

CLINICAL EFFICACY OF SHODHANA KARMA IN THE MANAGEMENT OF PUSHPAGHNI JATAHARINI W.S.R. TO POLYCYSTIC OVARIAN SYNDROME (PCOS): A CASE STUDY

Dr. Sreeja V.¹, Dr. Pankaja. Krushna²

Professor and HOD, Department of Prasutitantraevum Stree Roga, Shree Jagadguru Gavisiddheshwara Ayurvedic Medical college, Hospital and Research centre, Koppal, Karnataka.

PG Scholar, Department of Prasutitantraevum Stree Roga, Shree Jagadguru Gavisiddheshwara Ayurvedic Medical college, Hospital and Research centre, Koppal, Karnataka.

Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore

ABSTRACT: *Background: Polycystic Ovarian Syndrome (PCOS) is a prevalent endocrine-metabolic disorder among young females, often manifesting as menstrual irregularities, weight gain, and polycystic ovarian morphology (PCOM). In Ayurveda, this condition correlates with PushpaghniJataharini, characterized by anovulatory cycles and metabolic sluggishness. Objective: To evaluate the clinical efficacy of a comprehensive Ayurvedic intervention, specifically Shodhana Karma (purification therapy) and Shamana (palliative) medications, in the management of PCOS in a 19-year-old female. Methodology: A 19-year-old female with irregular cycles and bulky ovaries was treated with Deepana-Pachana, Snehapana (VarunadiGhrita), and Virechana Karma (TrivrutLeha), followed by oral medications including KanchanaraGuggulu and Varunadi Kashaya. Results: Post-treatment, menses regularized (6-day flow). USG confirmed resolution of polycystic morphology, with right ovarian volume reducing from 11.0 cc to 7.4 cc and endometrial thickness increasing from 5.6 mm to 8.1 mm. Conclusion: Virechana Karma effectively corrected the metabolic obstruction (Srotoavarodha), restoring hormonal balance and normal ovarian morphology without hormonal intervention.*

Keywords: *Pushpaghni Jataharini, PCOS, Shodhana Karma, Virechana.*

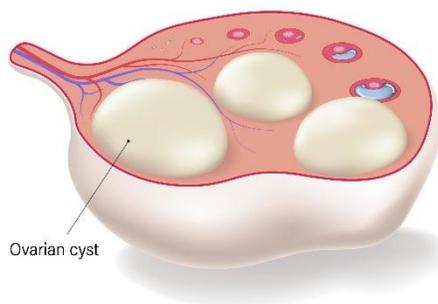
INTRODUCTION

Polycystic Ovarian Syndrome (PCOS) is one of the most common metabolic and reproductive disorders, affecting approximately 4% to 20% of women worldwide [1]. While the exact etiology remains idiopathic, it is strongly associated with insulin resistance, obesity, and sedentary lifestyles [2]. In Ayurvedic classics, the clinical features of PCOS find a close resemblance to *Pushpaghni Jataharini*, described by Acharya Kashyapa as a condition where a woman has regular or irregular cycles but they are "useless" (anovulatory), often associated with excessive hair growth (hirsutism) and obesity [3]. The condition involves the vitiation of *Vata* and *Kapha* Doshas, leading to the obstruction of *Artavavaha Srotas* (the channels carrying menstrual fluid) [4]. Conventional management typically focuses on symptomatic relief through hormonal contraceptives; however, Ayurveda offers a holistic alternative by targeting metabolic correction (*Agni Deepana*) and systemic detoxification (*Shodhana*) to restore the natural rhythm of the H-P-O axis [5].

DISEASE DESCRIPTION

Modern Perspective (PCOS)

PCOS is characterized by three main features: androgen excess, ovulatory dysfunction, and polycystic ovaries [6]. According to the Rotterdam criteria, at least two of these three must be present for a diagnosis. It is frequently accompanied by metabolic comorbidities, such as Grade 1 Fatty Liver, which indicates a systemic metabolic disturbance and insulin resistance [7].



