



Effects of Yogasanas in the Management of Pain during Menstruation

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ABSTRACT

Menstrual irregularities are main problems in females due to many reasons. The aim of the study is to evaluate effects of yogasanas in the management of pain during menstruation. 100 patients were selected as subjects, among them 50 participants in the case group were asked to attend 45 minutes yoga class every day with medications for a period of 3 months. The control group 50 subjects did not receive any yoga intervention only medications and were asked to complete questionnaires. Visual analog scale (VAS) was used to measure the pain severity for both the groups. The results of this study showed that yoga and relaxative techniques are better and beneficial therapy in the management of irregular menstruation and reducing the pain during menstruation. These techniques may be used as supportive along with conventional medications.

Key words: *Yogasanas, pain during menstruation.*

INTRODUCTION

A menstrual disorder is a physical or emotional problem that interferes with the normal menstrual cycle, causing pain, unusually heavy, light bleeding, delayed menarche, and missed periods¹.

Menstrual disorder is one of the most common problems in the women of the reproductive age group. Generally, women's are having menstrual irregularities like excess or scanty flow etc². Women have high rates of menstrual irregularities

33%, Amenorrhea 9%, psychological factors, stress, depression, lack of concentration were found to be associated with menstrual irregularities³. A menstrual disorder is a physical and psychological problem that interferes with the normal menstrual cycle. Irregular menstruation is common gynaecological disorder among female adolescents⁴.

The symptoms of irregular periods are may vary depending on the woman, her hormonal patterns and menstrual history. It may causing painful cramping, involves menstrual periods that are accompanied by usually in the pelvis and lower abdomen(Dysmenorrhea), Infrequent menstrual periods (oligomenorrhoea), too frequent periods (Polymenorrhoea), missed periods (Amenorrhea), abnormal duration of bleeding(Menorrhea),blood clots, changes in blood flow unusually heavy or light bleeding⁵. Patient with irregular menstrual cycles, obesity, infertility, all likely to impact quality of life, mood, potentially precipitate depression and anxiety. Indeed, it has a significant effect on adult women, resulting in diminished quality of life, dysfunction in the family and work environment⁶.

In a study by Lisa J Moran⁷, psychological stress, anxiety, depression, fatigue, vomiting, lack of attention, Sleeplessness, life style changes, diet modification and without daily exercises are the causes for increasing weight, that leading to irregular periods. If one month the cycle 23 days and another it's 35 days, and then another it's 30 days, this type of changes observe in the menstrual cycle called as irregular periods⁷. Yogic

techniques offer a means to reduce the physiological and psychological problems⁸. Yoga has its origin in ancient India. Its original form consisted of spiritual, moral, and physical practices. The different relaxation techniques often lead to specific psychological and physiological changes termed as relaxation response⁹. Yogic life style is a form of holistic mind-body medicine, developed thousands of years ago, is simple and can be practiced by all. There is mounting evidence that yoga reduces the pain and menstrual disorders¹⁰. Yoga reduces the psychological conditions like stress, tension, depression and anxiety, and also reduces the physiological problems like pain during menstruation and irregular periods¹¹.Yogic relaxation training should be prescribed more frequently as an adjunct or alternative to conventional drug therapy for menstrual pain and disorders¹².

The present study was planned to assess the effect of Yogasanas in the management of pain during menstruation in adolescent group with unknown causes.

METHODOLOGY

This randomized study with 100 subjects conducted at Narayana medical college and hospital, Narayana Yoga and Naturopathy Medical College and Hospital, Nellore, Andhra Pradesh, India. The study protocol approved by the Institutional Ethical Committee. Informed consent was obtained from study participants. The subjects were familiar with the aims and

objectives of the study. The study will be conducted up to 3 months (90 days) of periods.

YOGA INTERVENTION

The following yoga poses were done by the study groups are practicing 45 minutes daily. Sukshama vyayama 12 minutes, Padmasana 2 minutes,

Paschimottasana 2 minutes, Vajrasana 2 minutes, Ushtrasana 2 minutes, Shashankasana 2 minutes, Matsyasana 2 minutes, Uttanpadasana 2 minutes, Sarvangasana 2 minutes, Surya namaskara 12 rounds 10 minutes. After practicing these asana Shavasana were given up to 7 minutes as follows.

S.No	Asana Names	Duration
1.	Sukshama Vyayama	12 minutes
2.	Padmasana	2 minutes
3.	Paschimottasana	2 minutes
4.	Vajrasana	2 minutes
5.	Ushtrasana	2 minutes
6.	Shasangasana	2 minutes
7.	Matsyasana	2 minutes
8.	Uttan Padasana	2 minutes
9.	Sarvangasana	2 minutes
10.	Surya Namaskara	10 minutes
11.	Shavasana	7 minutes

EXCLUSION CLITERIA:

Women's were having any gynaecological related surgeries, pregnancy, Pelvic inflammatory diseases, Thyroid problems, Poly Cystic Ovarian Disease, Hereditary problems and uncooperative subject were excluded.

