

Analysis of the effect of yoga practices on pre-menstrual syndrome

¹ Dr. K Krishna Sharma, ² Rashmitha

¹ Chairman, Dept. of Human Consciousness and Yogic Sciences, Mangalore University, Mangalagangothri, Karnataka, India

² Research Scholar, Dept. of Human Consciousness and Yogic Sciences, Mangalore University, Mangalagangothri, Karnataka, India

Abstract

A study to assess the effect of yoga therapy on ladies with PMS (Pre Menstrual Syndrome) conducted at women's Hostel, Mangalore University, Mangalagangothri. 20 subjects suffering with PMS were randomly selected for the current study. They are divided into two groups, experimental and control group with 10 subjects in each group. The experimental group was given selected yogic practices for one hour from 6.00 to 7.00pm, six days per week for a period of 30 days. The session included a series of asanas, pranayamas and relaxation techniques. The control group was not given any of these. Luteinizing hormone level, B.P, BMI and questionnaire readings were recorded for both the groups before and after the study. The results of various tests were analysed through student 't' test and have been compared for the two groups. After yoga therapy, the experimental group showed significant improvement at a level of significance $p < 0.05$ with a significant p value 0.0126. There was no significant change in control group. This depicts that the regular practice of the selected yogic techniques assist in regularization of hormones and in reducing PMS.

Keywords: luteinizing hormone, pre menstrual syndrome, yoga therapy

Introduction

Health is the greatest blessing in human life. One should nurture it carefully. But the miserable fact is that the health of woman is always neglected. Health status of nation depends on the health status of woman. Physical and mental health is threatened by diseases and disorders of female reproductive system. *Every woman at some stage or other experience menstrual disturbances, and these can and often affect their routine*¹ At present a considerable number of young ladies of child bearing age are facing premenstrual syndrome i.e. symptoms like stress, difficulty with sleep, mood swings, constipation, diarrhoea, tenderness in breasts, cyclic acne, muscle pain, food cravings etc. due to modern unhealthy lifestyle. This influence on her behaviour or pattern of response changes physically and emotionally. By which variations in the hormonal level occurs. This directly influences on several bodily and mental changes in her. Fatigue, pain, anxiety, anger, depression which finally end in frustration. Woman has a very special boon of giving birth which she has to accomplish with most care and happiness. It is possible only when she is healthy both physically and mentally.

Increasing incidence of this problem has provoked studies of how yoga can help in handling this. It is proved in various studies that regular practice of yoga can manage most menstrual disorders. Yoga is a preventive, asanas and curative aspect. *Yoga can make emotionally stable and make free from psychological disturbances. It helps to control and check emotions, it gives balance of mind*² Yogic practices like kriyas, asanas, pranayamas, and relaxation techniques help to relieve the physical and mental stress and helps in maintaining the

normal level of hormones in the body. Here is a small attempt to study the effect of yogic practices on PMS.

Objective

To find out the effect of yoga therapy on the subjects with PMS.

Variables

Independent variables: Selected yogic practices

Dependent variables: Luteinizing hormone, questionnaire.

Materials and Methods

The present study was conducted to determine the effect of yoga therapy on the subjects with PMS. 20 volunteer subjects with age group 20-24 years were randomly selected for the study. They were classified into two group i.e. experimental and control group with 10 subjects each. Control group continued with normal lifestyle. The experimental group was given selected yogic practices six days per week at the women's Hostel, Mangalore University, and Mangalagangothri. Yogic practices were given in a sequence and individual care was taken. To analyse the significance of the result statistically, paired "t" test was selected.

The following yogic practices taught to experimental group for a period of 30 days. Swastikasana, Vajrasana, Supta Vajrasana, Tadasana 1, Trikonasana, Parsvakonasana, Prasara padottanasana, Paschimottanasana, Purvottanasana, Pavanamuktasana, Bhujangasana, Shalabhasana, Dhanurasana, Baddha konasana, Upavistha konasana, Uttanapadasana, Ujjayee pranayama, Anuloma Viloma pranayama, Bhastrika pranayama and Shavasana.

