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# Evaluation of the Effect of Suppression of Natural Urges (*Vega-avaraodha*) on Women's Health with Special Reference to Dysmenorrhea (*Udavartini*): A Clinical Trial

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## ABSTRACT

Dysmenorrhoea is the most common problem experienced by many women which have signs and symptoms like mild to severe abdominal pain along with vomiting, diarrhoea, giddiness which disturbs day-to-day activities. Suppression of natural urges *(vegadharana*) is one of the leading causes of dysmenorrhoea. There is a high need to educate women about the importance of food, nutrition, attending natural urges, daily regimen *(dinacharya*) for the maintenance of gynaecological health. The study aims to evaluate the effect of the suppression of natural urges (*vegaavarodha*) and its role in causing dysmenorrhoea (*udavartini*). The secondary objective was to study the effect of *ayurvedic* uterine drugs like *dashamoolaksheerapaka* with *latakaranja masi* in dysmenorrhoea. This was a single-blind clinical trial on 110 patients diagnosed with primary dysmenorrhoea. This study included counselling of patients, education about menstrual hygiene, food habits, non-suppression of natural urges, and use of *ayurvedic* treatment i.e. *dashamoolaksheerapaka* 100 ml twice daily for 3 months and *latakaranjamasi* (Caesalpinia crista) 300 mg twice daily for 10 days before menstruation. The study showed, overall moderate improvement in subjective parameters of the dysmenorrhoea which were abdominal pain (60.91%), decrease in the duration of pain (59.37%) and quantity of menstrual flow (60.01%), improvement in consistency of menstrual flow with reduced clots (69.11%). Counseling and education about the non-suppression of natural urges play a significant role in the prevention of dysmenorrhoea (*udavartini)*. The study drug *Dashamoolaksheerapaka* along with *Latakaranja masi* showed moderate improvement in subjective parameters of dysmenorrhoea.

**Keywords:** *Udavartini*, Dysmenorrhoea, *Vegadharana, Dashamoola ksheerapaka, Latakaranja Masi*

## INTRODUCTION

The health of the nation mainly depends on the health, literacy, and level of awareness of women in general. Women have to face great physiological changes and challenges in their lifetimes. Dysmenorrhoea has a wide range of symptoms like abdominal pain, vomiting, giddiness, headache, diarrhoea, cramps in the legs which cause limitations in routine activities.[1] *Acharya Charaka* quotes suppression of natural urges can cause reverse peristalsis (*udavartha*) which can lead to diseases like dysmenorrhoea (*udavartini*).[2] Women are at the risk due to busy schedules and habits of modern lifestyle like eating junk food, addictions, extra salty and spicy food, irregular working hours like night duties, excessive use of cosmetics, plastic implantations, pills to prepone or postpone menstrual cycle, excessive use of abortifacients, suppression of natural urges (*vegaavarodha*)[3], mental stress, etc. The consequence of these combined habits in individuals of low-middle income groups has given rise to metabolic blunders which lead to the deposition of *ama* (toxins) in the body. There are several voluntary or involuntary reflexes controlling the overall functioning of the body.[4][5] Suppression of natural urges (*vegadharana*) is one of the leading causes of dysmenorrhoea (Shukla, Tripati 2000)[6]. The prevalence of dysmenorrhoea among Indian females was 33.5% as reported by Nag (1982). There is a need to educate women about the physiology of the regular menstrual cycle, the importance of food, nutrition, attending natural urges, daily regimen *(dinacharya*) and monthly regimen (*ritucharya*) to maintain normal gynaecological health. The present study aims to evaluate whether suppression of natural urges leads to dysmenorrhoea. The drugs which were selected in the present study are *dashamoolaksheerapaka*[7] for 30 days and *latakaranja masi* for approximate 10 days before the onset of a menstrual period. This treatment was advised for 3 months. The given drugs can clear the existing pathology of obstruction *(avarodha*) in *artavavaha strotas.* Psychological counselling for non-suppression of natural urges can be the preventive measure to avoid future obstruction in the *artavavaha strotas.* Results of the pre and post effect of medicine with counseling were analysed in a single group of 110 patients, using paired student T-test.

