

## Efficacy of *Veratrum album* in treatment of primary dysmenorrhoea

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### Abstract

**Introduction:** Present scenario dysmenorrhoea decreases women quality of life, work productivity and health. Commonly school girls, college students, etc. are affected by primary dysmenorrhoea. It is reported that 93% of teenagers are affected by dysmenorrhoea. It hampers the day to day activities of a women resulting in highest incident of absenteeism. Today's new life style has brought changes in the hormonal functionary resulting in intolerable pain. A study of the prevalence of dysmenorrhoea and its associated symptoms would provide evidence of the severity of the problem. Most of the girls are commonly using pain killers to overcome pain during menstruation which is having side effects. As compared to allopathic medicines, homoeopathic medicines have a wide scope in curative action in dysmenorrhoea.

**Material & Method:** Minimum 30 cases were scheduled whose totality is suitable to *Veratrum album*. 200 potency was prescribed as first dose. If required potency was raised in repetition, if condition demands. Repetition-patient was observed for 3hours after medication. If pain did not subside next dose will be introduced.

**Results:** Out of 30 cases, 29 cases were improved and 1 case was not improved and the two tailed p value is less than 0.0001.

**Conclusion:** Efficacy of *Veratrum album* in primary dysmenorrhoea.

**Keywords:** *Veratrum album*, Dysmenorrhoea

### 1. Introduction

Dysmenorrhoea refers to the pain during menstruation with sufficient magnitude so as to incapacitate day to day activities of women. Incidence of dysmenorrhoea differs with the modifying factors such as age, social status, occupation etc. Prevalence of dysmenorrhoea: In young women is 17-24 years of age 67%-90% and Adult women is 15%-75%.

**1.1 Types: Primary Dysmenorrhoea:** Pain of uterine origin, linked directly to menstruation but no detectable pelvic pathology.

**Secondary Dysmenorrhoea:** Menstrual pain associated with pelvic pathology

Based on pathophysiology dysmenorrhoea is Seen Clinically in three varieties:

**Spasmodic Dysmenorrhoea:** Most common and manifests as cramping pain generally most pronounced on the first and second day of menstruation. Usually relieved after first delivery.

**Congestive Dysmenorrhoea:** Manifests as increasing pelvic discomfort and pelvic pain few days before menstruation begins and rapid relief thereafter. Commonly seen in association with pelvic pathologies like PID, IUCD wearers, endometriosis, fibroids, etc. [1, 2].

**Membranous Dysmenorrhoea:** Painful shedding of endometrium during menstruation.

### 1.2 Physiology of Menstruation: Menstruation

It is defined as a periodic physiologic discharge of blood,

mucus, and other cellular debris from the uterine mucosa which occurs at more or less regular intervals, except during pregnancy and pregnancy and lactation from the time of puberty to menopause. Menstruation represents the breaking down and casting off an endometrium prepared for a pregnancy which does not materialize. The average age at which menstruation begins is between the 12<sup>th</sup> and 14<sup>th</sup> Year but in a minority it may start as early as the tenth or as late as early as the 17<sup>th</sup> year. The term menarche indicates the onset of first menses and menopause its final cessation.

### 1.3 The Menstrual Cycle (Endometrial Cycle)

The periodicity of the menstrual cycle is variable. Generally, it occurs at an interval of 28 days, most women have cycles with an interval that lasts from 21 to 35 days, but there is a great variation among women in general. The duration of the flow is also variable, the usual being 3-6 days and estimate blood loss is 20-80ml. The first 4 days of the cycle are occupied with menstruation during the remaining 24 days the histological cycle consists basically of a proliferative phase and a secondary phase.

**Proliferative Phase:** The proliferative phase begins after menses. The Graafian follicle under the influence of FSH secretes oestrogen which produces proliferative changes in the endometrium. The stage extending from the 5<sup>th</sup> and 6<sup>th</sup> to 14<sup>th</sup> day of the cycle. The glands become tubular, the epithelium becomes columnar and continuous. The stromal cells become spindle shaped with evidences of mitosis. The thickness of endometrium measures about 3-4mm [3, 4].

**Secretory Phase:** The secretory phase is seen after ovulation and is due to progesterone. After ovulation the ruptured Graafian follicle develops into corpus luteum, which secretes

progesterone. Progesterone stimulates the endometrium to undergo secretory hypertrophy. It begins on 15<sup>th</sup> day and ceases 5-6 days prior to menstruation. The glands increase in size, become cork screw shaped. The stromal cells become swollen, large polyhedral. The thickness of endometrium reaches its highest about 5-6mm.