STUDY PROTOCOL

In this study protocol the total participants are 100. Among them 50 participants in the study group were asked to attend 45 minutes yoga class every day for a period of 3 months. All classes were free of charge to the participants. The control

group 50 subjects did not receive any yoga intervention only medications and were asked to complete questionnaires. Each group was evaluated after 3 months. Visual analog scale (VAS) was administered on both the groups at the end of 3 months.

SAFETY EVALUATION

Any adverse events will be recorded at during the study period. Breakfast will be provided at the end of study. At the period of menstruation unable to perform the yoga during these days subjects will not practiced.

ASSESSMENT

The collected data's were statistically analyzed by the student's t test. p value less than 0.05 shown to be significant.

RESULTS

The present interventional study shows that 50 adolescent's girls with mean±S.D age of 21.50 ±3.164 were selected as cases those underwent yoga session with medicines. 50 girls of age matched (mean±S.D. 20.50 ±1.930) were selected as control group underwent only medication. During the first visit, case group girl's shows mean VAS score 4.16 versus 4.22 with p-value 0.679. During second visit, case group girl's shows mean VAS score 2.38 versus 2.8 with p value 0.007. Whereas at final visit, VAS score of cases recorded 0.26 versus control 1.38 with p value less than 0.001. The cases who done yoga shown a very high significant change of VAS score completing the last visit i.e. at third visit. This current study proved that practice of regular yoga in the given manner that is Sukshama vyayama 12 minutes, Padmasana 2 minutes, Paschimottasana 2 minutes, Vajrasana 2 minutes, Ushtrasana 2 minutes, Shashankasana 2 minutes, Matsyasana 2 minutes, Uttanpadasana 2 minutes, Sarvangasana 2 minutes, Surya namaskara 12 rounds 10 minutes. After practicing these asanas Shavasana were given up to 7 minutes.

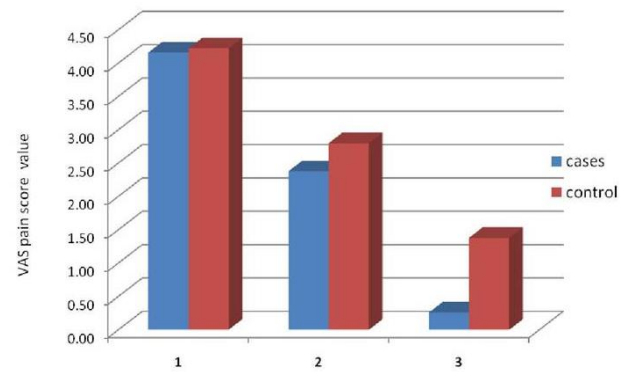


Figure 1. Shows VAS scale of both groups at first, second and third visit

DISCUSSION

In this present study results showed that yoga provided a beneficial result in the treatment of irregular menstruation and relieving the pain during menstruation. Yoga is a reparative techniques with breathing for improving the health, control, prevention and curing of diseases. It promotes the physical relaxation by decreasing the activity of sympathetic nervous system and increased parasympathetic function¹³. yogasana and relaxation techniques helps in the reduction of irregular menstruation problems like pain stress, anxiety, depression, lack of concentration ,tension and irritation¹⁴.

The results suggest that there was a very high significant improvement in positive well being, improves the vitality in the case group. Yogasana is believed to balance the body and mind. Yoga is an ancient technique for improving the health. Practice of yoga has increased in several countries for various ailments, particularly related to physiological and psychological problems¹⁵. Yoga is believed to balance psychic and vital energies within the psychic channels of the energy

framework underlying the physical body. Free flow of these energies is considered to be the basis of optimal physical and mental health¹⁶.

Yoga promotes the physical relaxation by decreasing the activity of sympathetic nervous system, which lowers the heart rate and increase the breathe volume. A deep breathing provides extra oxygen to the blood and causes the body to release endorphins, which are naturally occurring hormones that reenergize and promote relaxation¹⁷. The effect of pain is mainly deposited in the lower abdomen muscles; muscle relaxation attained through stretching of abdominal muscles was the main aim in practicing of asana for reduction of pain. Yogasana and relaxation techniques help in the reduction of irregular menstruation and pain during periods.

Previous studies have also shown that employing yoga interventions are good effective treatments of psychological and physiological well beings¹⁸. However, the improvement in control group did not show a significant difference, but in the case group there was improvement in these parameters also when compared to control groups. The subjects who practiced yoga they felt that they have experienced and learnt a skill in the form of yogasanas, Pranayama, loosening exercises .They felt very happy and self confident, fully satisfied with the treatments.

CONCLUSION

Current study with medicines and yoga gives better management to reduce pain during menstrual cycle. The study showed that yoga

techniques can be used as supportive therapy along with conventional medications to reduce pain during menstruation.

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