Results

Before and after 30 days of yoga therapy all the subjects under the study were tested. Significant result of luteinizing hormone in case of experimental group was seen. Table 1 shows the significant result of LH test for every individual of experimental group but no such significance in the control group. By observing the questionnaire it was found that most of the experimental subjects experienced reduction in mood swings and emotional imbalance and physical pain such as

headache and muscle cramp before the very next menses. This shows that by yoga therapy has reduced PMS in experimental group compared to the control group. Therefore in general, we can analyse the result as follows:

- LH level of all the experimental subjects reached the normal level.
- Questionnaire helped to measure the physical and mental status of the subjects which was significantly positive in experimental group after yoga therapy.

Table 1: The values of LH and Questionnaire of experimental group

Parameter	Mean		S.D		t value	p value	Significance
	Before	After	Before	After			
LH	6.392	11.275	4.4706	6.9345	-3.1018	0.0126	S
Questionnaire	48.645	46.05	9.1304	8.8724	6.1312	0.000173	HS

S- Significant HS-Highly Significant

Table 2: The values of LH and Questionnaire of Control group

Parameter	Mean		S.D		t value	p value	Significance
	Before	After	Before	After			
LH	13.998	13.924	7.0465	6.71790	0.2684	0.79438	NS
Questionnaire	51.07	51.92	8.40678	8,19070	-1.95547	0.08224	NS

NS-Non Significant

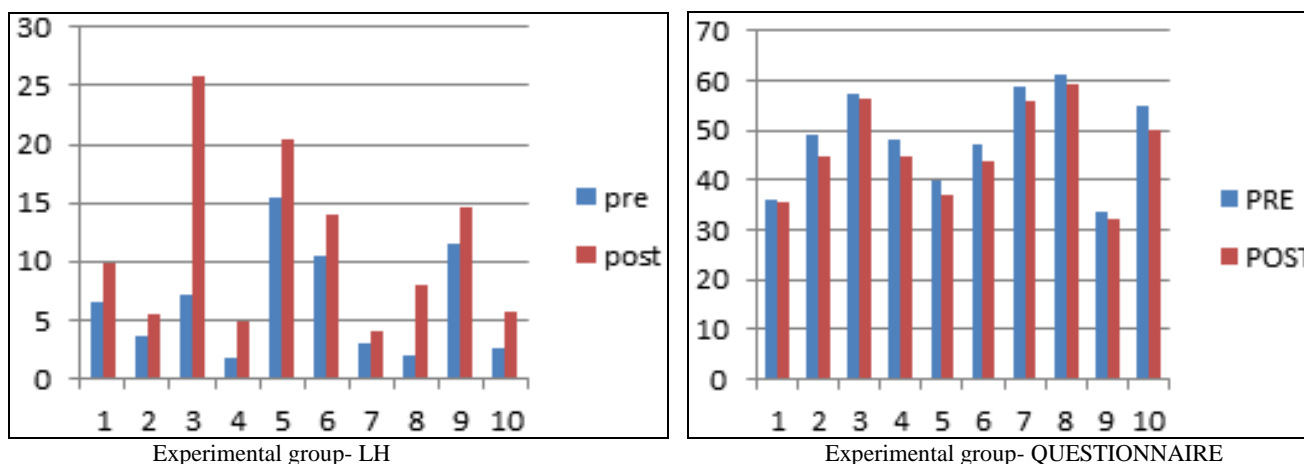


Fig 1: representation of result before and after the yogic practice in experimental group.

