

EFFECTIVENESS OF YOGA THERAPY IN THE MANAGEMENT OF PRIMARY DYSMENORRHOEA IN SIDDHA – A CASE STUDY

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Article Received on
22 April 2019,

Revised on 12 May 2019,
Accepted on 02 June 2019,

DOI: 10.20959/wjpr20197-15262

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ABSTRACT

Background: Siddha system of Medicine is a unique science which describe more about the Kayakarpam and deals with increasing the quality of human life through Astanga yoga. Yoga and the yogic postures are dealt in the third limb of Astanga yoga in Siddha system of medicine. Yogaasanas (yogic posture) play a vital role in gynecological problems and also by improving the quality of life. The aim of this study is to find the effect of Yogic postures (Asanas) in relieving primary dysmenorrhoea and the improvement in quality of life. **Objective:** To study the effectiveness of yogic postures mentioned in Siddha system of medicine in primary dysmenorrhoea. Yoga asanas were advised to the patient with primary dysmenorrhoea for the period

of 2 months (excluding 5 days of menstrual period), to access increasing the quality of life by reducing the pain during menstruation. **Materials and Methods:** 16 years old female present with the complaints of Primary dysmenorrhoea (pain during menstrual cycle) was take as a study subject. Yoga asanas were advised to the study subject for the period of 2 months (excluding 5 days of menstrual cycle). **Results and Discussion:** There was a significant improvement found in subject. The quality of life is improved and there is also decrease in the pain during menstrual cycle. The quality of life and pain was accessed before and after intervention of yoga therapy.

KEYWORDS: Siddha - Yogaasanas - Dysmenorrhoea- Quality of life.

INTRODUCTION

Dysmenorrhoea is painful menstrual cramps of uterine origin. Pain duration is commonly 8 to 72 hours and is usually associated with the onset of menstrual flow. It is commonly divided into primary dysmenorrhoea (pain without organic pathology) and secondary dysmenorrhoea (pelvic pain associated with other pathological conditions). Adolescent girls tend to have a higher prevalence of primary dysmenorrhoea than older women, as primary dysmenorrhoea can improve with age. The initial onset of primary dysmenorrhoea is usually shortly after menarche (6–12 months). Secondary dysmenorrhoea can also occur at any time after menarche, but may arise as a new symptom during a woman's fourth and fifth decades, after the onset of an underlying causative condition. Secondary dysmenorrhoea rates may be lower in adolescents, as onset of causative conditions may not yet have occurred.^[1] Symptoms typically last less than three days.

In Siddha literature of Dysmenorrhoea is mentioned as *Soothaga Vali*.^[2] The pain is usually in the pelvis or lower abdomen. Other symptoms may include back pain, diarrhea, or nausea.^[3] It is the most common menstrual disorder.^[9] Typically it starts within a year of the first menstrual period.^[3] When there is no underlying cause often the pain improves with age or following having a child.^[9] Dysmenorrhea occurs less often in those who exercise regularly.^[1] In young women painful periods often occur without any problems like uterine fibroid, adenomyosis and endometriosis.^{[4][5]}

Mechanism

During a woman's menstrual cycle, the endometrium thickens in preparation for potential pregnancy. After ovulation, if the ovum is not fertilized and there is no pregnancy, the built-up uterine tissue is not needed and thus shed.

Molecular compounds called prostaglandins are released during menstruation, due to the destruction of the endometrial cells, and the resultant release of their contents.^[6] Release of prostaglandins and other inflammatory mediators in the uterus cause the uterus to contract. These substances are thought to be a major factor in primary dysmenorrhea.^[7] When the uterine muscles contract, they constrict the blood supply to the tissue of the endometrium, which, in turn, breaks down and dies. These uterine contractions continue as they squeeze the old, dead endometrial tissue through the cervix and out of the body through the vagina. These contractions, and the resulting temporary oxygen deprivation to nearby tissues, are responsible for the pain or "cramps" experienced during menstruation.

Compared with other women, women with primary dysmenorrhea have increased activity of the uterine muscle with increased contractility and increased frequency of contractions.^[8]

Symptoms

The main symptom of dysmenorrhea is pain concentrated in the lower abdomen or pelvis.^[3] It is also commonly felt in the right or left side of the abdomen. It may radiate to the thighs and lower back.^[3]

Symptoms often co-occurring with menstrual pain include nausea and vomiting, diarrhea or constipation, headache, dizziness, disorientation, hypersensitivity to sound, light, smell and touch, fainting, and fatigue. Symptoms of dysmenorrhea often begin immediately after ovulation and can last until the end of menstruation. This is because dysmenorrhea is often associated with changes in hormonal levels in the body that occur with ovulation.

Yoga

Yoga, it means to bind or to join. It also means union or communion. It is the true union or our will with the will of god. Yoga is one of the six orthodox system of Indian philosophy. Patanjali enumerates eight limbs or stages of yoga for the quest of soul. He explain asana in his third limb of astanga yoga. He states that asanas keep the body healthy and strong and in harmony with nature. Asanas are not merely gymnastic exercise, they are postures. By practising asanas one develops agility, balance, endurance and great vitality. They reduce fatigue and soothe the nerves.^[10] There are various types of asanas. Each and every asanas will have a peculiarity to tone up a particular part of a human body. Yoga asanas help in stretching the muscles of pelvic cavity and increase the blood circulation to the pelvic organs and also the spinal twisting asanas help in relieve spinal muscle spasm and help to neutralise abanavaayu whic helps in normal menstrual flow.

