

AYURVEDIC APPROACH FOR MANAGEMENT OF PCOD THROUGH LIFESTYLE MODIFICATIONS

^{*1}Dr. Sonal Shriprasad Tinaikar and ²Dr. Roma Gangawane

¹PG Scholar, (Swasthavritta), MAM's Sumatibhai Shah Ayurved Mahavidyalaya, Hadapsar, Pune-28.

²Assistant Professor, Department of Swasthavritta and Yoga) MAM's Sumatibhai Shah Ayurved Mahavidyalaya, Hadapsar, Pune-28.



*Corresponding Author: Dr. Sonal Shriprasad Tinaikar

PG Scholar, (Swasthavritta), MAM's Sumatibhai Shah Ayurved Mahavidyalaya, Hadapsar, Pune-28.

Article Received on 23/05/2025

Article Revised on 11/06/2025

Article Accepted on 01/07/2025

ABSTRACT

Introduction: Polycystic Ovarian Disease (PCOD) is a prevalent endocrine disorder, affecting approximately 5% of women worldwide.^[1] It is characterized by a range of reproductive, metabolic, and dermatological symptoms. PCOD commonly disrupts the menstrual cycle, impairs fertility, and leads to hormonal imbalances. Affected individuals may also experience physical manifestations such as acne, hirsutism (excess facial and body hair), androgenic alopecia (balding), and weight gain. In addition, many women with PCOD report psychological challenges, including depression.^[2] *Ayurveda* emphasizes the prevention of diseases through adherence to *Dincharya* (daily regimen) and *Ritucharya* (seasonal regimen)^[3], along with the consumption of wholesome diet (*Pathya Aahar*), appropriate lifestyle practices (*Vihar*), and the use of beneficial herbs and medicines (*Aushadh*). The core principle of *Ayurveda* is "*Swasthyasya Swasthya Rakshanam*", which emphasizes preserving the health of the healthy, rather than solely focusing on "*Aturasya Vikara Prashamanam cha*", which refers to treating the ailments of the sick.^[4] In this context, *Kapha*-reducing, insulin-balancing, and obstruction-clearing interventions involving *Aushadh*, *Aahar*, and *Vihar* play a crucial role in the prevention and management of PCOD. **Method:** This research conducts a literary review of classical texts of *Ayurveda* such as *Charaka Samhita*, *Ashtanga Hridaya* and *Kashyapa Samhita* along with analysis of modern clinical studies and conceptual data regarding PCOD. **Results and Discussion:** *Pathya Ahar* and *Pathya Vihar* practices can help to regulate *Artavavaha Srotas*, balance *Doshas*, *Dhatus* and *Updhatus* to achieve metabolic and hormonal equilibrium. The incorporation of *Pathyapathya* into the routine management of PCOD may enhance the efficacy of *Shamana* and *Shodhana Chikitsa* as well as can help to resolve the root cause of the disease i.e. *Nidanparivarjan*.

KEYWORDS: PCOD, Artavavaha Srotas, Infertility.

INTRODUCTION

In recent decades, lifestyle of women has undergone significant transformation due to evolving social, professional and familial roles. The ongoing challenge of balancing personal and professional responsibilities is contributing to increased physical and mental stress among women. Their hectic schedule often leads to altered food habits, intake of *Viruddha Ahara*, improper sleeping patterns and lack of exercise which can disturb normal physiology of body and lays foundation for number of lifestyle disorders. PCOD i.e. polycystic ovarian disease being amongst them is the most common metabolic and endocrine disorder characterized by a range of symptoms and clinical signs. The term itself gives insight into the nature of the disease.

- Poly means many
- Cystic refers to fluid-filled sacs
- Ovarian denotes involvement of the ovaries

- Disease reflects a collection of symptoms

PCOD was originally described in 1935 by Stein and Leventhal and called as "Stein - Leventhal syndrome" for many years.^[5] PCOD can affect various aspects of women's health including menstrual cycle, fertility, hormonal balance as well as appearance including acne, hirsutism, balding and obesity. Some women may experience challenges to their feminine identity and can suffer from depression.