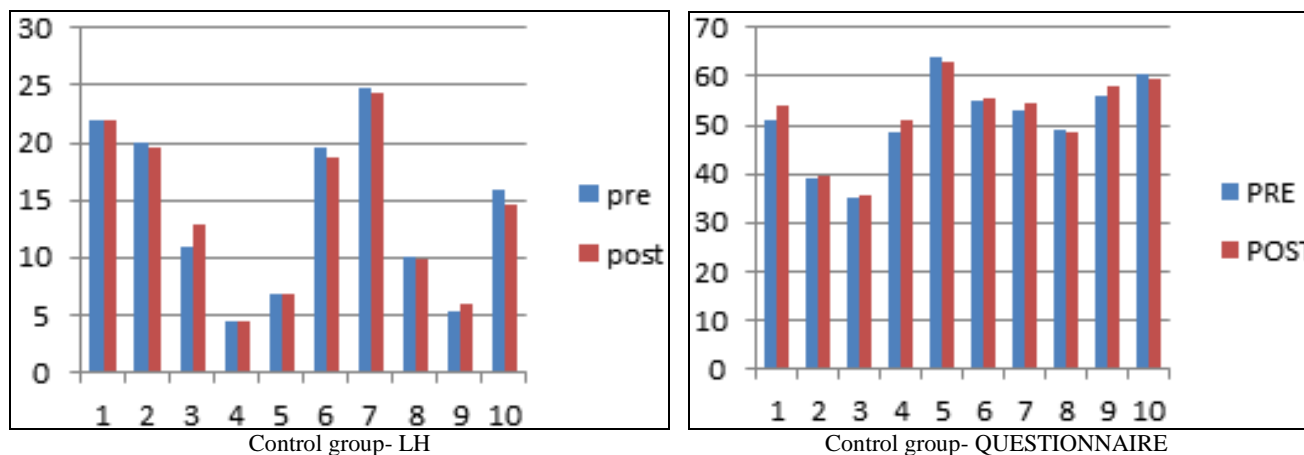


Fig 2: representation of result before and after the study in control group

Discussion

The present study reveals that the concerned variables of PMS have been concentrated in terms of the hypothesis that the experimental group will outperform the control group due to 30 days of yogic practices. The results could best depicted that there is significant improvement at a level of significance $p < 0.05$ in LH with a significant p value 0.0126 and in questionnaire with significant p value 0.000173. When compared to experimental group the control group has not shown any significant changes after the study, with p value 0.7943 in LH and 0.08224 in questionnaire. This reveals that the experimental group has been benefited more in terms of variables concerned.

A few studies on effect of yoga therapy on menstrual disorder showed that level of hormone reached the normal level after the practice of yoga and indicated that yoga may be a useful form of therapy for menstrual disorder. The results of present study allow a few fairly firm conclusions. Significant improvement in the Luteinizing hormone only in the yoga group but not in the control group indicates the efficacy of yoga. This further substantiated the significantly greater improvement in positivity in physical and mental level in the yoga group than in the control group.

From the result it is evident that all the subjects of the experiment group responded to the therapy positively. Hence it is proved that yogic practices have a significant impact in reducing PMS. But the variation of rate of success could be dependent on the regularity of practice, lifestyle, dietary change etc. Therefore we can say that yoga is fully fruitful for those young ladies who regularly practice yoga. A long term practice can lead into much more significant result.

Conclusion

The result obtained from the present study can be concluded as below:

1. The yoga therapy helps efficiently in regularising the Luteinizing hormone in ladies with PMS.
2. Selected yogic practices assist to reduce the emotional imbalance and physical strain.
3. In a more controlled set up under strict vigilance may yield better results.

References

1. Vivekananda Swami, Rajayoga, Patanjala yoga sutra, 41st edition, Advaita Ashrama Publications, New Delhi,
2. Athavale VB, Basic Principles of Ayurveda by Dr. V.B Athavale, Chaukamba Sanskrit Pratisthana, Delhi.
3. Swash Michael. Hutchinson's clinical methods 21st edition, published by W. B Saunders Company Ltd.
4. Ross, Wilson. Anatomy and Physiology in Health and Illness, by Anne Waugh and Allison Grant.
5. Gerald Tortora, Nicholas Anagnostakos P. Principles of Anatomy and Physiology Harper Collins Publishers.
6. Geetha Iyengar S. Yoga a gem for women, Allied Publishers private limited, New Delhi.
7. Dhanalakshmi Dash. Woman, Environment and Health, Mangal Deep publications, Jaipur.
8. Dr. Neealm Tejwani, *et al.* Effects of Yoga in Menstrual Disorders; published in National Journal of Integrated Research in Medicine. 2015; 6(1):45-48.

9. Logeshwari K, *et al.* Effect of yoga therapy on menstrual disorders with Reference to hormonal discrepancy; Published in Asian journal of Complementary medicine. 2014; 2(5):24-28.