Polycystic ovary syndrome (PCOS)

Ayurvedic Perspective (*PushpaghniJataharini*)

In Ayurveda, PCOS is viewed as a *SantarpanaJanyaVyadhi* (disease due to over-nutrition). The pathogenesis (*Samprapti*) begins with *Agnimandya* (weak digestive fire), leading to the formation of *Ama* (metabolic toxins). This *Ama* causes *Srotoavarodha* (obstruction) in the *Rasavaha*, *Medovaha*, and *Artavavaha Srotas* [8].

- **Dosha:** *Kapha* (causing cyst formation and weight gain) and *Vata* (causing irregular cycles).
- **Dushya:** *Rasa* (plasma), *Meda* (adipose tissue), and *Artava* (menstrual fluid).
- **Adhishtana:** *Garbhashaya* (Uterus) and *Phalakosha* (Ovaries) [9].

CASE REPORT:

A **19-year-old unmarried female** presented to the Outpatient Department (OPD) of PrasootiTantra and StreeRoga at Shree JagaduruGavisiddheshwaraAyurvedic Medical College and Hospital, Koppal, Karnataka.

Chief Complaints

The patient sought treatment for the following symptoms:

- **Menstrual Irregularity:** Persistent irregular cycles since menarche.
- **Leucorrhoea:** White vaginal discharge persisting for the past year.
- **Weight Gain:** A gradual increase in body weight noted over the last 6 months.
- **Dysmenorrhea:** Low back pain associated with menses for the last 2 months.

Medical and Family History

- **Menstrual History:** The Last Menstrual Period (LMP) was recorded on **10/11/2024**.
- **Past History:** No significant prior illnesses or relevant medical interventions were reported.
- **Family History:** Non-contributory; no similar conditions or significant hereditary diseases were noted in the family.

Age of menarche	13 year
Cycle	Irregular >35 days
Interval	2-3 months
No. of days of bleeding	6
No. of pads/day	2 (fully soaked)
Dysmenorrhea	Absent
Clots	Nil
White discharge	Present
Odor	Fowl
Consistency	Thick

Vayaktika Vruttanta:

Ahara	Vegetarian
Nidra	Adequate
Appetite	Reduced
Bowel	Constipated
Bladder	Normal Micturation
Allergy	Nil
Habits	Nothing specific
Bala	Madhyama
Desha	Sadharana

Marital history: Unmarried.

Physical Examination

The patient presents with a **moderate build**, weighing **60 kg**. Based on the integration of clinical history, physical symptoms (menstrual irregularity, hirsutism, and weight gain), and diagnostic imaging, a diagnosis of **Polycystic Ovarian Syndrome (PCOS)** was confirmed.

Ultrasonography (USG) Reports

Date of Examination: 18/03/2025

1. Uterine Assessment

- **Position:** Anteverted
- **Dimensions:** 55.3 * 26.5 * 25.2 mm
- **Endometrial Thickness (ET):**5.6 mm

2. Ovarian Morphology

The scan revealed **bilaterally bulky ovaries** characterized by multiple small peripherally arranged follicles and a centrally echogenic stroma—classic indicators of PCOM (Polycystic Ovarian Morphology).

- **Right Ovary:** 33.6 * 19.2 * 32.6mm (Volume: **11.0 cc**)
- **Left Ovary:** 28.8 * 24.7 * 28.8 mm (Volume: **10.7 cc**)

3. Hepatic Findings

- **Liver:** Diagnosed with **Grade 1 Fatty Liver**, noted by a diffuse increase in echogenicity.
- **Size:** Normal 131.3 mm

Laboratory Investigations

- **Hemoglobin (Hb):**13.3 g/dL (Within normal range)
- **Thyroid Profile (T3, T4, TSH):** Normal; ruling out thyroid dysfunction as a cause for menstrual irregularities or weight gain.

