Research Article

Ayurvedic Management of Polycystic Ovarian Syndrome: A Case Study

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Abstract:

Background: Polycystic Ovarian Syndrome is a common endocrine and metabolic disorder characterised by menstrual irregularities, hyperandrogenism, obesity, and infertility. The limitations of conventional therapies have increased interest in holistic treatment approaches such as Ayurveda.

Objective: To evaluate the clinical effectiveness of Ayurvedic Management in a patient diagnosed with Polycystic Ovarian Syndrome.

Methods: This single case study involved a 25- year-old female with irregular menstruation, obesity, and ultrasonographic evidence of polycystic ovaries. The patient received a six-month Ayurvedic treatment regimen comprising *Rasapachak Yog*, *Kanchanar Guggulu, Aampachak Vati* and *Gandharva Haritaki*, along with dietary modifications and regular physical activities. Clinical outcomes were assessed through menstrual history, body weight, symptom improvement, and follow-up examinations.

Results: After six months of treatment, the patient demonstrated significant clinical improvement. Menstrual cycles normalised to an interval of approximately 30 days with a menstrual flow duration of 4-5 days. A noticeable reduction in body weight was observed, indicating improved metabolic status. The patient reported overall improvement in well-being, and no adverse drug reactions or treatment-related complications were noted during the study period.

Conclusion: Ayurvedic management, combined with appropriate dietary and lifestyle modifications, showed promising outcomes in improving both reproductive and metabolic manifestations of PCOS in this case. Although the findings suggest that Ayurveda may offer a safe and holistic therapeutic approach, larger controlled clinical studies are required to establish its efficacy and generalizability.

Key-words: PCOS, Ayurveda, Menstrual irregularity, Lifestyle modification, Holistic Management

Introduction:

Polycystic Ovarian Syndrome (PCOS) is one of the most common endocrine and metabolic disorders affecting women of reproductive age worldwide. According to the Rotterdam consensus criteria, the diagnosis of PCOS is established when at least two of the following three features are present: oligomenorrhea/anovulation, clinical and /or biochemical hyperandrogenism and polycystic ovarian morphology on ultrasonography.[1] The global prevalence of PCOS varies depending on the diagnostic criteria employed and the population studied, with estimates ranging from 5% to 15%, while recent reports indicate that a substantial proportion of cases remain undiagnosed.[2] PCOS has emerged as a significant public health concern because of its increasing prevalence among adolescent and young women, largely attributed to changing lifestyle patterns, sedentary behaviour, dietary factors, obesity, and psychological stress.[3]

PCOS is a multifactorial disorder characterised by complex interactions among genetic, epigenetic, environmental, metabolic and neuroendocrine factors.[4] Hyperandrogenism, insulin resistance and dysregulation of the Hypothalamic-Pituitary-Ovarian (HPO) axis are considered central mechanisms in its pathogenesis. Increased gonadotropin-releasing hormone preferentially stimulates luteinizing hormone secretion, resulting in excessive androgen production and impaired follicular maturation. Hyperinsulinemia further increases androgen by enhancing ovarian steroidogenesis and reducing sex hormone-binding globulin concentrations, thereby contributing to chronic anovulation and the development of polycystic ovarian morphology.[5,6,7]

Clinically, PCOS manifests with a broad spectrum of reproductive, metabolic, dermatological and psychological features. Common manifestations include menstrual irregularities, anovulation, infertility, hirsutism, acne, androgenic alopecia, obesity and acanthosis nigricans.[8] In addition to reproductive dysfunction, women with PCOS are at increased risk of insulin resistance, impaired glucose tolerance, type 2 diabetes mellitus, dyslipidemia, cardiovascular disease, and endometrial pathology. The condition is also associated with anxiety, depression, poor self-esteem, negative image and reduced health-related quality of life, highlighting its multidimensional impact on women's health.[9]