Polycystic Ovarian Disease (PCOD) is considered to involve an imbalance primarily of *Kapha* and *Vata doshas*, along with disturbances in *Meda Dhatu*, *Ambuvaha Srotas*, and *Artava Dhatu*.

MATERIALS AND METHODS

Sources for Literature Review

1. *Ayurvedic Classics* – Including *Charak Samhita*,

Sushrut Samhita, Ashtang Hriday, Bhaishajya Ratnavali, Bhavprakash.

2. Modern Medical Science – Standard textbooks of Gynaecology.
3. Online Research Databases – Relevant information accessed through various search engines.
4. Scientific Journals – Articles and studies from reputed journals.

Signs & Symptoms of PCOD^[6]

- Menstrual Irregularities: Women with PCOD often experience menstrual dysfunction, ranging from infrequent periods (oligomenorrhoea) to complete absence of menstruation (amenorrhoea). Typically, they may have only 3 to 6 menstrual cycles in a year. This hormonal imbalance can lead to endometrial hyperplasia and increase the risk of endometrial cancer.
- Anovulation
- Hirsutism
- Acne
- Acanthosis nigricans – characterised by thickened and pigmented skin (grey brown). Commonly affected areas are nape of the neck, inner thighs, groins and axilla.
- Obesity: Around 50% of women with PCOD are obese. This condition increases the risk of developing type 2 diabetes and cardiovascular diseases later in life.
- HAIR – AN disease
 - Hyperandrogenism
 - Insulin Resistance
 - Acanthosis nigricans

Ayurvedic Perspective

Based on the symptoms and signs of PCOD, it can be interpreted in Ayurveda as a *Kapha- Vata* predominant *Tridosha Artava Dushti*.^[7]

- *Vata* is responsible for cellular functions such as the division of granulosa and theca cells, and the rupture of the follicle during ovulation.
- *Pitta*, through its *paaka karma*, facilitates the conversion of androgens to estrogens and supports the maturation of follicles. It also contributes to ovulation via its *Shrava Karma*, in conjunction with *Vata*.
- *Kapha* plays a key nutritive role, supporting follicular growth and proliferation along with *Vata*.

Although PCOD is not directly described in classical Ayurvedic texts, several conditions mentioned by ancient Acharya can be correlated with it.

- *Pushpaghni Jataharni*:^[7] This term includes descriptions such as "*Vritha Pushpam*" (non-productive menstruation) and "*Sthula Loma Gandasha*" (obese cheeks with hair), which can be interpreted as signs of central obesity and hirsutism.

Both are features of PCOD caused by elevated androgen levels.

The term "*Pushpaghni*" suggests infertility due to anovulation, poor ovum quality, or defective endometrial lining.

- *Vikrita Jataharni*:^[7] Characterized by irregular menstruation in terms of duration, color, and volume. This reflects the anovulatory or oligo-ovulatory cycles in PCOD, where menstruation may be scanty or heavy, irregular, and vary in color, depending on the frequency of ovulation.
- *Artava Kshaya*:^[7] Defined by delayed menstruation (*Vathochita Kaalad Darshanam*), scanty flow (*Alpatva*), and painful menses (*Yoni Vedana*). These symptoms partially correlate with PCOD. However, classical texts focus primarily on external signs of menstrual flow and do not elaborate on features like androgen excess or the presence of cystic ovaries.
- *Granthibhuta Artava Dushti*:^[7] Here, *Artava* refers to ovum, hormones, and menstrual blood. In PCOD, the *Beejarupi Artava* (ovum) may become cystic or anovulatory due to *Kapha* and *Vata* vitiation. Similarly, *Bahya Artava* (menstrual blood) may present with clots and vary in flow—either scanty or heavy—depending on the dominant dosha. Endometrial hyperplasia or polyps may also occur. In the context of *Nasta Artava*, *Acharya Vagbhata* describes amenorrhoea arising from obstruction in the channels of *Artava*, despite no physical blockages being present—another trait aligning with PCOD.

Diagnostic Criteria

Rotterdam criteria for PCOD

1. Oligo/anovulation
2. Hyperandrogenism (clinical/ biochemical)
3. Polycystic ovaries (either 12 or more follicle or increased ovarian volume >10cm³) as identified by ultrasound.