## MATERIALS AND METHODS

This is a clinical trial carried out for a period of two years from 2013 to 2015 on 130 patients diagnosed with dysmenorrhoea in *stree-roga* opd. This study has obtained institutional ethical clearance. Patient consent was taken from each registered volunteer after providing her detailed information on the treatment. 110 patients were selected.

**Inclusion criteria**: female patients of the age group of 18 yrs-45 yrs, patients with classical symptoms of primary dysmenorrhoea.

**Exclusion criteria**: Patients below the age of 18yrs and above 45yrs, history of uterine fibroids or tumours, diabetes, hypertension, obstetric surgery were excluded from the study.

**Criteria for diagnosis:**

Based on the signs and symptoms of dysmenorrhoea, parameters of the study like pain during menstruation (in hours), menstrual flow (in pads), consistency of menstrual flow (clots/ no clots), regularity of menstrual cycle, duration of menstrual flow (in days)[8][9][10] (along with the findings like lack of water intake, suppression of natural urges, anxiety, and stress) were noted in standard case sheet. The patients who were fulfilling the criteria of diagnosis were included in the present study.

**Drug preparation, drug safety, dose, and duration:**

The study drug *latakaranja masi* was prepared by burning the seeds of *latakaranja* in closed *sharava* and *dashamoola* powder mixture was prepared in *Rasashatra & Bhaishyajya Kalpana Department*. The study drug safety was approved by Central Research Facility approved by AYUSH, KAHER's Shri BMK Ayurveda Mahavidhyalaya, Belagavi. Here the drug *latakaranja* was analyzed by organoleptic examination like colour, odour, taste, appearance, clarity. *Latakaranja masi* was tested for specific gravity, solubility, microscopy, quantitative analysis of inorganic elements.

Patients were informed about the procedure of *Dashamoolaksheerapaka*[11] (where 1 part of the powdered drug, 8 parts of milk, and 32 parts of water were heated and reduced to 20% of its volume) which was advised to be taken twice per day for 3 months. *Latakaranja* (Caesalpinia crista)[12] *masi* was given 300 mg (2 *ratti*)[11] twice per day for 10 days, before the onset of menses.

**Counselling regarding Non-suppression of urges:**

All the patients with a history of suppression of natural urges were noted. These patients were counseled and educated regarding proper drinking of water when thirsty, balanced and warm food when hungry, attending natural urges at the proper time, etc. Regular follow-up was done every month for 3 months with medications and 3 months further without medication where the post-treatment assessment was done. The data collected were statistically analysed using paired student T-test.

**Table 1: Relation between Non-suppressible urges, V*ata* and nervous plexes[8]**

| *Apaana vata* (Pelvic plexes) | Flatulence (*adhovata*), Stools (*Vit*), Urine (*mutra*), semen (*Retas*) |
|---|---|
| *Udaana vata* (Thoracic plexes and respiratory gase | Sneezing (*Kshavathu*), Cough (*kasa)*, Yawning (*jrimbha*), Vomiting (*chardi*), Belching (*udgara*) |
| *Samaana vata* (Colic plexes) | Hunger (*Kshudha*), Thirst (*trut)* |
| *Prana vata* (Cranial nerves) | Rapid breathing (*shrama shwasa*), Sleep (*nidra*), Tears (*ashru*) |

**Criteria for Post-treatment assessment:**

1. **Pain during menstruation (in hours)**
   Grade 0- no pain
   Grade 1-Painful abdomen for 1-3 hrs
   Grade 2-Painful abdomen for more than 3 less than 6 hrs
   Grade 3- Painful abdomen for more than 6 hrs.
2. **Menstrual flow (in pads)**
   Grade 1- 0-1pads/day
   Grade 2- 2-3pads/day
   Grade 3- 3-4 pads/day
3. **Consistency of menstrual flow (clots/ no clots)**
   Grade 1- no clots
   Grade 2- with small clots
   Grade 3- with bigger clots
4. **Regularity of menstrual cycle**
   Grade 0- regular
   Grade 1- irregular
5. **Duration of menstrual flow (in days)**
   Gr
   ade 0-no flow
   Grade 1- flow seen for 1 day
   Grade 2- 1-2days
   Grade 3- 2-4days