General examination

Pallor	Absent
Icterus	Absent
Clubbing	Absent
Cyanosis	Absent
Lymph nodes	Absent
Edema	Absent
Temp.	Afebrile
Weight	60 Kg
BMI	22 Kg/m ²
Pulse rate	76 bpm
BP	110/80 mm of Hg

Ashtasthanapariksha

- Nadi - 76 bpm ●Shabda –Prakruta
- Mala - Once / day ●Sparsha -AnushnaSheeta
- Mutra- 5-6times/day ●Druk –Prakruta
- Jivha – Lipta●Akriti –Madhyama

Dashavidhapariksha

1. Prakruti: Kapha Pitta
 2. Vikruti: Dosha: Vata, Pitta, Kapha
- Dushya: Rasa, Meda and Artava
3. Sara:Madhyama
 4. Samhanana: Madhyama
 5. Satmya: Madhyama
 6. Satva: Madhyama
 7. Pramana: Madhyama
 8. Ahara shakti; Jarana shakti –Madhyama
- Abhyavaranashakti –Madhyama
9. Vyayama Shakti: Madhyama
 10. Vaya: Madhyama

Systemic examination:

Respiratory system:

Inspection Shape of the chest - Bilaterally Symmetrical
Chest movements - Symmetrical
RR- 18 cycles/min
Palpation: Chest Expansion – Symmetrical
Lymph nodes are not palpable
Percussion: Resonant over the lung field except the cardiac dullness
Auscultation: Normal B/L vascular breath sounds heard

Cardiovascular system:

Inspection: Chest B/L Symmetrical, no visible pulsation or dilated veins
Palpation: Apex beat palpable at left 5th intercostal space.
Percussion: Cardiac dullness present on left side.
Auscultation: S1S2+, no added sounds

Per Abdomen: Soft, Tenderness in Hypogastrium, No organomegaly.

Central nervous system: Conscious and well oriented.

Sampraptighataka:

Dosha: Kapha Vata
Dushya: Rasa, Meda, Artava
Agni: Jataragni, Dhatwagni
Agni Dushti: Jataragnimandya, Rasa Dhatavagnivaishamyata
Srotas: Rasavahi, medovahi, Artavahisrotas
Srotodushti: Strotoavarodha
Udbhavastaana: Aamashaya
Sancharastaana: Rasavaha, raktavaha, ArtavahaSrotas
VyaktaStaana: Garbhashaya
Adhishtana: Garbhashaya

RogaMarga: Abhyantara
SadyaAsadhyatwa: SadhyaVyadhi

TREATMENT PROTOCOL

Ayurvedic Management:

1st visit (on 25/02/2025): Medication for 15 days-OP Management

Complaints	Treatment	Observations
Irregular menstrual cycle since menarche associated with white discharge per vagina, gradual weight gain, low back during menses.	1.Varunadi kashaya-20ml kashaya with 40ml of luke warm water BD before food 2.Tab Leuco-R 1 TID after food 3. Tab Septilin 1 TID after food	Leucorrhea reduced.

IP management:

Date	Complaints	Kriyakrama	Medication	Observations
Day 1: 19/03/25	Irregular cycle LMP: 17/01/2025	DeepanaPachana	1.Jeerakarishtha 30ml TID A/F 2. Tab. Agnitundivati 1TID B/F 3.Tab. Hinguvachadi 1 TID B/F	Weight-60 Kg
Day 2 to Day 5: 20/03/25- 23/03/25		Snehapana	Varunadighritam Arohanamatra 30ml to 120ml at time of suryodaya (4 days)	Snehasiddhilakshana: Snehovarcha, vatanulomana, snigdhatwak
Day 6-7: 24/03/25 & 25/03/25		Vishramakala Sarvangaabhyanga followed by bhashpasweda	Dhanwantarumtaila abhyanga	
Day 8: 26/03/25		Sarvangaabhyanga, followed by bhashpasweda Virechana karma	Dhanwantarumtaila Abhyanga, Virechanadravya:Trivrut leha 40gm orally @ 8:30am	Total vega-15(madhyamashuddhi) Weight- 58.70Kg
Day 9: 27/03/25		Samsarjana karma for 3days		