Investigation

1. LH:FSH ratio >3.
2. Increased testosterone & androstenedione.
3. Insulin resistance, levels raised.
4. USG findings as mentioned above.

Dietary Recommendations (Pathyaha)^[8]

1. Whole Grains and Low-Glycemic Foods: Include whole grains and low-glycemic index cereals (known as *Ruksha Anna*) that are low in calories but provide high satiety (*Guru Aptarpan Aahar*). Among these, grains (*Shookdhanya Varga*) such as Barley (*Yava*), Barnyard Millet (*Shyamak*), Job's Tear (*Gavedhuk*), Kodo Millet (*Kodrav*), and Wheat (*Triticum sativum/Godhum*) are especially beneficial. These grains are lower in carbohydrates and higher in dietary fiber, aiding in weight management.
2. Protein-Rich Legumes: Incorporate legumes mentioned in Ayurveda (*Shimbi Dhanyak Varga*), which are rich in protein. These include Green Gram (*Mudga*),

Lentils (*Mangalyak*), Split Pigeon Peas (*Adaki*), Brown Chickpeas (*Chanak*), Horse Gram (*Kulath*), and Black Gram (*Masha*). High-protein diet can reduce insulin resistance, improve menstrual regularity, enhance lipid profiles, and aid in weight loss.

3. Seeds with Nutritional Benefits: Consume seeds like Sesame (*Tila*), Flax (*Atsi*), Sunflower, and Pumpkin seeds. These are rich in monounsaturated fatty acids, oleic acid, and essential vitamins and minerals, acting as antioxidants and helping lower blood cholesterol. Sesame seeds, with their low glycemic index, are particularly beneficial due to their antioxidant properties and high levels of copper and manganese.

4. Matsya for Hormonal Support: According to *Acharya Susruta*, fish meat (*Matsya Mansa*) is recommended in conditions like *Artava Kshaya*, a key symptom of PCOD. Fish is rich in omega-3 fatty acids, which have been shown to reduce testosterone levels, regulate menstrual cycles, improve insulin sensitivity, and reduce cardiovascular risk by lowering cholesterol.

5. Fruits and Leafy Greens: *Acharya Bhavprakash* recommends citrus fruits (*Amla Phala*) and green leafy vegetables (*Shaak*) for managing *Artava Kshaya*. Citrus fruits have a low glycemic index, are rich in dietary fiber and vitamin C, and help maintain stable blood sugar and insulin levels. Whole fruits are preferable to juices to avoid insulin spikes. Studies support that a low-glycemic diet contributes to gradual increases in blood sugar and prevents insulin surges. Recommended fruits include Pomegranate (*Dadim*), Lemon (*Matulung*), Jackle Jujube (*Karkandu*), Gooseberry (*Amalak*), Apple, Orange, Peaches, Plums, Raspberries, Strawberries, Cranberries, Blackberries, Kiwi, Pear, Watermelon, and Papaya.

6. *Madhu* and Aged Fermented Beverages: Incorporate honey (*Madhu*) and traditional aged alcoholic preparations mentioned in Ayurvedic texts, such as cereal-based beverages (*Sura*) and vinegar (*Sukta*). These substances help balance *Vata* and *Kapha* doshas, which are considered primary contributors to PCOD according to Ayurveda.

7. Spices for *Dosha* Balance: Include spices like Piper longum (*Pippali*), Asafetida (*Hingu*), Himalayan Rock Salt (*Saindhav*), Cumin Seeds (*Ajaji*), and *Trachyspermum ammi* (*Yavani*) in daily meals. These ingredients possess *Agneya* and *Vata-Kaphahara* properties, which help address the imbalances in PCOD and promote harmony of *Doshas*.

8. *Takra* Consumption: Drink buttermilk (*Takra*), known for its *Kashaya Rasa* and *Vata-Kapha* reducing properties. It supports healthy digestion and assists in weight management.

9. *Triphala* with Honey: Taking *Triphala* powder—an Ayurvedic herbal formulation—with honey aids in maintaining healthy body weight and promotes detoxification.