AIM OF THE STUDY

To evaluate the effectiveness of yoga in primary dysmenorrhoea in a female adolescent.

OBJECTIVE

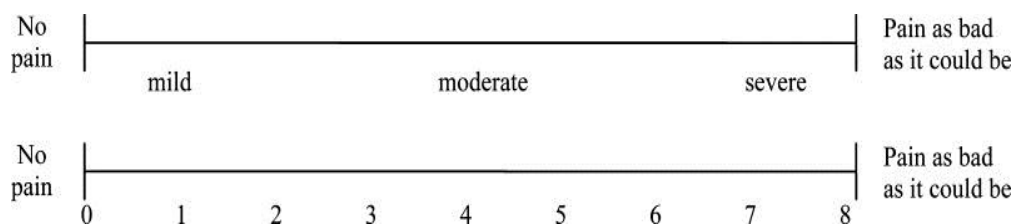
To find the effectiveness of Yoga in reducing menstrual cramps, Primary Dysmenorrhoea with the interention of Yoga therapy.

MATERIALS AND METHODS

A 16 year old female came with the complaints of pain before and during the menstrual cycle, who attained her menarche at the age of 14. Abdominal and pelvic examination was done by a blinded physician to rule out other pelvic pathology. Pain of primary dysmenorrhoea was measured by using VRS^[11] before and after Yoga therapy. WALLID.^[13] Score is also used to diagnose dysmenorrhoea. The study subject is advised to do Yoga postures (Asanas) for 2 months (except 5 days of menstruation). quality of life of the subject also measured by using a questionnaire.

Before the intervention of Yoga therapy the patient was educated about the study in her mother tongue and got consent from the study subject and from her parents. Subject with pelvic pathology, skeletal pathology (Scoliosis & Kyphosis) and unequal leg length are excluded from the study, because these conditions may aggravate the pain during menstrual cycle.

VRS (Verbal Rating Scale)



WaLIDD score variables

Working ability	Location	Intensity (Wong–Baker)	Days of pain
0: None	0: None	0: Does not hurt	0: 0
1: Almost never	1: 1 site	1: Hurts a little bit	1: 1–2
2: Almost always	2: 2–3 sites	2: Hurts a little more – hurts even more	2: 3–4
3: Always	3: 4 sites	3: Hurts a whole lot – hurts worst	3: ≥ 5

Notes: Score: 0 without dysmenorrhea, 1–4 mild dysmenorrhea, 5–7 moderate dysmenorrhea, 8–12 severe dysmenorrhea. Wong–Baker scale was reclassified to adjust a four-level scale.

Abbreviation: WaLIDD, working ability, location, intensity, days of pain, dysmenorrhea.

Yoga Therapy Regimen**I. Initial Prayer and Relaxation****II. Asanas**

1. Baddha konasana - Butterfly stretch
2. Matsyasana - Fish pose
3. Ushtrasana - Camel pose
4. Janusirasana - one legged forward bend
5. Pavanamuktasana - wind relieving pose

These are all the asanas advised to the patient.

III. Final Relaxation and Prayer.**RESULTS AND DISCUSSION****VRS (VERBAL RATING SCORE)**

Table No. 1

S.NO	AGE/SEX	PRE VRS	INTERMITTEN VRS	POST VRS
1.	16/F	8	5	1

WaLLID Score

Table No.2

S.No		PRE WaLLID	30 TH DAY WaLLID	POST WaLLID
1.	Working ability	3	2	1
2	Location	2	2	1
3	Intensity	2	1	0
4	Days of Pain	2	1	1
5	Over all WaLLId Score	9 (Severe)	6 (Moderate)	3 (Mild)

Comparison of VRS and WaLLID score

Table No. 3

S.No	SCORES	PRE SCORE Day 1	INTERMITTENT SCORE Day 30	POST SCORE Day 60
1.	VRS	8	5	1
2.	WaLLID	9	6	3

The pre VRS of the study subject on day 1, before the yoga session, was graded as 8. The post VRS of the subject on 30th day, after the yoga session, was graded as 5. The final VRS score was measured after 60 days of yoga therapy was 1. The significant reduction in VRS shows reduction of pain during menstrual cycle. The WaLLID score which is the main

diagnostic tool of dysmenorrhoea was also noted before and after intervention of yoga therapy. Before the yoga therapy session the WaLLID score of the subject was 9 which denote sever dysmenorrhoea. After the intervention of yoga therapy on 30th day the WaLLID score was reduced to 6, which denote moderate Dysmenorrhoea. The final WaLLID score was measured on 60th day of Yoga therapy session and it shows a drastic change in the WaLLID score, the WaLLID score was 3 which denote Mild dysmenorrhoea. The Changes in both VRS and WaLLID scale was noted and both the outcome measures shows the significant reduction in menstrual pain. By this we can clearly state that there is a considerable reduction of menstrual cramping pain (dysmenorrhoea) after practising yoga asanas and it also improve the quality of life.

In summary, the short term yoga therapy can give a significant result in reducing primary dysmenorrhoea.

CONCLUSION

The present study suggest that 2 months of yoga therapy can give a significant result in subjects who are suffering from Primary Dysmenorrhoea (menstrual cramping pain) and improvement in the quality of life. While practising Yoga asanas Stretching of pelvic muscles, twisting spinal movements and increased blood circulation to the pelvic organs, may lead to the decrease in primary dysmenorrhoea and also play a vital role in improving the quality of life.

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