

**YOGA AN EFFECTIVE, ALTERNATIVE AND COST EFFECTIVE
APPROACH TOWARDS MANAGEMENT OF DYSMENORRHEA.****Mahajan Roshi^{1*}, Dogra Jyoti² and Tewari Aditaya Nath³**

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ABSTRACT

Dysmenorrhea undoubtedly one of the most common complaint among all gynecological disorders; is a medical condition of pain during menstruation that interferes with daily activities, The incidence of dysmenorrhea is seen more in the ages of early reproductive years. Painful menses in women with a normal pelvic anatomy, usually beginning during adolescence can be attributed as Primary dysmenorrhea.^[1] According to Acharya Charaka that Vata is the causative factor of all Yoniroga.^[2] He described Udavarta yoni roga in Vataja nanatmaja diseases^[3] which means an upward direction of

Vayu. In this disease Aggravated Apana Vayu pushes the rajas in upward direction causing an obstruction to its flow so Raja comes out with great difficulty and with severe Shoola.^[4] Because the pain and discomfort is subjective, diagnosis relies upon the proper history. It is also important to differentiate the primary diagnosis from the secondary one. Prognosis of dysmenorrhea is good. It can be treated successfully with Ayurvedic single herbs or formulations in addition to making diet and lifestyle changes. Experts believe that one of the major contributing factors to menstrual cramps can be lack of exercise.^[5] Unhealthy dietary habits have also been known to add to the woe. Yoga is a holistic approach towards a physically and mentally healthy lifestyle. When practiced regularly over a period of time, it can have the desired effects on the body. Few studies have been done on yoga as therapy for stress and primary dysmenorrhea. This study is aimed at evaluating the efficacy of yoga as alternative therapy for primary dysmenorrhea and stress.

KEYWORDS: Yoga, Dysmenorrhea, Udavarta, Shoola, Nanatmaja.

INTRODUCTION

The term yoga comes from a Sanskrit word which means union. Traditionally, yoga is a way by which an individual joins self with the Divine, Universal Spirit, or Cosmic Consciousness. It includes both Physical and mental exercises are designed to help achieve this goal. On the physical level, yoga postures, called asanas, are designed to tone, strengthen, and align the body. These postures are performed to make the spine supple, healthy and to promote blood flow to all the organs, glands, and tissues, keep all the systems of the body healthy. On the mental level, yoga uses breathing techniques (pranayama) and meditation (dhyana) to quiet, clarify, and discipline the mind.

Primary dysmenorrhea is menstrual pain without pelvic pathology i.e. that is not a symptom of an underlying gynecologic disorder but is related to the normal process of menstruation. Studies on the prevalence of menstrual pain have shown that many factors are related to this disorder. These factors include a younger age, low body mass index (BMI), smoking, early menarche, prolonged or aberrant menstrual flow, perimenstrual somatic complaints, pelvic infections, previous sterilization, somatization, psychological disturbance, genetic influence, and a history of sexual assault influencing the prevalence and severity of dysmenorrhea.

Although dysmenorrhea is not life-threatening, it can be debilitating and psychologically taxing for many women. Some choose to self-medicate at home and never seek medical attention for their pain. Dysmenorrhea is responsible for significant absenteeism from work, and it is the most common reason for school absence among adolescents.^[6] There is a wide variation in the estimate of dysmenorrhea from studies around the world reporting a range between 28% and 71.7%.^[7] Many studies determined that the prevalence of dysmenorrhea showed a decrease with increasing age, indicating that primary dysmenorrhea peaks in late adolescence and the early 20s and the incidence falls with increasing age.^[8]

Clinical features

Dysmenorrhea or painful menstruation is defined as a severe, painful, cramping sensation. Dysmenorrhea is characterized by crampy pelvic pain beginning shortly before or at the onset of menses in the lower abdomen usually concentrated in the supra pubic area and lasting 1–3 days all occurring just before or during the menses. Pain may radiate to the back of the legs or the lower back. Systemic symptoms of nausea, vomiting, diarrhea, fatigue, mild fever and headache or light headedness are fairly common in the lower abdomen. Pain usually develops

within hours of the start of the menstruation and peaks as the flow becomes heaviest during the first day or two of the cycle.^[9]

Path physiology of Primary dysmenorrhea

In primary dysmenorrhea, there is a highly complex interplay between hormones and mediators, basal body temperature, sleep patterns, and the central nervous system (CNS), the extent of which is not completely understood.^[10] Current evidence suggests that the pathogenesis of primary dysmenorrhea is due to prostaglandin F_{2α} (PGF_{2α}), a potent myometrial stimulant and vasoconstrictor, in the secretory endometrium. The response to prostaglandin inhibitors in patients with dysmenorrhea supports the assertion that dysmenorrhea is prostaglandin-mediated. Substantial evidence attributes dysmenorrhea to prolonged uterine contractions and decreased blood flow to the myometrium.^[11] Elevated prostaglandin levels were found in the endometrial fluid of women with dysmenorrhea and correlated well with the degree of pain.^[12]

In addition, a neuronal hypothesis has been advocated for the pathogenesis of primary dysmenorrhea. Type C pain neurons are stimulated by the anaerobic metabolites generated by an ischemic endometrium. Women with dysmenorrhea appear to have enhanced pain sensitivity compared to women without dysmenorrhea, even during phases of the menstrual cycle when they are not experiencing menstrual pain.^[13]

Primary dysmenorrhea has also been attributed to behavioral and psychological factors. Although these factors have not been convincingly demonstrated to be causative, they should be considered if medical treatment fails.