Obesity plays a crucial role in the pathophysiology and progression of PCOS. Central adiposity contributes to insulin resistance and chronic low-grade inflammation through altered secretion of adipokines and inflammatory mediators. Evidence suggests that modest weight reduction can improve ovulatory function, metabolic parameters, and reproductive outcomes, emphasising the importance of lifestyle modification as a cornerstone of management.[10]

Current management strategies primarily focus on symptom control through lifestyle interventions, hormonal therapy, insulin-sensitising agents and surgical procedures such as laparoscopic ovarian drilling in selective cases. However, long-term adherence to treatment, adverse events, recurrence of symptoms, and the heterogeneous nature of the disorder continue to pose significant therapeutic challenges.[11] These limitations have encouraged exploration of complementary and integrative approaches that address the underlying metabolic and hormonal disturbances associated with PCOS.

Although PCOS is not described as a distinct disease in classical Ayurvedic texts, its clinical manifestations have been correlated with conditions such as *Pushpaghni Jatharagni*, *Artavakshaya, Nashtartava, Anartava, Yonivyapad,* and *Sthoulya*. Ayurvedic literature attributes the pathogenesis of such disorders to derangements of *Dosha*, particularly *Kapha* and *Vata*, impaired *Agni*, *Ama* formation, *Meda Dhatu* vitiation, and obstruction to *Srotas*, ultimately leading to disturbed *Artava* formation and ovulatory functions.[12] Therefore, Ayurvedic management aims not only to alleviate symptoms but also to restore systemic balance through dietary regulation, lifestyle modification, *Shodhana* therapies and *Shamana* interventions.

Considering the growing prevalence of PCOS, its substantial reproductive and metabolic consequences, and the limitations of conventional treatment approaches, there is an increasing need to scientifically evaluate the role of Ayurvedic interventions in the management of PCOS. Such interventions may contribute to the development of safe, holistic and sustainable treatment strategies for affected women.

Aim:

To evaluate the clinical effectiveness of Ayurvedic management in a patient diagnosed with Polycysctic Ovarian Syndrome (PCOS).

Objectives:

1. To assess improvement in menstrual regularity.
2. To evaluate changes in symptoms such as obesity, acne, hirsutism and menstrual irregularities.
3. To assess changes in ultrasonographic findings of polycystic ovaries.
4. To document the therapeutic outcome and safety of the Ayurvedic interventions.

Materials And Methods:

1. The literary review for the present study was compiled from classical Ayurvedic texts and commentaries relevant to the concept and management of Polycystic Ovarian Syndrome.
2. Relevant information was collected through a comprehensive review of published literature, including textbooks, peer-reviewed research articles, review papers, and scientific publications from national and international journals.
3. The methodology and interventions described in the study were referred to and interpreted according to the principles and guidelines outlined in classical Ayurvedic literature.

Case-study:

A 25-year-old female visited the OPD with complaints of weight gain and irregular menses for 1 year.
Past Medical History: No h/o any systemic illness.
Past Surgical History: No surgical history.
H/O Allergy: No history of any drug allergy.
Family History: Nil
Menstrual History: L.M.P.- 13/12/2025
L.L.M.P- 9/9/2025
Present M/H- Menstruation is irregular, scanty and occurring at gap of 2-3
Months with a flow of 1-2 days
Marital Status: Unmarried
General Examination
General condition: Good
Temperature: 97.3°F
B.P:122/80 mm of Hg
P : 80/min
Height:5’2’’
Weight: 76 kg

BMI :30.25 kg/m^2
Systemic Examination
RS:clear
CVS :S1 S2 normal
CNS : Conscious, Oriented
Ultrasonography:
Both ovaries are showing mild changes of PCOD. Right ovary measures 25×28×28 mm, volume of 10.9cc. Left ovary measures 31×31×29 mm volume 14.59 cc
Treatment Given

Treatment given is mentioned in table 1

Medication	Dosage	Time of administration	*Anupana*
Rasapachak Yog (Kanlingaka, Patola, Katukrohini)	2 tablets bid	After food	Warm water
Kanchanar Guggulu	1 tablet bid	After food	Warm water
Aampachak Vati	1 tablet TDS	Before food	Warm water
Gandharva Haritaki	1 tablet HS	At bed time	Warm water

Table 1: Duration: 6 months with follow-up after every one month.

