

Evaluating the Efficacy of Yoga & Ayurveda as a Complementary Treatment for Primary Dysmenorrhea: A Case Report

Research Article

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Abstract

Primary dysmenorrhea, characterized by painful menstrual cramps without underlying pathology, is a prevalent gynecological issue that significantly impacts the quality of life for many women. This case study explores the effectiveness of a holistic treatment approach combining Ayurvedic interventions and yoga to manage primary dysmenorrhea symptoms in a 19-year-old female patient. The Ayurvedic treatments included Rajparivartini Vati, Ajmodadi Churna, and Kumariasava, known for their analgesic, anti-inflammatory, and antispasmodic properties. Complementing these treatments, a yoga regimen comprising specific asanas and pranayama was implemented. Over three menstrual cycles, the patient experienced significant pain relief, reduced symptom severity, and an overall improvement in well-being. The case study highlights the potential benefits of integrating traditional Ayurvedic medicine and yoga as a non-invasive, multimodal approach to managing primary dysmenorrhea. These findings suggest a promising avenue for further research and the development of standardized protocols for the combined use of these therapies in treating dysmenorrhea. The study assessed pain intensity, frequency of analgesic use, and the patient's subjective experience of menstrual symptoms before and after the introduction of yoga. Results demonstrated a marked reduction in pain levels, decreased reliance on pain medication, and an enhanced sense of well-being. The findings suggest that yoga, as a non-invasive and holistic practice, can effectively complement traditional treatment methods for primary dysmenorrhea. This case highlights the potential for integrating yoga into routine care, offering a sustainable and empowering option for pain management.

Keywords: Primary Dysmenorrhea, *Ayurveda*, *Yoga*, Prostaglandin, *Kumariasava*, Pain.

Introduction

Menstrual cramps, also known as dysmenorrhea, are characterized as periodic pain that is directly associated with the menstrual cycle. Just before or at the start of menstrual flow, the pain starts, and it goes away during menstruation. The lower back, upper legs, pelvis, breast all may be affected by the pain(1). Once ovulatory cycles are established, primary dysmenorrhea typically manifests within the first six months following menarche. The frequency of dysmenorrhea ranged from 25% of women who are menstruating to 90% of teenage girls or 45% to 95% of women of any age (2). It appears that dysmenorrhea is the most frequent gynecological condition. It frequently starts at the same time as menstruation. Usually, the lower abdomen or pelvis is where the pain (3) which could spread to the upper thigh and low back Colicky pre- or mid menstrual pain

in the pelvis, lower back, or upper thighs that lasts for 48–72 hours is commonly referred to as menstrual cramps (4). Lower back discomfort, stomach distension, indigestion, headaches, nausea, diarrhea, and stress are some more symptoms. Nausea, exhaustion, diarrhea, lethargy, sensitivity, breast tenderness, cyclical mastalgia (breast pain) (5) (6) fluid accumulation, autonomic nervous system symptoms, attention deficit, depression, and emotional distress and disturbance have all been recorded as manifestations (7). Period pain and discomfort can result in several health issues that might impact day-to-day tasks including housework, employment or work hours, and scholastic achievement (8). In contemporary medicine, medications such as OCPs, NSAIDs, antispasmodics, and analgesics are used to treat dysmenorrhea. When these chemical agents are used over an extended period of time, harmful side effects such as hepatotoxicity, nephrotoxicity, headaches, vertigo, dizziness, depression, and skin rashes can occur. Therefore, there is a lot of room for research to identify an Ayurvedic and Yoga treatment for *kashtartava* (dysmenorrhea) that is safe, effective, and affordable in order to close the aforementioned gap. Yoga and Ayurveda is cost effective and more safe treatment for Primary Dysmenorrhea (9).

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Case Report

Patient information and clinical finding

A 19-year-old unmarried female presented with complaints of pain in lower abdomen and back during the days of menstruation and before two days of periods for last 2-year Pain intensity was measured on Visual Analogue scale (VAS) Her menstrual period was of 6 days and on 1st day she was changing 1–2 pads per day partially soaked. From 2nd to 4th day, she was changing three pads per day partially soaked and from 4th–6th day, one pad per day partially soaked. There was no history of any surgical or medical illness. The patient was conscious and oriented. Blood pressure was 124/80 mmHg, heart rate was 78 beats/min, respiratory rate was 18/min, and oxygen saturation was 100% at room air she was a student. She was very fond of fast food and a sedentary lifestyle. On physical examination, there was no sign of anemia, malnutrition and other systemic diseases. Patient was advised to go for blood investigations (CBC, Thyroid Profile) and trans-abdominal pelvic scan. Laboratory findings were within normal range and USG showed no pelvic pathology. However, on local examination, no sign of complaint was noticed.

