Journal of Advanced Medical and Dental Sciences Research

@Society of Scientific Research and Studies *NLM ID: 101716117*

Journal home page: www.jamdsr.com doi: 10.21276/jamdsr Indian Citation Index (ICI) Index Copernicus value = 100

(e) ISSN Online: 2321-9599; (p) ISSN Print: 2348-6805

Original Research

Effectiveness of viburnum opulus mother tincture in primary dysmenorrhoea

Sonal

PhD Scholar, Department of Homoeopathy, Tantia University, Sri Ganganagar, Rajasthan, India

ABSTRACT:

Primary Dysmenorrhoea, menstrual pain without pelvic pathology, is the most common gynecologic problem in young menstruating women with almost 90% young women reporting having some degree of discomfort and pain. Homoeopathic medicines not only offer pain relief but also decrease its tendency. Viburnum opulus is well indicated for dysmenorrhoea. Aims- (a) To study different cases of primary dysmenorrhoea in females. (b) To study effectiveness of Viburnum opulus mother tincture in cases of primary dysmenorrhoea. Objectives-To achieve the aims, I have the following objectives-(a) To assess possibility of usage of Viburnum opulus mother tincture in cases of primary dysmenorrhoea after doing statistical analysis. (b) To make a comparative analysis of placebo and Viburnum opulus mother tincture effects after administering to two groups. Study Design- Single blind clinical study. Method- 80-100 female patients with primary dysmenorrhoea were studied for six months. Patients were enrolled as per inclusion criteria and were divided into two groups by random allocation method, experimental group was given Viburnum opulus mother tincture, and control group was given placebo. Result- Treatment with Viburnum opulus in group A showed significant improvement from baseline 5.66 which reduced to 4.047 at one month, 2.42 at three month and .761 at six months. Max. Menstrual Pain intensity at baseline is 8 which reduced to 7 at one month,3 at three months, and 2 at six months after treatment with 40 cases showing marked improvement, and 2 cases show moderate improvement. However those treated with placebo, in Group B (n=42)), 2 cases shows mild improvement, 40 cases show non-significant changes. Conclusion- Viburnum opulus mother tincture is more effective in acute management of pain, because mother tincture act on physiological level and Primary Dysmenorrhoea is also physiological condition so we can administration Viburnum opulus as a primary solution in pain management of Primary Dysmenorrhoea.

Key words- Primary Dysmenorrhoea, Viburnum opulus, mother tincture, Numerical rating Scale.

Received: 17 November, 2022 Accepted: 21 December, 2022

Corresponding author: Sonal, PhD Scholar, Department of Homoeopathy, Tantia University, Sri Ganganagar, Rajasthan, India

This article may be cited as: Sonal. Effectiveness of viburnum opulus mother tincture in primary dysmenorrhea. J Adv Med Dent Scie Res 2023;11(1):103-106.

INTRODUCTION

Dysmenorrhoea is defined as the presence of painful cramps of uterine origin that occur during menstruation. It is one of the most common causes of pelvic pain and menstrual disorder. (1) The term 'dys' meaning difficult/painful/abnormal; 'meno' meaning month and 'rrhoea' meaning flow⁽²⁾ is amongst the commonest complaint in females of reproductive age group.

The International Association for the Study of Pain defines pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage". The burden of Dysmenorrhoea is greater than any other gynecological complaint. World Health Organization

estimated that Dysmenorrhoea as the most important cause of chronic pelvic pain. (1)

The worldwide prevalence of dysmenorrhoea varies substantially from 16% to 91% whereas study in India reported in between 50 to 88%. Another study reported that dysmenorrhoea affects upto 90% women of child bearing age to varying degrees. Its 70.2% and furthermore in Rajasthan it came out to be 81.5%, in rural and 76%, in urban area. (3,4,5)

Dysmenorrhoea may be primary or secondary dysmenorrhoea. Primary dysmenorrhoea is termed as painful menstruation without any organic pathology and elevated endometrial prostaglandins and its metabolites are said to be the causative factor. (6)