Day 12: 30/03/25		Discharge	<p>1.Varunadi kashaya- 20ml kashaya+40ml luke warm water BD B/F</p> <p>2.Tab Hyponid- 1 TID B/F</p> <p>3.Tab. Shaddharanam 1 TID B/F</p> <p>4. Ashtachurnam 1 tsf TID just B/F with honey and lemon juice for 15 days</p>	
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Follow Up: 11/04/2025 Advice- for 1 month

Complaints	Treatment	Observations
No fresh complaints	<p>1.Gandharvahasthadi Kashaya:20ml Kashaya+40ml Luke warm water BD B/F with 1 pinch of Jaggery</p> <p>2.Tab Hyponid- 1 TID B/F</p> <p>3.Tab Ksheerabala 101- 1 BD B/F</p> <p>4.Tab Kanchanaraguggulu- 1 TID B/F</p>	<p>Menses on 13/04/2025 Menstrual history- <u>6 days/3-</u> <u>4pad/day</u></p>

USG findings after treatment (on 22/11/2025) shows:

- Uterus- Anteverted and Measures 65.8*38.2*30.7 mm with endometrial thickness of 8.1 mm
- Ovary- Both ovaries are normal in shape, echogenicity and echotexture.
Right ovary: 25.6*20.3*27.1 mm and Volume of 7.4cc
Left ovary: 28.6*26.4*26.1mm and Volume of 10.3cc
- Liver: Grade 1 fatty liver- diffuse increase in echo genicity
Normal in size (135.7mm) and shape

BEFORE TREATMENT

Sharvari
DIAGNOSTIC CENTRE
DISCOVER | DIAGNOSE | DELIVER

Dr. Chandalingappa Kuri
MBBS, MDRD, DNB RD, FRCR
Consultant Radiologist

Cell - 8431000432
E-mail - sdck1705@gmail.com

Patient Name: .	Date: 18/03/2025
Patient Id: 102106	Age/Sex: 19 Years / FEMALE
Ref:DR. SREEJA	

ABDOMEN AND PELVIC SONOGRAPHY

LIVER:The liver is normal in size 131.3 mm, shape & diffuse increase in echogenicity. Hepatic veins and intrahepatic portal vein radicles are normal in size and distribution. No focal solid or cystic mass lesion is noted.

GALL BLADDER: Gall bladder appeared normal. No mural mass or calculus is noted.
CBD: Common bile duct appeared normal. No calculi seen in the common bile duct.

PANCREAS:is normal in shape size and echotexture. No focal lesion seen.
SPLEEN:Spleen is normal in size 99.3 mm, shape and echotexture. No focal lesion is seen.

KIDNEY: Right kidney measures 97.0 x 48.9 mm and Left kidney measures 89.6 x 50.0 mm. Both kidneys are normal in size, shape, position, echogenicity and echotexture. Normal corticomedullary differentiation is noted. No focal solid or cystic mass lesion or any calculus is seen. Pelvicalyceal systems on both sides are normal.

URETERS : Visualized portions of both ureters are not dilated. No calculus is seen in the portions of ureters which can be seen by sonography.

URINARY BLADDER:The urinary bladder shows physiological distention. No calculus or mass lesion is seen.

UTERUS: The uterus is anteverted. It measures 55.3 x 26.5 x 25.2 mm. It is normal in size, shape, position, echogenicity and echotexture. There is no focal mass lesion in uterus. No gestation sac is noted. Endometrium measures 5.6 mm.

OVARY: Both ovaries are bulky in size with multiple small peripherally arranged follicles and central echogenic stroma.

Right ovary measures 33.6 x 19.2 x 32.6 mm. (Volume is 11.0 cc).
Left ovary measures 28.8 x 24.7 x 28.8 mm. (Volume is 10.7 cc).

OTHER: Visualized portions of IVC and Aorta are grossly normal. There is no free or loculated fluid collection in abdomen or pelvis. No significant lymphadenopathy is noted.

IMPRESSION:

- > GRADE I FATTY LIVER.
- > ABOVE FEATURES ARE SUGGESTIVE OF POLYCYSTIC OVARIAN MORPHOLOGY.