10. Healthy Cooking Practices: Choose healthier cooking methods such as baking, steaming, grilling, and boiling instead of deep frying to reduce unnecessary fat intake.

Dietary Modifications

Ayurveda places significant emphasis on eating habits (*Ahara Sevana Vidhi*), especially in the management of conditions like PCOD.

1. *Matrashit* (*Matrashisyat*)^[9]: Consume food in appropriate quantities—neither too much nor too little.
2. *Jirne Ashniyat*:^[9] Eat only after the complete digestion of the previous meal to avoid metabolic imbalance.
3. *Veerya Viruddha Ashniyat*:^[9] Avoid consuming foods that are antagonistic in potency or incompatible with each other.
4. Choose light and easily digestible foods in the evening to support better digestion and metabolic function at night.

Yogic Interventions

Acharya Charak has strongly emphasized the significance of physical exercise (*Vyayam*), especially in conditions arising from over-nutrition (*Santarpanoththa Vyadhi*), and advocated for regular practice by stating "*Vyayam Nitya*" (daily exercise).^[10] A study by C.L. Harrison et al. highlighted that physical activity can help improve anovulation, insulin resistance, hypertension, and elevated lipid levels in women with PCOD.^[11] Further research has compared the impact of a *Yoga* regimen—including *Asanas*, *Pranayama*, and *Dhyana*—with that of conventional physical exercise on glucose metabolism and lipid profile in PCOD patients. After practicing for one hour daily over a 12-week period, results showed that *Yoga* was more effective than conventional exercise in enhancing glucose control, lipid levels, and insulin sensitivity.^[12]

1. *Surya Namaskar* (Sun Salutation)^[13]

Surya Namaskar is an ancient yogic practice that honors the sun through a sequence of postures (*asanas*) synchronized with specific breathing patterns. This dynamic flow enhances blood circulation, directly stimulates endocrine glands, and helps balance hormonal activity. Regular practice helps regulate the menstrual cycle, lowers blood sugar levels, improves insulin sensitivity, enhances lipid profiles, reduces weight, improves BMI, and lowers the waist-to-hip ratio.

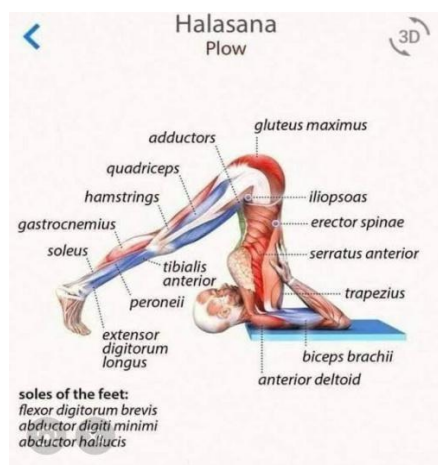
2. *Ushtrasana*

This stimulates the thyroid, adrenal, and pituitary glands, which are key players in hormonal regulation. This stimulation helps correct hormonal imbalances that are common in PCOD. The deep stretch in the abdominal and pelvic region increases blood flow to the ovaries and uterus, promoting better reproductive organ function and supporting regular menstruation. This posture strengthens and stretches the abdominal muscles, helping to reduce abdominal fat, which is often associated with insulin resistance and hormonal imbalance.



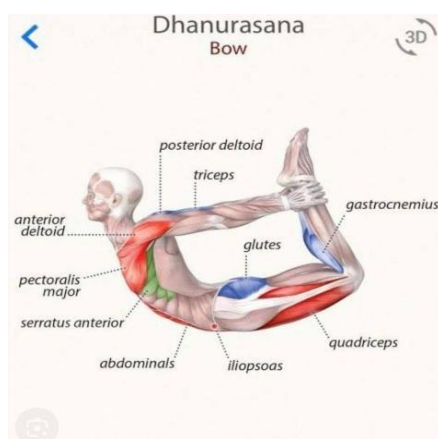
3. Halasana (Plough Pose)

Halasana stimulates thyroid gland and activates parasympathetic nervous system which helps to reduce stress. By increasing blood flow to the pelvic region, *Halasana* may support better ovarian and reproductive health.



