
Cervix (consistency)	
Firm	29
Hard	1
Soft	5
Uterus	
Direction	
Antiverted	10
Retroverted	25
Size	
Normal	18
Parous	17
Mobility	
Mobile	31
Restricted	4
Fornices	
Nonpalpable	34
Palpable	1

habits and lifestyle and suppression of natural urges by the young adults.^[3a] Treatment is aimed at pacifying the aggravated *Vata* and correction of the direction of its normal flow. According to *Sushruta* in *Udavarta*, fresh juice of *Rasona* should be taken in the morning.^[2b] *Lasuna* has *Katu, tikta* rasas, *Snigdha, Guru* and *picchilla guna*, by which it acts as an antispasmodic, hypolipidemic^[5] and has anti-inflammatory properties to pacify

Vata.^[6b] Moreover, *Rasona* has also emmenagogue property by which it normalizes the menstrual blood flow. *Trivrit* is a laxative and has *vatanulomaka* and *sukha rechaka* properties.^[3b] *Tila taila* is best media among *vatahara* oils due to its *Guru, Snigdha* and *yogavahi* properties. It is considered as the best agent to pacify vitiated *vayu*. Hence, *uttarbasti* with *Rasona* and *Trivrit* oil was selected for this study.

The mean age of the registered patients was 28.61 years. Nulligravida and nulliparous patients formed the majority of the total cases registered. These findings show that dysmenorrhea is more common in early reproductive age of nulliparous women and pregnancy relieves the complaint. In India, marriage brings upon a lot of stress to a woman. After marriage, a woman frequently encounters many challenges and responsibilities and there is a sudden change in her lifestyle. All these produce fear and stress. Stress leads to anxiety and depression, which may manifest as pain. Multiparous women are less likely to suffer from dysmenorrhea because pregnancy and childbirth improves the vascularity and growth of uterine muscles and causes less sensitization of nerve endings that carry pain sensation in uterine and cervix musculature after vaginal delivery.

Most of the women suffering from painful menstruation were housewives (90.32%) and hailed from middle class families (54.83%). Housewives are always busy in household work and they always have anxiety and tension of over work. This anxiety and tension results in hormonal imbalance in women, which is the one of the causative factors of painful menstruation, as progesterone stimulates myometrial contractions of the smooth muscles of the cervix and causes narrowing of the cervical canal. Progesterone further stimulates the production of prostaglandin F_2 alpha which in turn accentuates pain.

Majority of the cases had normal size cervix with firm consistency, and normal sized, retroverted, mobile uterus with nonpalpable fornices. Initially, pain in the lower abdomen was found in 19 women, which started declining from the first follow-up, and 18 patients were relieved from the pain during the fourth follow-up. Initially, pain in the back was found in 10 women, which started declining from the first follow-up and six patients were relieved from the pain during fourth follow-up. Pain in thighs was seen only in two patients and the patient was relieved of it during second follow-up. On statistical comparison between initial stage and different follow-ups, no significant outcome was seen from first follow-up ($P > 0.05$) in intensity and duration of pain but comparison between initial stage and different follow-ups showed highly significant results in the second follow-up ($P < 0.001$) with regard to all the symptoms, except diarrhea, backache and pain in vagina. The control group felt symptomatic relief from pain for a few hours but needed frequent dosing (3 tabs/day) in all the patients with many side effects like burning sensation in stomach, nausea and vomiting.

Table 5: Efficacy of Uttar Vasti in the site of pain in different follow-ups (FU)

Site of pain	Comparison between different follow-ups (paired "t" test).			
	Initial vs. FU-I	Initial vs. FU-II	Initial vs. FU-III	Initial vs. FU-IV
Lower abdomen	3.26 P > 0.05 NS	11.79 P < 0.001 HS	19.76 P < 0.001 HS	34.20 P < 0.001 HS
Back	3.53 P > 0.05 NS	6.67 P < 0.01 HS	10.77 P < 0.01 HS	8.57 P < 0.01 HS

NS, nonsignificant; HS, highly significant

Table 6: Comparison between different follow-ups in the intensity of pain

Statistical value	Comparison between different follow-ups			
	Initial vs. I FU	Initial vs. II FU	Initial vs. III FU	Initial vs. IV FU
Mean	17.09	30.32	49.68	68.06
±SD	8.64	10.48	9.83	10.78
Chi-square test	14.88	29.12	46.25	62.00
T	11.02	16.11	28.15	35.17
P	<0.001 HS	<0.001 HS	<0.001 HS	<0.001 HS

