

A Case Study of Ayurvedic Therapies for Polycystic Ovarian Disorder

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Abstract

Background: Endocrinopathies are involved in the complex heterogeneous illness known as polycystic ovarian disease (PCOD). Although the symptoms resemble Vata and Kapha Dosha involvement, Ayurveda does not link the condition to a specific disease or syndrome. By addressing fundamental metabolic abnormalities and restoring ovulation naturally by accelerating follicle growth, Ayurveda cures polycystic ovarian disorder. The course of treatment for a PCOS patient varies on the patient's body type, underlying causes, and manifested symptoms. Case study: A 25-year-old woman who was visiting the Prasuti Tantra evam Streeroga OPD with her 28-year-old husband complained of dysmenorrhea, insufficient menses, delayed menses, acidity, hairfall, and general weakness. Her ovaries seemed polycystic in her ultrasound reports. She had sparse, painful periods every two days for 45 days with minimal clots. No obstetric history existed. For four months, the patient received Kuberaksha vati, Kalaonji powder, Rasapachak kwatha, Granthiraja powder, and Navayas Churna, with monthly follow-ups. The patient's menstrual cycle was progressively reset to normal, or 28 days, after treatment. Her menstrual cycle was getting closer together. Dysmenorrhea and clot concerns saw a significant improvement. Even her USG results showed that her ovaries looked normal following treatment. In conclusion, this instance demonstrates the value of customized treatment options for polycystic ovarian syndrome. Additionally, it highlights the value of Kuberaksha vati, Kalaonji powder, Rasapachak kwatha, Granthiraja powder, and Navayas Churna in lowering subjective as well as objective Polycystic Ovarian Disorder signs and symptoms. For further inferences, more extensive clinic trials should be conducted.

Keywords: *Artava Dushti, Poly Cystic Ovarian Disorder, Kuberaksha Vati, Granthibhut Artava, Rasapachak Kwatha, Kalaonji powder.*

Introduction

Endocrinopathies are involved in the complex heterogeneous ailment known as polycystic ovarian disease. (1) One in ten women are impacted. (2) Patients with this disorder have several cysts in their ovaries that develop as a result of a disruption in the regular menstrual cycle. (3) Excess androgen and estrogen are produced by enlarging ovaries. Anovulatory cycles and irregular menstruation are caused by these hormones' interference with the development and release of eggs from the ovaries. This disease is becoming more common due to sedentary lifestyles, pollution, and overindulgence in fast food. (4) A hormonal imbalance that inhibits follicular growth during the ovarian cycle results in polycystic ovarian syndrome, when the afflicted follicles stay in the ovary. With each menstrual cycle, a new cyst develops from the retained follicle, resulting in many ovarian cysts with ultrasound morphologic

evidence of 12 follicles that are 2.9 mm in diameter. Obesity, oligomenorrhea, anovulation, and hyperandrogenism are all linked to it. A substance in the blood called hyperinsulinemia (higher levels of insulin in the blood caused by cells' increased sensitivity to insulin) stimulates the release of androgen by the ovarian stroma, the connective tissue of the ovary, and lowers serum sex hormone binding globin (SHBG), which raises the levels of free testosterone. The follicles that are maturing during the ovarian cycle are impacted by the elevated androgen in the ovary, which results in anovulation of that specific follicle.(5)

Pathophysiology of PCOS

PCOS manifests as a phenotype that reflects a vicious cycle that includes ovarian, neuroendocrine, and metabolic abnormalities. Numerous theories have been put up over the years on the proximate physiologic causes of PCOS. PCOS is a result of interactions between numerous proteins and genes that are altered by environmental and epigenetic factors.(6) Recent genetic, clinical, and experimental findings underline the role of neuroendocrine systems in the pathogenesis of PCOS. Excessive ovarian and/or adrenal androgen production is a hallmark of PCOS. both intrinsic ovarian variables—like altered steroidogenesis—and extrinsic influences. Ovarian dysregulation in PCOS may be caused by distorted interactions between the endocrine, paracrine, and autocrine systems involved in follicular development, much to how hyperinsulinemia contributes to excessive ovarian androgen production. (7)