History of Present Illness

At the age of thirteen, she experienced menarche. She has been complaining for the past six months. Lower abdominal cramps begin with the onset of menstruation and last for two days. Radiating to both thighs, back discomfort begins one or two days before menstruation and lasts for two days. When menstruation began, the nausea got worse. Her periods were so painful that she was unable to attend college.

Past History: Nothing relevant

Family History: Nothing relevant

Personal History

Diet	Veg
Appetite	Reduce
Bowel	Regular
Urine	Normal
Sleep	Sound
Allergy	No
Addiction	No

Menstrual History

Menarche - 13 years
 LMP – 25/02/2024
 PMP- 23/01/2024
 Interval – 28-30 days
 Duration – 5 days Amount- 2-3 pads/day
 Clots – 4-5 cm
 Lower abdominal pain – Grade III (VAS - 10/10)
 Low back ache - Grade II (VAS - 5/10)

Physical Examination

Built – Normal
 Nutritional status – Moderate
 Height – 160 cm
 Weight – 51 kg
 Pulse rate – 71 beats/min

Heart rate – 71 beats /min
 BP – 124/76 mmHg
 Temperature – 98.6°F

Laboratory and Ultrasonography Report

On laboratory investigations her hemoglobin was 12g/dL and her Ultrasonography abdomen report was normal.

Timeline: Patient timeline shown in Table 1.

Table 1: Timeline Table Patient visit OPD = Out Patient Department

Time line	Clinical event and intervention
22-03-2024	Patient visited OPD Prescribed Ayurvedic medicines and practice Yogas Asana
24-04-2024	Symptomatically improved Continued Ayurvedic medicines and practice Yog asana
26-05-2024	Pain subsided significantly Continued Ayurvedic medicines and practice Yoga Asana
24-06-2024	Pain Reduced

Therapeutic Intervention

The treatment principles of the primary Dysmenorrhea to reduce the pain duration and pain intensity and menstruation related symptoms.

Ayurvedic Intervention

The patient was prescribed the following Ayurvedic medicines by the Ayurvedic Gynecologist .
 1. Rajah pravartani vati, is given two pills, 2(BD) twice Daily after meal.(Choudhary & Sharma, n.d.)
 2. Kumariasav 20ml with equal water, twice in a day after meal.
 3. Ajmodadi churna 3gm BD twice in a day after meal.

Table 2: : List of prescribed Ayurvedic medicines with their possible effects

NAME OF MEDICINES	DOSAGE	POSSIBLE EFFECTS
<i>Rajparivartini Vati</i>	2 BD twice daily	Stimulate the ovulation and correct ovarian function.
<i>Ajmodadi Churna</i>	3 Grams BD twice daily	Managing pain in abdomen and back.
<i>Kumariasava</i>	20ML with equal quantity of water twice daily	Help to relax the muscles and gives relief from cramps.

BD=Bis in die , twice daily

Yogic intervention

The yogic intervention duration was 30 min/day, five times/week for three consecutive menstrual cycles. A combination of asana, pranayama and relaxation protocol was practiced by the patient. The protocol was as follows: Cat pose, Cobra pose, Fish Pose, *Setubanda*, *Paschimottanasana*, and *Nadishodhana Pranayama*.

Dietary advice

To avoid oily, spicy, fried food, fermented, tart and fast food. She was advised to take high-fiber fruits, green vegetables, simple food and protein rich food and drink adequate water. According to Ayurveda, *Ruksha*, *Sushka Ahara*, and *Ratri Jagran* were avoided .

Follow up and outcome

The patient revisited outpatient department after 1st month of treatment abdominal pain was mildly reduced. The pain subsided, as reported after 2nd month of treatment. Moreover, after 3rd month completion of treatment, she reported no pain, and no other complain related to menstruation.

Table 3: Visual Analog Scale score

Visit Periods	Number of visits	VAS Score
1 st day of OPD visit	1 st visit	10(severe)
Visit after her cycle	2 nd visit	8(severe)
2 nd visit after cycle	3 rd visit	5(moderate)
3 rd visit after cycle	4 th visit	3(mild)

VAS, Visual Analogue Scale; OPD, Outpatient department

Discussion

The present case is discussed here of a 19-year-old female patient with a primary dysmenorrhea and related symptoms treated with Ayurvedic medicines and yogic practices.