**The overall effect of the therapy:**

Marked improvement: >75% to 100% improvement
Moderate improvement: >50 to <75% improvement
Mild improvement: >25 to <50% improvement
Poor improvement: < 25% improvement

**Table 2: The effect of treatment on dysmenorrhoea**

| Symptom | Mean | | Mean difference | % of Relief | SD | SE | t value | P value |
|---|---|---|---|---|---|---|---|---|
| | B.T. | A.T. | | | | | | |
| Pain in Abdomen | 2.9 | 1.13 | 1.76 | 75.86 | 0.78 | 0.14 | 12.41 | <0.001 |
| Duration of pain | 2.13 | 0.83 | 1.29 | 60.93 | 0.57 | 0.10 | 13.0 | <0.001 |
| Quantity menstrual flow | 1.93 | 0.7 | 1.23 | 63.7 | 0.32 | .06 | 20.5 | <0.001 |
| Consistency of menstrual flow | 2.26 | 0.7 | 1.56 | 69.11 | 0.5 | 0.09 | 16.6 | <0.001 |

**Table 3: The analysis of suppression of natural urges**

| Suppression of natural urges | Number of patients | Percentage (%) |
|---|---|---|
| Flatulence (*Adhovata*) | 55 | 50 |
| Defecation (*Vit*) | 18 | 16.67 |
| Urine (*Mutra)* | 55 | 50 |
| Sneezing(*Kshavathu*) | 18 | 16.67 |
| Cough (*Kasa*) | 11 | 10 |
| Yawning (*Jrimbha*) | 37 | 33.33 |
| Vomiting (*Chardi*) | 07 | 6.67 |
| Hunger (*Kshudha*) | 55 | 50 |
| Thirst (*trut*) | 73 | 66.67 |
| Rapid Breathing (*ShramaShwasa*) | 07 | 6.67 |
| Sleep (*Nidra*) | 07 | 6.67 |
| Tears (*Ashru*) | 18 | 16.67 |

**Table 4: Overall effect of therapy on difference parameters:**

| Parameters | Overall relief of symptoms in % |
|---|---|
| Abdominal pain | 60.91% |
| Duration of pain | 59.37% |
| Quantity menstrual flow | 61.01% |
| Consistency of menstrual flow | 69.11% |

## OBSERVATION & RESULTS:

The study showed that the participants who suffered from dysmenorrhoea were more in the age group of 18-22years (53.33%). Among them, 93.3% belonged to middle economic status, 60% were unmarried, 46.7% were from a very busy lifestyle, 60% had no family history of dysmenorrhoea, 46.67% had a history of irregular food habits, 50% were from *vaatpittaja* body constitution (*prakriti*).

## DISCUSSION

The present study is based on the fundamental principle (*siddhanta*) of "non-suppression of natural urges *(Na Vegan Dharayet Dhiman*)" which otherwise may lead to chronic pathology (Murthy 2001). *Ayurveda* has emphasised the concept of non-suppression of natural urges (*vegaavaroda*)[13][14] which enlists 13 natural urges (*vegas)* that are - urine, faeces, semen, flatus, vomiting, sneezing, belching, yawing, hunger, thirst, tears, sleep, and rapid breathing. These natural urges reveal the physiological regulations of the the nervous system, endocrines, and digestive enzymes, respiratory and cardiac functions. Suppression of natural urges affects the homeostasis of the body[15] Recent experiments in animals on bladder distension and its reverse effect on blood pressure and respiration has concluded two mechanisms: splanchnic vasoconstriction (Neural pathay) and second through catecholamine (endocrines) which leads to various disorders.[16] A list of specific *vata* and their involvement in the production of natural urges are tabulated in the Table.1 Relation between Non-suppressible urges, V*ata* and nervous plexes.[13]

