

Management of Endometriosis Through Ayurveda A Clinical Observational Study

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Abstract— Background: Endometriosis is a chronic, estrogen-dependent gynecological disorder characterized by ectopic endometrial tissue, affecting 10–15% of reproductive-age women worldwide. It commonly presents with dysmenorrhea, chronic pelvic pain, dyspareunia, and infertility, severely impairing quality of life. Conventional management relies on hormonal therapies and surgical excision, but these approaches are often limited by side effects, recurrence, and impact on fertility. Ayurveda, with its holistic approach of balancing doshas, detoxification (Shodhana), and rejuvenation (Rasayana), offers potential for safer long-term management. Aim: To evaluate the clinical efficacy and safety of Ayurvedic interventions in the management of endometriosis. Methods: A clinical observational study was conducted on 30 women (20–40 years) diagnosed with endometriosis through ultrasonography or laparoscopy. Patients underwent a combined treatment regimen consisting of Vairocana (purgation) and Basti karma (medicated enema) followed by oral classical formulations such as Kanchanara guggul, Ashoka Rishta, and Shatavari churna for 3 months. Outcome measures included pelvic pain (Visual Analogue Scale), dysmenorrhea severity, menstrual regularity, ovarian cyst size (via ultrasound), and quality of life (WHO-QOL scale). Data were assessed before and after treatment, and statistical significance was calculated. Results: Post-treatment, there was a highly significant reduction in pelvic pain (VAS score reduced from 8.2 ± 1.1 to 3.6 ± 1.4 ; $p < 0.001$) and dysmenorrhea severity ($p < 0.01$). Menstrual regularity improved in 40% more patients ($p < 0.05$), and WHO-QOL scores showed marked improvement (42 ± 6.3 to 68 ± 5.7 ; $p < 0.001$). Ovarian cyst size reduction averaged 40%, though this was not statistically significant ($p >$

0.05). No adverse effects were reported. Conclusion: Ayurvedic management demonstrated substantial clinical benefits in alleviating pain, improving menstrual regularity, and enhancing quality of life in women with endometriosis. While reduction in cyst size was observed in some cases, further large-scale controlled trials are needed to confirm efficacy and establish standardized treatment protocols. This study highlights Ayurveda's role as a safe, holistic, and promising alternative or complementary approach in the long-term management of endometriosis.

Index Terms— Endometriosis, Ayurveda, Dysmenorrhea, Panchakarma, Kanchanara guggulu, Ashoka Rishta, Basti.

I. INTRODUCTION

Endometriosis is a chronic, estrogen-dependent gynecological disorder defined by the growth of functional endometrial glands and stroma outside the uterine cavity, most commonly on the ovaries, fallopian tubes, peritoneum, and pelvic ligaments. It is considered one of the leading causes of chronic pelvic pain and infertility in women of reproductive age.¹ The condition has a global prevalence of approximately 10–15%, with higher incidence among women presenting with infertility (up to 40–50%). Despite being benign in nature, endometriosis is often progressive and severely impacts physical, psychological, and social well-being.² The clinical manifestations include dysmenorrhea, dyspareunia, chronic pelvic pain, abnormal uterine

bleeding, and infertility. The pathophysiology is multifactorial, involving theories of retrograde menstruation, coelomic metaplasia, altered immune response, and hormonal imbalances. Conventional management strategies consist of hormonal suppression (oral contraceptives, progestins, gonadotropin-releasing hormone agonists), analgesics, and surgical excision of lesions. However, these therapies are often associated with side effects, recurrence rates as high as 40–50% within 5 years, and limited fertility outcomes. Thus, there is an urgent need for integrative and holistic approaches to long-term management.³

From the perspective of Ayurveda, endometriosis can be correlated with disorders such as Yonivyapad, Artavavikara, and Granthi, wherein disturbed Vata and Pitta doshas along with vitiated Rakta dhatu lead to abnormal proliferation and displacement of uterine tissue.⁴ Chronic pain and irregular menstruation are primarily attributed to aggravated Apana Vata, while inflammatory changes and abnormal bleeding reflect deranged Pitta dosha. In addition, impaired Agni (digestive and metabolic fire) and accumulation of Ama (toxic by-products) are considered key contributors to the pathogenesis.⁵

Ayurveda advocates a comprehensive management plan involving Shodhana (bio purificatory therapies such as Vairocana and Basti), Shamana (palliative medicines such as Kanchanara guggulu, Ashoka Rishta, and Shatavari), as well as dietary and lifestyle regulations. The approach not only targets symptom relief but also addresses the root causes by restoring doshic balance, enhancing metabolism, and rejuvenating reproductive tissues (Artava dhatu).⁶

Given the chronic and recurrent nature of endometriosis, this study aims to explore the clinical efficacy of Ayurvedic management, particularly in improving pain, regulating menstruation, reducing lesion size, and enhancing quality of life in affected women.