Treatments for primary dysmenorrhea, which is defined by painful menstruation without underlying pathology, include *Ajmodadi Churna*, *Kumariasav*, and *Rajparivartini Vati*. In addition to providing analgesic and anti-inflammatory properties and relieving uterine spasms, *Rajparivartini Vati* balances the *doshas of Vata and Kapha*. The main benefits of *Ajmodadi Churna* include vata balancing, improved digestive health, pain reduction, and uterine muscle relaxation. As a uterine tonic, *kumariasava* lowers inflammation, balances hormones, and enhances blood flow to the pelvic area. When used in tandem, these formulations treat the underlying causes and symptoms of primary dysmenorrhea by balancing doshas, easing cramps, promoting digestive health, and improving overall uterine function. Dysmenorrhea is characterized by excruciating cramps that interfere with regular activities and occur during menstruation. Dysmenorrhea is a significant health issue that negatively impacts everyday activities and quality of life for adolescents in school and for healthcare professionals. The most prevalent gynecological issue that affects women is dysmenorrhea, which is brought on by aberrant uterine anatomy and function, psychosomatic causes, prostaglandin release, pelvic congestion, and other factors. yoga in the form of asanas, pranayama and meditation on a regular basis so as to alleviate dysmenorrhea effectively. The therapeutic intervention in this case study incorporated three main Ayurvedic treatments: *Rajparivartini Vati*, *Ajmodadi Churna*, and *Kumariasava* (11). These herbal formulations are known for their analgesic, anti-inflammatory, and

antispasmodic properties, which are crucial in managing dysmenorrhea symptoms. *Rajparivartini Vati*, in particular, is recognized for balancing the *Vata* and *Kapha doshas*, which are often associated with menstrual disorders. *Ajmodadi Churna's* role in enhancing digestive health and relaxing uterine muscles further supports its effectiveness in reducing pain and discomfort during menstruation. *Kumariasava* acts as a uterine tonic, promoting better blood flow and hormonal balance, which are essential in alleviating menstrual cramps. The incorporation of yoga, particularly the specific asanas (Cat, Cobra, Fish Pose, *Setubanda*) and pranayama (*Nadishodhana pranayama*), (7) (12) added a non-invasive, holistic dimension to the treatment. Yoga's effectiveness in managing dysmenorrhea is well-documented, with studies showing that regular practice can reduce the intensity and duration of menstrual pain by improving blood circulation, enhancing pelvic flexibility, and reducing stress and tension in the body. The patient in this case study experienced significant pain relief and a reduction in the frequency of analgesic use, which aligns with existing research on the benefits of yoga for menstrual health. The combination of Ayurvedic treatments and yoga practice over three menstrual cycles led to a marked improvement in the patient's symptoms. This approach not only reduced the intensity of pain but also enhanced the patient's overall well-being, indicating that a multimodal, holistic treatment strategy can be more effective than relying solely on pharmacological interventions (9). The findings from this case study underscore the potential of integrating traditional and complementary therapies, such as Ayurveda and yoga, into routine care for primary dysmenorrhea. This integrative approach offers a sustainable, non-invasive, and empowering option for pain management, allowing patients to take an active role in their health and well-being. However, while the results are promising, further research is necessary to establish standardized protocols for the combined use of Ayurvedic medicine and yoga in treating dysmenorrhea (9). Larger studies with control groups would help validate these findings and assess the long-term benefits of this integrative approach. Additionally, exploring the mechanisms through which these therapies alleviate dysmenorrhea could provide deeper insights into their effectiveness and guide future treatment recommendations.

Conclusion

This case study demonstrates the potential efficacy of combining Ayurvedic medicine and yoga as a complementary treatment for primary dysmenorrhea. The patient, a 19-year-old female with a history of severe menstrual cramps, experienced significant relief from pain, a reduction in symptom severity, and an overall improvement in well-being after undergoing a treatment regimen that included Ayurvedic formulations (*Rajparivartini Vati*, *Ajmodadi Churna*, and *Kumariasava*) and specific yoga practices. The findings suggest that this integrative, non-invasive approach can

be a viable alternative or complement to conventional pharmacological treatments for dysmenorrhea.

The holistic approach not only addressed the physical symptoms but also contributed to the patient's mental and emotional well-being, highlighting the benefits of a multimodal strategy. However, while the results are promising, further research with larger sample sizes and control groups is necessary to validate these findings and develop standardized treatment protocols. This case study opens the door for more extensive exploration into the integration of traditional Ayurvedic medicine and yoga in managing primary dysmenorrhea, offering a sustainable and empowering solution for those affected by this common condition.

Declaration of patient consent

Before start the treatment obtained her consent to be part of this study.

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