DR CHANDALINGAPPA KURI
MBBS.,MDRD.,DNB.,FRCR.
CONSULTANT RADIOLOGIST

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Shop No. 3, APMC complex, Opp. To 5th Yard | ನಂ. 03, ಎ.ಪಿ.ಎಂ.ಸಿ., ಕಾಂಪ್ಲೆಕ್ಸ್,
Gavimath Road, Koppal-583 231. | 5ನೇ ಯಾರ್ಡ್ ಎದುರುಗಡೆ, ಗವಿಮಠ ರಸ್ತೆ, ಕೊಪ್ಪಳ-583 231.

AFTER TREATMENT



Cell : 8431000432
E-mail:sdck1705@gmail.com

Patient Name: [REDACTED]	Date: 22/11/2025
Patient Id: 10210a	Age/Sex: 19 Years / FEMALE
Ref. DR. SREEJA	

ABDOMEN AND PELVIC SONOGRAPHY

LIVER: The liver is normal in size 135.7 mm, shape & diffuse increase in echogenicity. Hepatic veins and intrahepatic portal vein radicles are normal in size and distribution. No focal solid or cystic mass lesion is noted.

GALL BLADDER: Gall bladder appeared normal. No mural mass or calculus is noted.

CBD: Common bile duct appeared normal. No calculi seen in the common bile duct.

PANCREAS: is normal in shape size and echotexture. No focal lesion seen.

SPLEEN: Spleen is normal in size 102.4 mm, shape and echotexture. No focal lesion is seen.

KIDNEY: Right kidney measures 92.5 x 47.9 mm and Left kidney measures 91.6 x 47.0 mm. Both kidneys are normal in size, shape, position, echogenicity and echotexture. Normal corticomedullary differentiation is noted. No focal solid or cystic mass lesion or any calculus is seen. Pelvicalyceal systems on both sides are normal.

URETERS: Visualized portions of both ureters are not dilated. No calculus is seen in the portions of ureters which can be seen by sonography.

URINARY BLADDER: The urinary bladder shows physiological distention. No calculus or mass lesion is seen.

UTERUS: The uterus is anteverted. It measures 65.8 x 38.2 x 30.7 mm. It is normal in size, shape, position, echogenicity and echotexture. There is no focal mass lesion in uterus. No gestation sac is noted. Endometrium measures 8.1 mm.

OVARY: Both ovaries are normal in shape, echogenicity and echotexture.

Right ovary measures 25.6 x 20.3 x 27.1 mm. (Volume is 7.4 cc).

Left ovary measures 28.6 x 26.4 x 26.1 mm. (Volume is 10.3 cc).

There is no focal solid or cystic mass lesion in it. No appreciable other adnexal space occupying lesion is noted. Bilateral ovaries shows normal antral follicular count. Follicle measuring 20 x 15.8 mm in left ovary.

OTHER: Visualized portions of IVC and Aorta are grossly normal. There is no free or loculated fluid collection in abdomen or pelvis. No significant lymphadenopathy is noted.

IMPRESSION:

➤ GRADE I FATTY LIVER.

Dr. Chandalingappa Kuri
MBBS, MDRD, DNB-RD., FRCR
Consultant Radiologist

RESULTS

Parameter	Pre-Treatment (18/03/2025)	Post-Treatment (22/11/2025)	Result
Menstrual Cycle	Irregular (>35 days)	Regular (LMP 13/04/2025)	Normalized
Ovarian Morphology	Bulky, PCOM Present	Normal Shape & Texture	Resolved
Right Ovary Volume	11.0 cc	7.4 cc	Reduced
Left Ovary Volume	10.7 cc	10.3 cc	Stabilized
Endometrial Thickness	5.6 mm	8.1 mm	Improved
Body Weight	60 kg	58.7 kg (at discharge)	Reduced

DISCUSSION

The clinical presentation of this 19-year-old patient—irregular cycles, leucorrhoea, weight gain, and polycystic morphology—aligns with the Ayurvedic description of *PushpaghniJataharini*. In this condition, *Artava* is not formed or released correctly due to the blockage caused by *Kapha* and *Meda* [3].