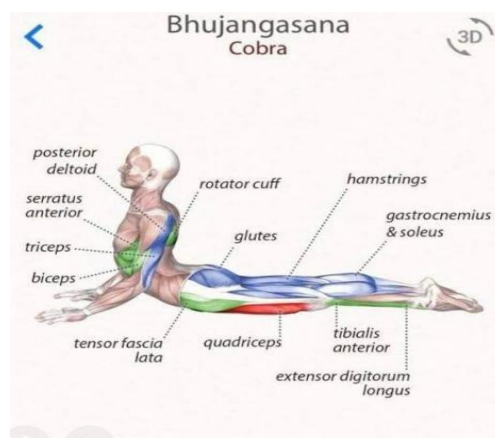
4. Dhanurasana (Bow Pose)

This posture provides an intense stretch to the abdominal muscles, promoting fat loss and overall weight reduction, making it highly effective for managing obesity-related symptoms of PCOD.



5. Bhujangasana (Cobra Pose)

Bhujangasana places gentle pressure on the abdominal region, stimulating the reproductive organs and enhancing ovarian function.



Breathing Techniques (Pranayama)

Pranayama refers to the regulation of breath, where 'Prana' means vital life energy and 'Ayama' means control. Regular practice of *Pranayama* helps prolong life and promotes overall well-being by regulating the breathing process.

- *Kapalbhati Pranayama*: *Kapal* means forehead and *Bhati* means shining. This technique enhances blood circulation to internal organs, balances glandular secretions, and combats oxidative stress. It is effective in reducing waist and hip circumference, as well as abdominal fat. By regulating the brain-pancreas-endocrine axis, *Kapalbhati* addresses metabolic disease. As an abdominal breathing exercise, it directly stimulates the pancreas to secrete insulin, counteracts hyperglycemia, and supports the regeneration of pancreatic cells, improving glucose utilization in tissues.^[14]
- *Anulom Vilom* (Alternate Nostril Breathing): This technique purifies the energy channels (*Nadis*), facilitating the smooth flow of vital energy (*Prana*). It calms both the mind and body by relieving stress and promoting mental clarity.
- *Bhramari*: A calming breathing practice that alleviates mental tension, agitation, and stress. Studies have shown that regular practice of *Bhramari* helps in regulating the normal functioning of the endocrine system. Overall, controlled breathing techniques strengthen the nervous system, enhance emotional stability, reduce anxiety, boost self-esteem, and improve insulin sensitivity.^[15]

Meditation (Dhyana)

Meditation is an essential component of *Yogic* discipline, aimed at establishing a harmonious balance between the body and mind. It plays a significant role in managing PCOD by calming and soothing the mind. During meditation, the individual focuses attention on a specific object or activity, leading to a state of mental clarity and emotional calmness.

Research indicates that Transcendental Meditation positively modulates the body's stress response, significantly lowering blood pressure and improving insulin resistance—two key components of metabolic disease.^[16]

RESULT AND DISCUSSION

By examining the etiology, pathophysiology, and clinical signs and symptoms of PCOD— and correlating them with the characteristics of *Vata*, *Pitta*, and *Kapha* in both their natural and vitiated states—it can be inferred that PCOD represents a *Kapha-Vata* predominant *Tridoshaja Vikara*. Polycystic Ovary Disease (PCOD) is a complex endocrine disorder commonly associated with obesity, hirsutism, and chronic anovulation. It is one of the leading causes of infertility and irregular menstruation. While *Ayurveda* does not identify PCOD as a single disease entity, its features closely resemble conditions described in classical texts, such as *Pushpaghni Jatiharini*, *Artava Kshaya* and *Kashyapa's Vikruta Jatiharini*. The onset and severity of PCOD can be prevented or minimized by adhering to *Ayurvedic* principles, including the regular observance of *Dincharya* (daily routine), *Ritucharya* (seasonal regimen), and the adoption of *Pathya Aahar*, *Vihar*, and *Aushadh* (wholesome diet, lifestyle, and herbal treatments).