According to studies, yoga intervention improves blood flow at the pelvic level as well as stimulating the release of B endorphins acting as nonspecific analgesics.^[14] A growing body of evidence supports the belief that yoga benefits physical and mental health via down-regulation of the hypothalamic pituitary-adrenal axis and the sympathetic nervous system.^[15] In addition, another study reported that yoga poses improve spinal flexibility and strengthens muscles in the back and yoga nidra means psychic sleep which may induce deep relaxation and, subsequently decrease oxygen consumption causing pain relief^[16] Yoga also plays an important role in reducing stress and sympathetic activity, increasing parasympathetic activity, improving one's quality of life, and decreasing psychological symptoms levels.^[17]

Asanas also help in relieving congestion in these organs, especially uterus, which is one of the reason for Dysmenorrhea pain. Practice of Pranayama help to reduce sympathetic dominance which also is one of the causes of Dysmenorrhea pain. Moreover, practice of Yoga helps in establishing a balance between the endocrine & reproductive systems, thus regulating the hormonal control of the menstrual mechanism. Pranayama like Nadishodhana help in the treatment of Dysmenorrhea by establishing a balance between Sympathetic & Parasympathetic nervous system. Relaxation techniques in Shavasana help in reconditioning of body- mind complex and provide relief. Meditation also helps to change the psychological status of the girls with Dysmenorrhea.

Yogasanas which are particularly beneficial in reducing dysmenorrhea are^[18]

- ❖ Cobra Pose (Bhujangasana) is one of the very powerful backward bending asana in Hatha Yoga beneficial for people with lower back aches. This posture decreases stiffness in the lower back, enlarges the chest, and strengthens the arms and shoulders. This Asana is also good to combat menstrual irregularities, and helps relieve stress. It has a huge amount of benefits which cover all the body systems. In women it tones the ovaries and the uterus and helps to alleviate gynecological disorders such as leucorrhea, dysmenorrhea and amenorrhea.
- ❖ Adho mukha Virasana (hero's pose) reduces fat around the thighs & calves. It improves the digestion quietens the mind and reduces tension and congestion in pelvic organs.
- ❖ Matsyasana or the Fish pose is a back bend that stretches and stimulates the belly muscles. It is also known to relieve the body of menstrual pain.
- ❖ Janu Shirasasana or the one legged forward bend is yet another yoga pose that massages the abdominal organs, thus relieving the pain caused by menstrual cramps.
- ❖ Bhujangasana or the cobra pose stretches and tones the abdomen .It also reduces fatigue and stress.
- ❖ Dhanurasana strengthens the abdominal muscles, back muscles and stimulates the reproductive organs. It alleviates menstrual discomfort and constipation
- ❖ One legged Pigeon pose opens the hips and stretches the entire lower part of body and help to prevent lower back pain, also stimulates the abdominal organs and relieves menstrual discomfort.
- ❖ Wide squat pose opens tight hips, releases tension in the lower back and stretches out the muscles in the feet.

SUMMARY AND DISCUSSION

Yoga is becoming popular in all parts of the world. It encompasses a system of asanas (postures), which helps to promote mental and physical well-being, with particular emphasis on making the spine supple and healthy and increase circulation and allow the mind to focus and become free from distraction for long periods of meditation, along with pranayama (breath control). It is a highly developed system of nearly 200 physical postures, movements and breathing techniques designed to tune the body to its optimal health. Dysmenorrhea is a functional problem and not a disease state that is causing pain, we can truly focus on a holistic approach by looking for aggravating factors in diet, life style, and emotional environment. Yoga encompasses breathing techniques which relaxes the body, which is helpful in relieving stress due menstruation. Performing the various positions in Yoga promotes body flexibility; the muscles become supple helps eliminating pain due to menstrual cramps and other causes.^[19] As stated, there is evidence for the benefit of yoga in reducing pain and symptoms of dysmenorrhea

CONCLUSION

Yoga is an ancient science and probably is the first known to mankind to maintain and promote health. As a system of treatment, it has gained worldwide popularity. Yoga experts around the world have always claimed that Yoga can prevent and treat a number of health problems. Numerous scientific studies using the modern scientific techniques carried out in different parts of world have shown that many yogic practices have health promotive and curative abilities. . Yoga improves the well-being. Yoga teaches women not to focus too much on the problem, rather it teaches them to learn to accept the inevitable changes in life. Yoga, being a physical breathing exercise, promotes good blood circulation. As a result, menstrual cycle will not be a problem anymore, thus minimizing pain. Yogic practices i.e. asanas, Pranayama, relaxation and meditation have proven very beneficial in the treatment of Dysmenorrhea. Apart from increasing the circulation to the reproductive organs, they increase the flow of vital energy to these organs and establish a balance among hormones regulating menstruation.

Yoga can prevent and treat diseases by using the energies inside the body, improving the circulation and waste disposal thereby cleansing the cells. As a practice, yoga aims to harmonize the body & mind. Therefore, Yoga is just not a system of physical exercises but a

just not a system physical exercises but a psycho physiological system of therapy. Yoga may be a safe and cost-effective intervention for managing menstrual problems.

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