The above improvement in the *Uttar Vasti* group is due to the anti-inflammatory action of *Lasuna* which inhibits the synthesis of prostaglandins, relieving myometrial contractions and causing vasodilation leading to smooth flow of menstrual blood. *Rasona* also has emmenagogue property by which the flow of menstrual blood is made smooth and without any discomfort^[7a]. *Trivrit* is a laxative and has *vatanulomaka* and *sukha rechaka* properties^[7b]. According to *Ayurveda*, the action of the trial drugs is due to *vatahara guna* of *Lasuna* (*Allium sativum*)^[6a] and *Mridu rechana guna* of *Trivrit* (*Ipomea turpethum*).

On the basis of above facts, it may be concluded that the drugs *Rasona* and *Trivrit* are effective in spasmodic dysmenorrhea without causing any side effects. *Uttar Vasti* is a simple and specialized technique and has significantly improved the outcome of *Udavartini yonivyapad*.

Conclusion

Primary dysmenorrhea (spasmodic type) can be correlated with *Udavartini yonivyapad* in *Ayurveda*. A clinical trial with *Trivrit* and *Lasuna* Oil as *Uttarvasti* has shown encouraging results in *Udavartini yonivyapad*. *Trivrit* and *Lasuna* are *ushna virya* drugs. *Trivrit* is a mild purgative and carminative, while *Lasuna* is a

potent anti-inflammatory and analgesic agent. *Tila taila* has *Snigdha* and *pichchila* properties in contrary to *Vata*, and this oil imbibed the *gunas* of both the drugs, showing maximum beneficial effects of *Uttarvasti*.

References

1. Available from <http://emedicine.medscape.com/article-253812-overview> [last accessed on 2007 May 5].
2. Sushruta Samhita Uttara Tantra, Hindi Translation by Dr. Ambika Dutta Shastri, Edition: Part-2, Varanasi: Chaukhamba Sanskrit Bhavan; Reprint 2006. (a) Su.Utt 38/9 p. 157 (b) Su.Utt-38/30 p. 163.
3. Shastri K, Chaturvedi G. In: Upadhyay Y, Sastri RD, Pandey G, editors. Vol. 2. Chapter 30. Charaka Samhita. Chowkhamba Sanskrit Series. (a) Chikitsa sthana; Reprint 1998. p. 25-6, 843 (b) Cha.Chi 30/110-1 p. 847
4. Owen PR. Prostaglandin synthetase inhibitors in the treatment of primary dysmenorrhea outcome trials reviewed. Am J Obstet Gynecol 1984;148:96-103.
5. Aouadi. R MS. "Effect of fresh garlic juice on lipid metabolism in male rats" by R.Aouadi MS et al, Nutrition Research, Vol-20, Issue-2, Feb 2000, Page no.273-280.
6. Dravyaguna Vignana by Acharya Priyavat Sharma. Vol 2. Vegetable Drugs V Ayurveda Series 3, Choukhamba Bharati academy; Reprint 2006. (a) *Lasuna*- p. 72-3 (b) *Trivrit*-p. 419.
7. Bhava Prakasha of Sri Bhava Mishra by Brahmasankara Mishra and Rupalalji Vaisya, Part-I 11th Edition, The Kashi Sanskrit Series I 30 (a) *Lasuna* Haritakyadi Varga, Page No. 130-131. (b) *Trivrit*, Guduchyadi varga, PageNo: 397.

हिंदी सारांश

प्राथमिक कष्टार्तव में त्रिवृत तथा लशुन तैल उत्तरबस्ति के प्रभाव का अध्ययन

शबनम जहाँ, एन.सुजाथा, नीलम

प्रस्तुत अध्ययन में त्रिवृत एवं लशुन तैल उत्तरबस्ति के प्रभाव का उदावर्तिनी योनिव्यापत् (प्रायमरि डिस्मेनोर्हीआ) के ३६ रूग्णों पर मूल्यांकन किया गया। रूग्णों को कुल दो वर्गसमूहों में बाँटा गया। त्रिवृत तथा लशुन तैल की उत्तरबस्ति का उत्साहवर्धक परिणाम पाया गया। जिसमें वेदनाओं की तीव्रता कम देखी गयी। औषधियों का वातहर, अनुलोमक प्रभाव इन परिणामों में कारण हो सकता है।