Ayurvedic perspective of PCOS

Although Ayurveda does not link the condition to a specific illness or syndrome, the symptoms are similar to those of physiological disorders of the reproductive system such as Arjaska- oligomenorrhoea caused by vitiation of Vatadosha, Lohitakshaya- oligomenorrhoea caused by vitiation of Vata-Pitta Dosha, Vandhya- infertility, Pushpaghni- Menstrual flow disorders Rajodushti and Kashtartava Dushti and Vata vitiation in Shandhi Yonivyapad cause. The reduction of the digestive fire brought on by the Vata and Kapha Doshas, as well as by Vishama Ahara and Vihara, results in the creation of Ama (undigested food).(8) This Ama generation results in incorrect enzymatic responses that impair metabolism and disrupt hormonal homeostasis. This hormonal imbalance results in hyperinsulinemia, hyperandrogenism, and ovarian abnormalities such polycystic ovaries, which in turn induce anovulation, amenorrhoea, and oligomenorrhoea. The fundamental pathology of PCOS in the context of Avarana by Dosha can be understood if Aartava is interpreted as ovarian hormones. This Avarana alters the hypothalamus-Pituitary-Ovarian (HPO) axis' equilibrium, resulting in hormonal imbalance and PCOS. (9)

Using herbal medications to address fundamental metabolic abnormalities, Ayurveda treats polycystic ovarian disorder. Ayurveda stimulates follicle growth to naturally induce ovulation. In order to restore the ovaries to their original size, it also dissolves old, immature follicles and cysts at the ovary. The course of treatment for a PCOS patient varies on the patient's body type, underlying causes, and manifested symptoms.(10)

Case report

A 25-year-old woman who was visiting the Prasuti Tantra evam Streeroga OPD with her 28-year-old husband complained of dysmenorrhoea, insufficient menses, delayed menses, acidity, hair loss, and

general weakness. Her ovaries seemed polycystic in her ultrasound reports. She had sparse, painful periods every two days for 45 days with minimal clots. No obstetric history existed.

Personal history

Patients' micturition was typical, occurring 6-7 times per day, with a reasonable frequency of once per day, and they had a decent appetite and sound sleep. Her pulse and blood pressure were found to be 68/min and 110/70 mm Hg, respectively, during a general assessment.

There was no edema or pallor. The patient's BMI was 20.2 kg/m². She had a Vata Pitta dominating Prakruti according to the Prakruti assessment, and the systemic test produced no useful results. An examination of the abdomen revealed no abnormalities. A per speculum examination found that the cervix and vagina appeared normally. A per vaginal examination revealed an anteverted uterus of normal size and free fornices.

There was no cervical motion soreness.

Table 1: Posology of Treatment given

Time	Drug	Dose	Outcome	USG findings
09/02/2022	<i>Kuberaksha Vati</i>	250 mg BD with luke warm water after meal.	C/o- Dysmenorrhoea, scanty menses, delayed menses, acidity, hairfall, and general weakness. LMP- 23/01/2022, 2days bleeding, dysmenoorhoea present	10/1/22- Patient presented with previously done ultrasonography reports revealing that uterus was normal in size and ovaries were bulky with polycystic appearance.
	<i>Kalajaji powder</i>	2gm BD with luke warm water after meal.		
	<i>Rasapachak Kwatha</i> (combination of <i>Kutajbeej</i> , <i>Patolpatra</i> , <i>kutki</i>)	10-15 ml BD with lukewarm water		
12/03/2022	<i>Kuberaksha Vati</i>	250 mg BD with luke warm water after meal.	LMP- 07/03/2022 (interval of 1 month 15 days) C/o- hair fall and dandruff-persist General weakness-reduced	-----
	<i>Kalaunji powder</i>	2gm BD		
	<i>Rasapachak Kwatha</i>	10-15 ml BD with lukewarm water		
21/04/2022	<i>Granthiraja powder (Trikatu, Patha, Gokshura, Indrayava)</i>	2gm BD	LMP- 15/04/2022 (interval of 1 month 7 days) Clots present++	

	<i>Navayasa loha</i>	250mg BD		
25/05/2022	<i>Kuberaksha Vati</i>	250 mg BD with luke warm water after meal.	LMP- 15/05/2022 (interval of 1 month) Clots-absent, Dysmenorrhoea-reduced	25/5/22- Ultrasonography reports revealed that uterus was normal in size and both ovaries were normal in size, shape and texture.
	<i>Navayasa loha</i>	250mg BD		

Investigation

The patient's general checkup, which included a complete blood count, urine analysis, a biochemical analysis, and a serological analysis, were all within normal ranges. The results of an ultrasonography showed that the uterus was normal in size and the ovaries were large and appeared polycystic.