CONCLUSION

Polycystic Ovarian Disease (PCOD) is one of the most common health issues affecting women of reproductive age, primarily caused by hormonal imbalances linked to unhealthy habits, a hectic schedule, and a stressful lifestyle. Women with PCOD often experience significant insulin resistance, obesity, and elevated androgen levels. Weight management plays a crucial role in both the prevention and treatment of PCOD, and it can be effectively achieved through lifestyle modifications. In *Ayurveda*, the concept of *Pathya Aahar* (wholesome diet) and the inclusion of *Yoga* practices are considered essential for maintaining health and ensuring proper functioning of the endocrine system. *Pranayama* (breathing techniques) are especially beneficial in alleviating PCOD symptoms that stem from deep-seated mental stress, helping to enhance emotional resilience and well-being. These holistic lifestyle changes not only improve fertility outcomes but also enhance the overall quality of life for individuals living with PCOD.

REFERENCES

1. Fouzia Akhter & Ayesha Siddika (2024). Management of Adolescent PCOD: A Real Challenge. *Sch Int J Obstet Gynec*, 7(2): 64-69.
2. Jha K. Dahal A, Shah B, Tripathi P, Thasineku S. Management of Polycystic ovarian disease (PCOD) with Ayurveda - A single case report. *Journal of Ayurveda Campus*, 2021; 2(1): 133-138.
3. 1 Kushwaha HC, Charaka Samhita, Pratham Bhag. Varanasi: Chaukhamba Orientalia, 2009.
4. Chakrapaanidatta, edited by Vaidya Yadavji Trikamji Acharya. Varanasi: Chaukhamba Sanskrit Sansthana. Sootrasthaana. 27/198, Page no. 163. Chaukhamba Sanskrit Sansthana. Sootrasthaana. 30/26, Page no 187.
5. Dutta D C, (2013) edited by Hiralal Konar. Textbook of Gynecology. Kolkata: New Central Book Agency. Chapter 28: Amenorrhea. Page no. 440
6. Dutta D C, (2013) edited by Hiralal Konar. Textbook of Gynecology. Kolkata: New Central Book Agency. Chapter 28: Amenorrhea. Page no. 440
7. Sharma S, Singh AK. Role of Ayurveda on PCOD (Polycystic ovary disease): A Critical
8. Thakur Jyotsna & Masand Sameet. A review on life style modification: The mainstay in polycystic ovarian disease. *Int. J. Res. Ayurveda Pharm*, 2018; 9(3).
9. Charak, Charak Samhita, English translation Editor Prof. Priyvrata Sharma vol. 1 Chaukhamba Orientalia, 2014. Vimansthan Chapter 1/3-5, p. 307
10. Charak, Charak Samhita, English translation Editor Prof. Priyvrata Sharma vol. 1 Chaukhamba Orientalia, 2014. Sutrasthana Chapter 23/25, p. 155.
11. C.L. Harrison, C.B. Lombard, L.J. Moran, H.J. Teede. Exercise therapy in polycystic ovarian disease: A systemic review. *Human Reproduction Update*, 2011; 17(2): 171-183.
12. Nidhi R. Effect of a yoga program on glucose metabolism and blood lipid levels in adolescent girls with polycystic ovary disease. *International Journal Gynecology and Obstetrics*, 2012; 118(1): 37-41.
13. Malhotra V, Singh S, Tandon OP, Sharma SB: The beneficial effect of Yoga in Diabetes. *Nepal Medical College Journal*, 2005; 7(2): 145-147.
14. Reshma Mohamed Ansari. Kapalbhati Pranayam: An answer to modern day polycystic ovarian disease and co-existing metabolic disease. *International Journal of Yoga*, 2016 Jul-Dec; 9(2): 163-167.
15. Manjunatha S, Vempati RP, Ghosh D, Bijlani RL (2005). An investigation into the acute and long-term effects of selected yogic postures on fasting and postprandial glycemia and insulinemia in healthy young subjects. *Indian Journal Physiol Pharmacol*, 49: 319-324.
16. Moura Paul Labrador, Dona Polk, James H. Dwyer et. al. Effects of a randomized controlled trial of transcendental meditation on components of the metabolic disease in subjects with CHD, *Arch Intern Med*, 2006; 166(11): 1218-1224.