Nearly about 50% of the menstruating women are facing Primary Dysmenorrhoea around the world. (7) It nearly affects 50% of the adolescent young girls 25 years especially. to Primary dysmenorrhoea impacts daily activities and causes a great distress. Often girls miss school and colleges due to severe pain. Work sector also faces huge loss due to absence of female employees or their reduced output due to anguishing pain. This affects the quality of life and increases the absenteeism in the college students and working women and is also a big social issue for the menstruating women. (7)

Primary dysmenorrhoea (spasmodic) starts within years of menarche ⁽⁸⁾. The pain of primary Dysmenorrhoea usually begins few hours prior, to just after the onset of menstrual period and may last long as 48-72 hours ⁽⁹⁾. Affected women experience sharp, intermittent spasms of pain, usually centered in the hypogastrium or supra-pubic area commonly associated with systemic symptoms like nausea, vomiting, diarrhea, fatigue, fever, headache or lightheadedness and nervousness. Vasomotor symptoms like cold sweats, pallor, faintness and collapse may be associated. ⁽⁸⁾

Conventional system of medicine offers symptomatic treatment only, so it acts as temporary relief. In homoeopathic system of medicine, we give medicine based on individualisation; that said, however, there are some other ways of prescribing too. According to Dr. John Henry Clarke, some drugs have a predominant affinity for certain organs so these drugs will cure a great variety of infections arising from these particular organs. These remedies are called Organopathic Remedies.

A Review of Phytochemistry and Biological Effects of Viburnum opulus reported presence of bioactive components such as phenolic compounds, vitamin C, carotenoids, iridoids, and essential oils. In vitro studies on Viburnum opulus show the antimicrobial potential of Viburnum opulus, especially against Gram-positive bacteria. In cell-based studies, Viburnum opulus demonstrated anti-inflammatory, anti-obesity, anti-diabetic, osteogenic, cardio-protective, and cytoprotective properties. (10)

Homoeopathic preparation of *Viburnum opulus* has been used for female related problems such as menstrual pain. W. Boericke, Hering and Clarke explained indications of *Viburnum opulus* in the treatment of primary dysmenorrhoea. (11-13)

In this study, effectiveness of Viburnum opulus mother tincture was studied with regard to primary dysmenorrhoea cases.

MATERIALS AND METHODOLOGY

- **1. Study setting-** Female patients from OPDs of following hospitals were part of study.
- a. Sri Ganganagar Homoeopathic Medical College, Hospital & Research Centre, Sri Ganganagar, Rajasthan.

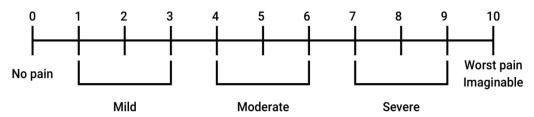
- b. Daksh Multi Speciality Hospital, Hanumangarh, Rajasthan.
- **2. Sample size-** 90 female patients were studied in this study.
- a. Group A: Treated with Viburnum opulus mother tincture- 45
- **Drop out -**03
- b. **Group B-** Placebo- 45
- **Drop out -**03
- **3. Study duration** Six months follow up was done.
- Selection of samples- Simple random selection method was used.
- **5. Study type:** Comparative study done with random allocation in treatment groups using computer generated randomization chart.
- **6. Study design-** Single blind clinical study was conducted in the study.
- 7. Inclusion criteria-
- a. Menstruating Female between ages of 18-28 years.
- b. Willing to give Informed consent.
- c. Diagnosed Cases of Primary Dysmenorrhoea.
- 8. Exclusion criteria-
- a. Cases who refuse to give their consent for the study.
- Cases with gross pathological changes (Secondary Dysmenorrhoea) like Uterine tumours, Fibroids, Cervical stenosis, Endometriosis etc were excluded.
- c. The patients who were not willing to discontinue other pharmacological intervention.
- d. Patients who were suffering from any other systemic illness requiring conventional treatment.
- e. Patients with advanced pathological conditions and Immunocompromised patients.
- f. Pregnant, those trying for conception and lactating females will be excluded.
- g. Declaration- Treatment given to patients during the course of study was not harmful in nature as per my knowledge.
- h. Diagnosis- No specific test is available for diagnosis of dysmenorrhoea. It is done after finding presence of typical symptoms of primary dysmenorrhoea in young adult females.