**Menstrual Phase:** In the absence of pregnancy, the corpus luteum degenerates, both oestrogen and progesterone levels decline and this fall brings about menstruation. The endometrial growth ceases 5-6 days prior to menstruation the contraction and constriction of coiled arteries results in ischaemia causing necrosis. The regressive changes in the endometrium are pronounced 24-48 hours prior to menstruation. Menstrual bleeding occurs when the open arteries damaged by necrosis and discharge blood into the uterine cavity. A fall in the level of oestrogen and progesterone also starts off a fresh positive feedback mechanism and triggers the hypothalamus to release gonadotropins.

**1.4 Causes:** Dysrhythmic Uterine Contractions and Uterine Hypoxia, psychosomatic factors, abnormal anatomical and functional aspect of myometrium, increased production of prostaglandins,

**Pathophysiology:** Growing evidence suggests that the pathogenesis of primary dysmenorrhoea is due to prostaglandin F2 alpha (PGF2 alpha), a potent myometrial stimulant and vasoconstrictor synthesised in the secretory endometrium, under the action of progesterone. This results in increased rhythmic uterine contractions from vasoconstriction of the small vessels in the uterine wall. Substantial evidence attributes dysmenorrhoea to prolonged uterine contractions, increased myometrial tone and decreased blood flow to the myometrium leading to muscle ischaemia. Leukotrienes have been postulated to increase the sensitivity of pain in uterus. Significant amount of leukotrienes has been demonstrated in the endometrium of women with primary dysmenorrhoea [5].

**1.5 Signs and Symptoms:** Low midline abdominal or pelvic pain, pain radiate to back or thighs, varies from a dull dragging to a severe cramping pain, pain begins a few hours before or just with the onset of menstruation, severity may last for few hours, usually lasts 24 hours but may persist for 2-3 days, may be associated with nausea and vomiting, headache, syncope or flushing, accompanied by vasomotor changes causing pallor, cold sweats and occasional fainting. Hahnemann showed that *Veratrum album* was the principal agent used at Anticyra and other places in Greece to produce the evacuations which were regarded as an essential of the "cure." Spring was deemed the most favorable season and autumn the next. Among the diseases in which the treatment was employed were "mental derangements, epilepsy, spasms of the facial muscles, hydrophobia, ptyalism of the pancreas, diseases of the spleens, goitre, hidden cancer," &c. (Hahnemann quoted by Teste). Hahnemann says (M. M. P.) that doubtless many patients were cured, but not a few succumbed to the enormous doses given [6].

**2. Methodology**

**2.1 Source of Data**

Alva’s Homoeopathic Medical College and Hospital, Mijar, Moodbidri, Karnataka, India. (December 2017 to June 2018).

**2.2 Method of Collection of Data**

Minimum 30 cases were scheduled whose totality is suitable to *Veratrum album*. 200potency was prescribed as first dose. If required potency was raised in repetition, if condition demands. Repetition-patient was observed for 3hours after medication. If pain did not subside next dose will be introduced.

**2.3 Inclusion Criteria**

Age group 15-25 years of age. Patients with primary dysmenorrhoea only. The patients who fit under the selective criteria for need of *Veratrum album*.

**2.4 Exclusion Criteria**

Patients who are under medication for chronic illness, Patients with secondary dysmenorrhoea, Patients who are not fit under the totality criteria for veratrum Alb.

**2.5 Types of Study**

Medicine was given to patients on the 1<sup>st</sup> day of menstruation. Duration of study -3 consecutive months. Analysis-was done based on student t test for statistical significance. Monitoring of intensity of pain is done for 3-consecutive month.

**Table 1:** Intensity of pain

Intensity of Pain	Grade	Score
No pain	Grade 0	0
Mild pain	Grade 1	1-4
Moderate pain	Grade 2	5-7
Severe pain	Grade 3	8-10

The patient was asked to mark the intensity of pain from 1-10, No pain- ‘0’ is to be marked, mild pain-patient has pain but patient can move about, complete her day to day activities without difficulties. Markings between 1-4, moderate pain - pain due to which patient cannot do her day to day activities and feels better by rest. Markings between 5-7, severe pain - pain due to which patient cannot do anything and not relieved by rest, patient was observed for a period of 3 months at regular intervals (depends on intensity of pain) and next medicine will be planned up.