Chronic suppression of the natural urges can cause *vataprakopa* which causes the pathology like reverse peristalsis (*udavarta*), obstruction (*sanga*) in the channels. Suppression of natural urges causes back pressure on local organs causing hypertrophy of cells which leads to capillary-vasodilatation, increasing interstitial osmotic pressure and thus causing oedema in the pelvic organs.[17]

The age group of 18-22 years is commonly under various stresses like stuthe dy, job etc. Unmarried girls have strange food habits, increased stress and anxiety. People of middle economic group usually have suppression of urges pertaining to family work, hesitate on etc. Family history had no significant role in this study. *Vaatapittaja prakriti* has less threshold of pain and suffer from anxiety of the menses. This stu found thirst, hunger, urination, flatulence were the natural urges predominantly suppressed by women.

In this study, drugs which can improve metabolism, promote uterine circulation, reduce inflammation, improve peristalsis were selected. *Dashamoolaksheerapaka* was advised daily for 3 months to improve peristalsis (*vataanulomana*) which is affected by suppression of natural urges. Nagarkar et.al have studied the effect of *dashamoolaarista* in cervicitis.[18] Reshma et.al have studied the anti-inflammatory, analgesic effects of *dashamoola*.[19] *Dashamoola* is a combination of *brihat panchamoola* and laghu *panchamoola*. This combination is known for its sthothara[20], *kaphahara*. pittahara, vatahara, jwarahara and amapachana properties[21]. *Dashamoolaksheerapaka* (processed in milk) alleviates *vata prakopa*, induces *amapachana, snehana* and also nourishes the *dhatus* with *ksheera* (milk). *Latakaranja* is a *tikta* rasa (bitter) *dravya* known for its anti-inflammatory, antipyretic activity (*jwarahara karma*).[22] *Latakaranja masi* is the activated medicinal charcoal which is *deepana* (appetiser), *pachana* (*digestive)* in its properties.[23] The *masi* induces *amapachana*, reduces the *sanga* (obstruction), thus helps in proper micro-circulation of blood. The severity and duration of pain were reduced by the use of the study drug. It also improved the quantity and consistency of menstrual flow with reduced clots. This effect may be due to the improvement in uterine circulation and reduction of local inflammation.

The study showed moderate improvement with treatment course of 3 months along with the practice of non-suppression of natural urges. Moderate improvement in the symptoms of dysmenorrhoea was seen post 3 months treatment where patients observed non-suppression of natural urges. This study can be conducted in two separate randomised groups, where one group can be given a drug and the other group can be observed for the effect of non-suppression of natural urges. Exploration of the role of *manasika bhava* in concern with *artavavaha srotas* can be a further scope of the study.

## CONCLUSION

A woman as a mother or sister is the first teacher for an individual. Her wellbeing is necessary for the creating of a healthy generation. Counseling and educating women will spread education to the whole nation. The present study showed that counseling and education about the non-suppression of natural urges plays a significant role in the improvement of dysmenorrhoea which is usually neglected by physicians. Ayurvedic *medication* like *dashamoolaksheerapaka with latakaranjamasi* helps in the reduction of symptoms of dysmenorrhoea. It also regularises menstrual cycles, improves menstrual flow. The classical literature of *Ayurveda* which insists on the non-suppression of natural urges has been reiterated through this study.

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## CONFLICT OF INTEREST

There are no conflicts of interest.