Primary dysmenorrhoea is covered under N94.6 code in ICD-10- CM

- **9. Remedy selection-** Mother Tincture of *Viburnum opulus* is used in the experimental group.
- **10. Posology-** Two groups are divided, one is experimental group, and other is control group. Control group is given placebo, whereas experimental group is given mother tincture of *Viburnum opulus*.
 - . Viburnum opulus Mother Tincture: The pharmacist was trained for the dispensing of Mother Tincture with precision as follows: Ten drops of the mother tincture will be dissolved in ½ cup of water and given three times in a day. Appropriate instructions will be given to the patients. Change of dosage was on after observing

- changes triggered after administration (status quo/improvement/deterioration).
- Placebo: 4 globules of sugar of milk three times a day.
- 11. Records of case- Case records of both groups were kept separately for proper analysis. Data was collected on specially designed Case taking Performa with proper follow up and maintained in soft and hard copy.
- **12. Follow up criteria-** Cases were followed up at regular intervals for a minimum period of six months.
- **13. Results criteria-** In both groups, cases were recorded and then noted as improved or not improved
- **13.1** Numeric Rating Scale (NRS) (14) The Numeric Rating Scale which becomes useful in our daily clinical practice. A symptom score was a subjective and quantitative measure of an individual's wellbeing, using a questionnaire. Responses were analyzed to arrive at a diagnosis. Numeric Rating Scale (NRS) involves following components of questionnaire:-

PAIN SCORE 0-10 Numerical Rating Scale (NRS)



13.2 Improvement assessment

The assigned scores were calculated in numerical value of each symptom in Numerical Rating Scale and NRS cutoff value of >5 were found to optimally discriminate between individuals with Dysmenorrhoea and those without.

Improvement status in % -

Percentage =
$$\frac{\text{Baseline score (x)- Score at en(y)}}{\text{Baseline score (x)}}$$

Outcome of the treatment was measured in gradation as;-

- Improved 26-100%
- Not improved- up to 25 %
- Status quo 0% (When there was no change in the condition of the patient in spite of taking the medicine for a period of time).
- Worse- % (When there was no improvement in condition of the patient instead his/her condition gets deteriorate.)
- **13.3 Data Analysis:** Data was analyzed for the base line demographic details and pre/post- treatment effect on the basis of the NRS scale. Completed cases were used for analysis as per ITT. Data analysis was done using Excel and SPSS software.
- **14. Other Intervention-** Proper diet and regimen was advised to patients during the course of study. Meditation for reducing stress was also emphasized.
- **15. Withdrawal Criteria:** In case the patient is showing some serious pathological changes during study, they were referred to concerned specialists.
- **16. Ethical issues-** Ethical clearance for this study was taken from Ethical Committee, Tantia

University. A written informed consent was obtained from each participant.

RESULTS

Treatment with *Viburnum opulus* in group A showed significant improvement from baseline 5.66 which reduced to 4.047 at one month, 2.42 at three month and .761 at six months. Max. Menstrual Pain intensity at baseline is 8 which reduced to 7 at one month,3 at three months, and 2 at six months after treatment with 40 cases showing marked improvement, and 2 cases show moderate improvement. However those treated with placebo, in Group B (n=42)), 2 cases shows mild improvement, 40 cases show non-significant changes.

DISCUSSION

In accordance with the epidemiology of Dysmenorrhoea in which states that Primary Dysmenorrhoea also occurs more frequently in unmarried woman than in married women. (15) This study showed that maximum cases of Primary Dysmenorrhoea were observed in unmarried females i.e. 55.88%. Most patients were unmarried female, this may be due to age group selected and affected.

It is observed that maximum cases of Primary Dysmenorrhoea had regular menstrual cycle with profuse flow; most patients (36.90%) had dark red menstrual discharge; half the patients reported profuse menstrual flow. Most patients had either clotted (34.5%) or partly clotted (35.71%) discharge. Most patients complained of spasmodic and cramping pain; pain in hypogastrium and back; and radiating to thighs.

Most commonly associated symptoms were nausea & vomiting; weakness and headache. Previous studies have reported similar symptomatology. (16-18)

Treatment with *Viburnum opulus* in group A showed significant improvement from baseline 5.66 which reduced to 4.047 at one month, 2.42 at three month and .761 at six months. Max. Menstrual Pain intensity at baseline is 8 which reduced to 7 at one month,3 at three months, and 2 at six months after treatment with 40 cases showing marked improvement, and 2 cases show moderate improvement.