Pathya- Apathya –
During this period, the patient was advised to avoid sweet, oily, heavy foods. Patient was advised to include fresh vegetables, seasonal fruits, salad and easily digestible foods and advised to exercise daily, brisk walking, strengthening exercises and *Suryanamaskar.*

Observation:

The patient adhered strictly to the prescribed medications as well as the recommended *Pathya-Apathya* throughout the treatment period. A significant reduction in body weight was observed during follow-up. Menstrual regularity improved considerably, with the patient achieving a normal 30-day menstrual cycle. Menstruation occurred regularly and lasted for 4-5 days. These findings indicate a positive response to the treatment protocol.

Result:

The patient completed a six-month treatment with good compliance with the prescribed medications, dietary recommendations and lifestyle modifications. Progressive improvement was observed during the follow-up period. A noticeable reduction in body weight was achieved, indicating improvement in the patient's metabolic status. Menstrual irregularity, which was the primary complaint, showed marked improvement. The menstrual cycle gradually normalised to an interval of approximately 30 days, and the duration of menstrual bleeding increased to 4-5 days with satisfactory flow.
No adverse drug reaction or complications were reported during the treatment period. The overall clinical response suggested improvement in both reproductive and metabolic parameters, resulting in enhanced general well-being and quality of life.

Discussion:

Polycystic Ovarian Syndrome is a multifactorial disorder involving hormonal imbalance, metabolic dysfunction, obesity, and reproductive disturbances. From an Ayurvedic perspective, the condition can be understood as a consequence of *Kapha-Vata* predominance, impaired *Agni*, *Ama* accumulation, *Meda Dhatu* vitiation, leading to obstruction of the channels responsible for normal *Artava* formation and ovulation.
The treatment approach adopted in this case was directed towards correcting these underlying pathological factors. *Rasapachak Yog* and *Aampachak Vati* were administered to improve Agni and facilitate Ama Pachana, thereby enhancing metabolic function. *Kanchanar Guggulu* was selected for *Kapha* reduction and channel cleansing properties, which support normalisation of ovarian function. *Gandharva Haritaki* helped maintain regular bowel movements and promote proper functioning of *Apana Vata*, an important factor in maintaining normal menstrual physiology.

Dietary regulation and regular physical activity formed an integral part of the treatment. Restriction of calorie-dense and difficult-to-digest foods, together with daily exercise, likely contributed to weight reduction and improved metabolic efficiency. Weight loss is recognised as an important factor in restoring menstrual regularity and improving reproductive outcomes in women with PCOS.

The observed normalisation of menstrual cycles and reduction in body weight indicate that the intervention may have contributed to restoring physiological balance and improving ovarian function. The positive outcome observed in this case supports the potential role of Ayurvedic management as a holistic approach in PCOS. However, as this is a single case study, larger clinical investigations are necessary to establish the effectiveness and reproducibility of these findings.

Conclusion:

The present case study demonstrated encouraging outcomes following Ayurvedic management in a patient with Polycystic Ovarian Syndrome. After six months of treatment, significant improvement was observed in menstrual regularity, duration of menstrual flow and body weight. The combination of Ayurvedic medications, dietary modifications, and lifestyle interventions appeared to contribute to the overall clinical improvement without any reported adverse effects. These findings suggest that Ayurvedic management may provide a safe and comprehensive approach for addressing both the reproductive and metabolic aspects of PCOS. Further controlled clinical studies with a large sample size and objective biochemical assessments are recommended to validate these observations and strengthen the evidence for Ayurvedic interventions in PCOS management.

Conflict of interest:

There are no conflicts of interest regarding the publication of this article.

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