## REFERENCES

1. Kumbar S, Reddy M. Prevalence of dysmenorrhoea among adolescent of Kadappa district at its impact on quality of life-a cross sectional study. National J of Community Medicine. Sept 2011; 2(2):265-268.
2. Agnivesha, Charaka, Dridhabala, Charak Samhita, SutraSthana, Navegandharaneeya Adhyaya, 3/66, edited by V Sukla, R Tripathi. Reprint ed. Chowkhamba Sanskrit Pratisthana, Delhi. 2000; 67.
3. Vagbhata. AsthangaSamgraha with Hindi commentary, Sutrasthana, Roganutpadaneya Adhyaya,5/48, edited by KavirajAtrideva Gupta. Chaukamba Press, Varanasi. 2002; 45.
4. Guyton AC, Hall JE. Text Book of Medical Physiology. Elsevier Publications, New Delhi, India. 2006; 513.
5. Sembulingam K. Essentials of Medical Physiology. Jaypee Brother Medical Publishers(P)Ltd, New Delhi. 2003; 617.
6. Agnivesha, Charaka, Dridhabala, Charak Samhita, ChikitsaSthana, Yonivyapatchikitsa Adhyaya, edited by V Sukla, R Tripathi. Reprint ed. Chowkhamba SanskritPratisthana, Delhi. 2000; 757.
7. Bhavamishra. Bhavaprakasha- vidyotinihindi commentary. edited by Pt. Sri BrahmasankaraMisra. 1st ed. Chaukamba Sanskrit Sansthan.Varanasi. 1998; 246.
8. Padubidri M. Shaw's Text Book of Gynaecology. Elsevier publications. New Delhi. 2004; 218.
9. Dutta DC. The text book of Gynecology. New central book Agency (P) LTD, Kolkata. 2007; 208.
10. Bhagyashri, Rahul, Vijay. Dysmenorrhoea (Kashtartava) an ayurvedic perspective. International Journal of Herbal Medicine. 2015; 3(3): 33-35.
11. Sharangdhara, Sharangdhara Samhita-Jiwanprada Hindi commentary. edited by Srivastav, ChoukambaOrientalis. Varanasi. 2005; 160.
12. Mehra B, Maurya S, Dwivedi. Pharmacognostic evaluation of Latakaranja (Caesalpinia bonduc [L.] Roxb). International Journal of GreenPharmacy. Oct-Dec 2015; 9 (4): 63.
13. Agnivesha, Charaka, Dridhabala, Charak Samhita, Sutra Sthana, Adhyaya, edited by V Sukla, R Tripathi. Reprint ed. Chowkhamba SanskritPratisthana, Delhi, 2000; 757.
14. Tawalare Kiran, Tawalare Kalpana, Pawar Jatved, Sharma Gopal, Sharma Mrityunjay and Ramteke Rachana. Review of Anatomical and Physiological Changes of Ageing. Int J Ayu Pharm Chem. 2014:1(1)1-11.
15. Charles Herbert Best, The Physiological basis of Medical Practice, 7th edition. Waverly press. Baltimore, USA. 1961; 819.
16. Mukherjee SR. Effect of bladder distension an arterial BP and renal circulation: role of splanchnic and buffer nerves. J. Physiol 1957; 138: 307-325.
17. Tripathi SN, Shukla M. Evaluation of the role of vegavidharana (Suppression of natural urges) in the aetiology of psychosomatic Diseases(with special reference to voluntary retention of urine and neurohumoral physiological and clinical changes in human volunteers). Anc Sci Life. 1981; 1(2): 83-93. PMCID:PMC3336661, PMID:22556408.
18. Nagarkar B, Jagtap S, Mohite S. Evaluation of the efficacy of dashmoolarishta in cervivitis: a proof-of-concept study. Journal of Pharmacy and Pharmaceutical Sciences. 2014; 3 (6): 1521-1531.
19. Reshma R, Parekar Experimental evaluation of analgesic, anti-inflammatory and anti-platelet potential of *Dashamoola.* J Ayurveda Integr Med. 2015 Jan-Mar; 6(1): 11–18.
20. Agnivesha, Charaka, Dridhabala, Charak Samhita, Sutra Sthana, Navegandharayeate Adhyaya, 5/66, edited by V Sukla, R Tripathi. Reprint ed. Chowkhamba SanskritPratisthana, Delhi, 2000; 49
21. Dalhana, Susruta, Susruta Samhita, Chikitsa Sthana, Mahavatavyadhichikitsa Adhyaya, 7/45, edited by Jadavaji Trikamaji acharya, Reprinted ed. Chowkhamba SanskritPratisthana, Delhi, 2000:425
22. Prakash R, Sharad B. Pharmacognostic Study of Caesalpinia Bonduc. Roxb. International Journal of Research in Pharmaceutical Sciences. 8(2): 120-123.
23. Patil P, Minakshi U. Masikalpana- a review, Journal of Ayurveda and Integrated Medical sciences. 2019; 4(2) 68-69.

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