II. AIMS & OBJECTIVES

Aim

- To evaluate the clinical efficacy of Ayurvedic management in alleviating the symptoms of endometriosis and improving the quality of life of affected women.

III. OBJECTIVES

- To assess the effect of Ayurvedic interventions on pain reduction (dysmenorrhea and pelvic pain).
- To study the impact of therapies on menstrual regularity and flow pattern.
- To evaluate changes in size and extent of endometriotic lesions as observed on ultrasonography.
- To observe improvements in overall quality of life and daily functioning of patients.
- To determine the safety and tolerability of the prescribed Ayurvedic therapies.

IV. MATERIALS AND METHODS

Study Design

A clinical observational study was conducted on women diagnosed with endometriosis (confirmed by ultrasonography or laparoscopy) at an Ayurvedic hospital.

Sample Size

30 patients aged 20–40 years presenting with dysmenorrhea, chronic pelvic pain, irregular menstruation, or infertility.

Inclusion Criteria

- Women with clinically and radiologically confirmed endometriosis
- Age 20–40 years
- Not on concurrent hormonal treatment

Exclusion Criteria

- Malignancy of reproductive organs
- Severe systemic illness
- Postmenopausal women

Interventions

Patients received:

- Panchakarma procedures: Vairocana (purgation) for Pitta balancing, Basti karma (medicated enemas) for Vata regulation.
- Oral medications: Classical formulations such as Ashoka Rishta, Kanchanara guggulu, Shatavari churna, and Triphala guggulu.

- Pathya-apathya (diet and lifestyle): Avoidance of spicy, acidic foods; emphasis on light, easily digestible diet; inclusion of ghee and milk.

Duration of Study

3 months of treatment with follow-up at monthly intervals.

Assessment Criteria

- Subjective parameters: Pain (Visual Analogue Scale), severity of dysmenorrhea, menstrual flow, and quality of life.
- Objective parameters: Ultrasonographic evaluation of endometriotic cysts and lesions.

Observational Data of Before and After Ayurvedic Treatment in Endometriosis

Parameter	Before Treatment (Mean ± SD)	After Treatment (Mean ± SD)	Improvement (%)
Pelvic Pain (VAS Score)	8.2 ± 1.1	3.6 ± 1.4	≈ 56%
Dysmenorrhea Severity	Severe in 80% cases	Mild in 70% cases	Marked
Menstrual Regularity (%)	30% regular cycles	70% regular cycles	+40%
Ovarian Cyst Size Reduction (%)	0% reduction	40% average reduction	+40%
Quality of Life (WHO-QOL score)	42 ± 6.3	68 ± 5.7	+26 points (~62%)

Clinical Outcomes Before and After Ayurvedic Treatment in Endometriosis Patients (n = 30):

Parameter	Before Treatment (Mean ± SD)	After Treatment (Mean ± SD)	Improvement (%)	p-value	Significance
Pelvic Pain (VAS Score)	8.2 ± 1.1	3.6 ± 1.4	≈ 56%	< 0.001	Highly Significant
Dysmenorrhea Severity (Grade)	Severe in 80% cases	Mild in 70% cases	Marked	< 0.01	Significant
Menstrual Regularity (%)	30% regular cycles	70% regular cycles	+40%	< 0.05	Significant
Ovarian Cyst Size Reduction (%)	0% reduction	40% average reduction	+40%	0.07	Not Significant*
Quality of Life (WHO-QOL Score)	42 ± 6.3	68 ± 5.7	+26 points (~62%)	< 0.001	Highly Significant

Note: Reduction in ovarian cyst size showed clinical improvement in some patients, but statistical significance was not achieved ($p > 0.05$).

V. RESULTS

- Significant reduction in pelvic pain and dysmenorrhea ($p < 0.05$).
- Improvement in menstrual regularity reported in 70% of patients.
- Ultrasonography showed reduction in size of ovarian cysts in 40% of cases.
- No adverse drug reactions were reported during the study.