However those treated with placebo, in Group B (n=42)), 2 cases shows mild improvement, 40 cases show non-significant changes.

CONCLUSION

Viburnum opulus mother tincture is more effective in acute management of pain, because mother tincture act on physiological level and Primary Dysmenorrhoea is also physiological condition so we can administration *Viburnum opulus* as a primary solution in pain management of Primary Dysmenorrhoea.

REFERENCES

- Bernardi M, Lazzeri L, Perelli F, Reis FM, Petraglia F. Dysmenorrhea and related disorders [version 1; referees: 3 approved]F1000Research 2017, 6 (F1000 Faculty Rev):1645 (doi: 10.12688/f1000research.11682.1)
- Dawn CS. Text book of gynaecology, described for students and practitioners.12th ed. Calcutta: Dawn:1963.)
- Ju H, Jones M, Mishra G. The Prevalence and Risk Factors of Dysmenorrhoea. Epidemiologic reviews. Epidemiol Rev 2014[cited 20201nov 26];36:104– 113.Available
- Omidvar S, 3-Bakouei F, Amiri FN, Begum K. Primary Dysmenorrhea and Menstrual Symptoms in Indian Female Students: Prevalence, Impact and Management. Glob J Health Sci. 2016;8(8):53632. Published 2016 Aug 1. doi:10.5539/gjhs.v8n8p135
- Chauhan M, Kala J. Relation Between Dysmenorrhea and Body Mass Index in Adolescents with Rural Versus Urban Variation. J ObstetGynaecol India. 2012 Aug [cited 2020 nov 26]; 62(4): 442–445. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3500946.
- Kural M, Noor NN, Pandit D, Joshi T, Patil A. Menstrual characteristics and prevalence of dysmenorrhea in college going girls. J Family Med Prim Care. 2015;4(3):426-431. doi:10.4103/2249-4863.161345
- Joshi T, Kural MR, Agrawal DP, Noor NN, Patil A. Primary dysmenorrhea and its effect on quality of life in young girls. International Journal of Medical Science and Public Health | 2015 | Vol 4 | Issue 3
- 8. Dutta DC.D C Dutta's Textbook of Gynaecology including contraception 6th ed.Kolkata: New Central Book Agency (P) Ltd; 2013. 171 p.
- Berek JS (editor). Novak's Gynaecology. 11th ed. Canada: Library of Congress Cataloging in publication data; 1988: 410 p.
- Kajszczak D, Zakłos-Szyda M, Podsędek A. Viburnum opulus L.—A Review of Phytochemistry and Biological Effects. Nutrients. 2020; 12(11):3398. https://doi.org/10.3390/nu12113398

- Boericke W. New manual of homoeopathic Materia medica and repertory. 9thed. New Delhi: B. Jain Publishers; 2005.
- Clarke JH. Dictionary of practical material medica. New Delhi: Indian books & Periodicals Publishers:2013.
- 13. Hering C. The Guiding Symptoms of Materia Medica. 1sted.New Delhi: B Jain (P) Ltd; volume 10,2005.
- Rao, Jyoti; Patel, Girish; Shah, Pranav Efficacy Of Homeopathic Medicines In Dysmenorrhoea. National Journal of Integrated Research in Medicine . Sep/Oct2021, Vol. 12 Issue 5, p48-50. 3p.
- 15. Saem, Zuleika Bremien. The Effect of Viburnum Opulus 3x on Females with Primary Dysmenorrhoea, University of Johannesburg (South Africa) ProQuest Dissertations Publishing, 2017.
- Acheamponh K, Awauh DB, Ganu D, Appiah S, Pan X, Kaminga A, et al.Prevalence and predictors of dysmenorrhea,itseffects,and coping mechanism among adolscents in shaiosudoku district, Ghana. Obstetrics and Gynecology Internatioal.2019.[cited 2022 feb 31].
- 17. Jeffcoate N. Principles of Gynaecology. 4th ed. London. Butterworth & Co Publishers Ltd. 1975.
- Nausea during period: Causes, treatments, and prevention. Medical News Today; September 30, 2020. https://www.medicalnewstoday.com/articles/nauseaduring-period