The Role of Shodhana

The most significant turning point was the *Virechana Karma*. In PCOS, the *H-P-O axis* is often disrupted by systemic inflammation and metabolic waste. *Virechana* performs "cellular cleansing," which resets the endocrine environment. The post-*Virechana* weight loss (60 kg to 58.7 kg) was not just water weight but a reduction in *Kleda* (morbid fluids), as evidenced by the patient's improved appetite and reduced constipation [5].

Ovarian and Endometrial Response

The USG findings post-treatment are highly encouraging:

- **Reduction in Ovarian Volume:** The Right Ovary reduced from 11.0 cc to 7.4 cc. This indicates that the *Lekhana* (scraping) action of *KanchanaraGuggulu* and *Varunadi Kashaya* successfully reduced the stromal hyperplasia and the number of peripherally arranged follicles [13].
- **Endometrial Thickness (ET):** The increase from 5.6 mm to 8.1 mm is a clinical marker of successful ovulation and proper estrogen-progesterone balance. An ET of ~8 mm is considered ideal for a healthy menstrual cycle [6].

Metabolic Impact

The presence of Grade 1 Fatty Liver highlights that PCOS is not just a reproductive issue but a systemic metabolic one. The use of *Deepana-Pachana* drugs (*AgnitundiVati*, *Hinguvachadi*) at the start of the treatment addressed the *Jataragnimandya* (low digestive fire), which is the root cause of fatty liver and subsequent PCOS [8].

The drugs used in this protocol work synergistically to address the *Samprapti* (pathogenesis) of *Pushpaghni Jataharini* (PCOS).

1. Shodhana (Detoxification) Drugs

- **VarunadiGhritam:** Used for *Snehapana* (internal oleation). It contains *Varuna* (*Crataevanurvala*), which is a potent *Kapha-Medohara* (fat-reducing) and *Lekhana* (scraping) drug. It helps in softening the obstructed follicles and mobilizing the toxins from the tissues to the gastrointestinal tract [10].
- **TrivrutLeha:** Used for *Virechana* (purgation). It contains *Trivrut* (*Operculinaturpethum*), which induces *Sukha-Virechana* (easy purgation). This process eliminates excess *Pitta* and *Kapha* and corrects the movement of *Apana Vata*, which is the primary *Dosha* responsible for the regular excretion of *Artava* (menstrual fluid) [11].

2. Shamana (Palliative) Drugs

- **KanchanaraGuggulu:** This is a classic *Lekhana* (scraping) formulation. Its primary ingredient, *Kanchanara* (*Bauhinia variegata*), has a specific affinity for glandular swellings and cysts. It helps in reducing the "bulky" nature of polycystic ovaries by scraping away excess *Kapha* and *Meda* [12].
- **VarunadiKashaya:** Acts as a metabolic enhancer. It improves *Dhatwagni* (tissue-level metabolism), preventing the further formation of *Ama* (toxins) and helping to clear the Grade 1 Fatty Liver observed in the USG [4].
- **Tab Hyponid:** This is a proprietary formulation often used for insulin sensitizing. It helps in managing the metabolic syndrome aspect of PCOS, such as weight gain and insulin resistance, by improving glucose utilization [14].

- **GandharvahasthadiKashaya:** Used in the follow-up phase to maintain *Vatanulomana* (proper downward movement of Vata). It ensures that once the channels are cleared, they remain unobstructed for the next menstrual cycle [11].

CONCLUSION

This case study demonstrates that Ayurvedic *Shodhana Karma* (specifically *Virechana*) is highly effective in managing PCOS by addressing the underlying metabolic and channel-based obstructions. The treatment successfully regularized the menstrual cycle, reduced ovarian volume, and improved endometrial health. The integration of traditional therapies offers a safe and sustainable alternative for young women suffering from the hormonal and metabolic consequences of *PushpaghniJataharini*.

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