VI. DISCUSSION

The findings of this observational study suggest that Ayurvedic management of endometriosis provides significant symptomatic relief while improving menstrual regularity and reducing lesion size in some

cases.⁷ The reduction in dysmenorrhea and pelvic pain aligns with the classical Ayurvedic concept of pacifying aggravated Vata dosha, which is responsible for pain and irregular uterine contractions. The use of Basti karma (medicated enema), known as the prime therapy for Vata Vidhi, appears to have played a crucial role in alleviating chronic pelvic pain and regulating the menstrual cycle.⁸

Comparison with Modern Medicine

In modern gynecology, endometriosis is managed with hormonal suppression and surgery. While these methods provide symptomatic relief, their limitations include high recurrence rates, adverse effects such as bone density loss, mood swings, weight gain, and the risk of compromised fertility.⁹ In contrast, Ayurveda offers a non-hormonal, natural approach that aims to correct the root causes through dosha balance, detoxification (Shodhana), and rejuvenation (Rasayana). This holistic method not only addresses

symptoms but also improves the overall reproductive health of women.¹⁰

Role of Ayurvedic Formulations^{11,12,13}

- Kanchanara guggulu is described as Granthi-hara (anti-cystic) and Shotha-hara (anti-inflammatory), which likely contributed to the reduction in cyst size observed in some patients.
- Ashoka Rishta acts as a uterine tonic, balances Pitta dosha, and regulates Artava (menstruation), explaining the observed improvement in menstrual regularity.
- Shatavari churna, being Stanya-janana (galactagogue) and Rasayana, nourishes reproductive tissues, enhances fertility, and counters hormonal imbalance.
- Triphala guggulu has proven anti-inflammatory and detoxifying effects, which may support regression of lesions and prevent recurrence.

Pathophysiological Insights

From an Ayurvedic standpoint, endometriosis involves deranged Vata and Pitta with accumulation of Ama in the pelvic region. The combined approach of Vairocana (purgation) to expel excess Pitta and Basti to regulate Vata creates a synergistic therapeutic effect. The significant pain reduction and improvement in quality of life seen in this study support this rationale.¹⁴

From a biomedical perspective, many herbs used in Ayurveda have shown anti-inflammatory, anti-oxidant, and immunomodulatory effects in pharmacological studies. This suggests that Ayurvedic treatment could reduce the inflammatory milieu and abnormal immune responses implicated in the pathogenesis of endometriosis.¹⁵

Implications and Integrative Potential

The results highlight Ayurveda as a safe, effective, and holistic management option for endometriosis, particularly for women seeking alternatives to long-term hormonal therapy or surgery. It could serve as a complementary system, integrated with modern diagnostic tools, to reduce recurrence and improve fertility outcomes.¹⁶

Limitations of the Study

- The study was limited by its small sample size (30 patients).

- Being observational, it lacked a control group for direct comparison.
- Objective reduction in lesion size was not consistent across all patients, suggesting variability in response.
- Long-term follow-up was not conducted, so recurrence rates could not be assessed.

Future Directions

Larger randomized controlled trials are essential to validate these findings. Future research should focus on:

- Biochemical and hormonal profiling before and after treatment.
- Standardization of Ayurvedic formulations and Panchakarma procedures.
- Long-term outcomes, particularly fertility and recurrence rates.
- Integrative protocols combining modern surgical precision with Ayurvedic long-term management.

VII. CONCLUSION

The present clinical observational study indicates that Ayurvedic management of endometriosis can offer significant therapeutic benefits. Patients demonstrated marked improvement in dysmenorrhea, pelvic pain, and menstrual regularity, along with partial regression of endometriotic cysts in some cases. Importantly, no adverse effects were reported, highlighting the safety and tolerability of the Ayurvedic approach. Unlike conventional treatments, which primarily focus on hormonal suppression or surgical excision, Ayurveda adopts a holistic, root-cause-oriented strategy. By pacifying aggravated Vata and Pitta doshas, eliminating accumulated Ama, and rejuvenating reproductive tissues, Ayurvedic therapies not only reduce symptoms but also improve overall quality of life and reproductive health. The use of Panchakarma procedures like Vairocana and Basti, combined with classical herbal formulations such as Kanchanara guggulu, Ashokarishta, and Shatavari, provided a multidimensional approach targeting both systemic balance and localized pathology. The findings suggest that Ayurveda could serve as an effective complementary or alternative system of care, especially for women seeking long-term, non-hormonal, and non-invasive management of

endometriosis. Moreover, the integrative use of Ayurvedic treatment alongside modern diagnostics and monitoring could potentially enhance outcomes and reduce recurrence rates. However, this study also highlights certain limitations, including a small sample size, observational design, and short follow-up duration. To strengthen the evidence base, larger randomized controlled trials are needed with extended follow-up periods, biochemical and imaging evaluations, and standardized treatment protocols. Such studies could establish Ayurveda as a scientifically validated, globally acceptable option in the management of endometriosis.

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