**3. Results**

Out of 30 cases, one case is presented in detail in this study. To achieve objective of this study i.e., evaluating the efficacy of *Veratrum album* in case of primary dysmenorrhoea, total number of collected cases are 30. The study has conducted for a period of 3 consecutive months. 29 cases were improved and 1 case was not improved.

**Table 2:** Total Presented Symptoms

Abdominal Pain	Diarrhoea	Vomiting	General Symptoms
30	19	18	30

**Table 3:** Total Number of Cases Initially Presented With Following Grades

Grade 3	29
Grade 2	1
Grade 1	0

**Table 4:** Follow up Analysis

Number of Cases				
	Grade 3	Grade 2	Grade 1	Grade 0
After 30m of medication	5	24	1	0
After 1hr of medication	0	3	23	2
After 2hrs of medication	0	0	2	15
After 3hrs of medication	0	0	0	12

**Table 5:** Speed of Recovery

Time	Grade 3-2	Grade 2-1	Grade 1-0
30 minutes	23 cases	2 cases	0 cases
1 hour	5 cases	24 cases	2 cases
2 hours	0 cases	1 cases	15 cases
3 hours	0 cases	0 cases	11 cases

**3.1 P value and statistical significance**

The two tailed p value is less than 0.0001.

By conventional criteria this difference is considered to be highly statistically significant. Hence from the above conclusion it is proved that homoeopathic medicine named *Veratrum album* have a great role in curative action in primary dysmenorrhoea.

**4. Discussion**

The study was conducted for the patients who received treatment from Alva’s medical college, mijar and peripheral OPD, with prior ethical clearance from the institution. A total number of 30 cases were taken for the study of minimum periods of 3 consecutive months, unless the patient reported for follow up for longer duration of time. Out of many cases reported, 30 cases of primary dysmenorrhoea which suits to the totality of *Veratrum Alb* are only selected. Out of 30 cases 29 cases are noticed as improved with decreased severity of symptoms. And also remaining 1 case is reported as not improved.

While observing the action of *Veratrum album* by giving it for age group 15-25yrs, based on totality, pain relief was registered within minutes and helped to reduce the severity of symptoms present. It has been noticed that among 30 cases 29 cases are improved with decreased severity of symptoms and 1 not improved, the reason which I felt in my observation is the indicated remedy for the unimproved case must be some other than *Veratrum album*. This observation makes it clear that *Veratrum album* works very strongly when indicated in case of primary dysmenorrhoea. The study also shown that the most reliable symptoms of *Veratrum album* matches with condition of primary dysmenorrhoea are severe lower abdominal pain, diarrhoea, vomiting, coldness and muscle cramps.

By observing 29 improved cases for 3 consecutive months, another interesting observation has been made, time taken for these improvement to register in majority of the cases (23 cases) is within 30 minutes. Pain reduced from grade 3 to grade 2 within this time. This shows how quick *Veratrum album* acts. It can act faster than allopathic pain killers. This sending a strong message about fastness of action of homoeopathic medicine to those who think otherwise. Concluded with my observation that the remedy named *Veratrum album* is a remedy which showed and proved that it can cure dysmenorrhoea according to the presented

symptom in primary dysmenorrhoea. But the drawback I observed is in majority of cases every month the patient seeks the help of same remedy to relieve the pain and other symptoms. Thus we can infer that as an acute remedy *Veratrum album* has strong action. But if fails to produce sustained relief to consequent months if not given. Potency used in this study is 200. As the condition improved with single dose, higher potency was not introduced.

**5. Conclusion**

Homoeopathic system stands unique from others as it considers the body as a whole and not by individual parts or organs. The cases have been studied based on the fact that apart from this holistic approach homoeopathic medicines have been widely used to treat various conditions by various physicians in clinical practice. Here the study is conducted with medicine named *Veratrum album*. To know the effect of this medicine in primary dysmenorrhoea. Primary dysmenorrhoea is one of the threats to teenage girls as it is difficult to manage. So modern medicine is in search for an effective management of primary dysmenorrhoea by giving pain killers. Here comes the role of homoeopathic medicines which can assure rapid cure based on prescription given according to totality of symptoms. This study is aimed at understanding the efficacy of *Veratrum album* in case of primary dysmenorrhoea. As a part of this study cases of individuals with primary dysmenorrhoea were treated using *veratrum alb*.

The study has been conducted on 30 subjects of age groups of 15-25 yrs. All the cases have fulfilled the criteria of being prescribed on the basis of symptoms. After the remedial prescription it has been noted that there are specific changes can be observed within minutes by giving one dose of *Veratrum album* in 90%.

**6. Acknowledgement**

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