Treatment

Dysmenorrhea, scanty menstruation, and delayed menstruation were symptoms of Artava Dushti, and USG results also revealed polycystic ovaries, hence the patient was identified as having PCOD. As Artava is regarded as the Upadhatu of Rasa Dhatu, therapy was utilized to enhance Rasadhatwagni, which in turn enhanced Rasa Dhatu's metabolism. Drugs with Artavajanana characteristics were taken together. The patient received the following course of care, and the following results were reported (Table no:1).

Result

The patient had treatment for four months, with monthly follow-ups. The menstrual cycle of the patient was gradually adjusted to normal, or 28 days. Her menstrual cycle was getting closer together. Dysmenorrhea and clot concerns saw a significant improvement. Her USG results showed polycystic ovarian appearance, which was later changed by treatment to normal ovaries. For the purpose of preventing a recurrence, the patient was instructed to continue treatment for another month following the standard USG result.

Table 2: Showing the Before and after treatment Ultrasonography reports

BEFORE TREATMENT	AFTER TREATMENT
10/1/22- Ultrasonography reports revealed that uterus was normal in size and ovaries were bulky with polycystic appearance.	25/05/2022- Ultrasonography reports revealed that uterus was normal in size and both ovaries were normal in size, shape and texture

Discussion

The etiology of polycystic ovarian disorder involves several Vyadhi Ghatakas, including Kapha and Vata Dosha, Rasa, Rakta, and Meda Dhatu, Artava, Stree Shukra, Artavavaha Srotas, and Rasavaha Srotas. The body must be detoxified, the female reproductive system must be strengthened and

revitalized, menstrual cycles must be regularized, and hormonal imbalances must be corrected with Panchakarma treatments and Ayurvedic medications.

Probable mode of action of drugs

Kuberaksha vati, Kalaonji powder, Rasapachak kwatha, Granthiraja powder, and Navayas Churna were the key ingredients used in this case study. Sunthi (*Zingiber officinale* Linn) 125gm, Hing (Ghrit Bharjit) 75mg, Kala Namak (black salt) 75mg, and Latakaranj (Kuberaksha) 125gm make up Kuberaksha vati, which is processed in Bhavana (Lasuna Swaras). It helps those with PCOS, Udarshoola (colic discomfort), Parinamshoola, Grahani, Atisara, and dysmenorrhea.(11) By reducing the amount of cystic follicles, Kalajaji powder (*Nigella sativa*) has a protective impact on the ovary of PCOS caused by Letrozole.(12) Rasapachak is the greatest Deepana-Pachana medication; it improves Rasa Dhatwagni, which in turn creates high-quality ovules (Artava).(13) Granthiraja Choorna, who is referenced in the Granthibhoota Artavadushti, aids in the maintenance of the Agni through the Deepana, Pachana, and Vatakaphahara through the Katu Rasa, Ushna Virya, and Pittaprakopa through the Madhura Vipaka. Additionally, Granthiraja assisted PCOS patients in maintaining a healthy metabolism and weight.(14) Trimada and Lauha Bhasma can be found in Navayasa Churna. It enhances insulin metabolism, protects the liver, and lessens insulin resistance in the body.(15)

Conclusion

Ayurveda tries to bring harmony within the Doshas, which improves the functioning of body systems. It seeks to identify the precise reason of each disease and assesses the state of each Dosha in the body. This instance demonstrates the value of Ayurvedic principles in the treatment of polycystic ovarian syndrome. Additionally, it highlights the importance of Kuberaksha vati, Kalajaji powder, Rasapachak kwatha, Granthiraja powder, and Navayas Churna in lowering subjective as well as objective Polycystic Ovarian Disorder signs and symptoms. For further inferences, additional large-scale clinic trials may be useful.

Limitation of the study

This course of treatment was created with consideration for the patient's unique makeup, medical history, and investigational findings. This is only a case study, so additional research with an appropriate research design is required for the scientific validation.

Patient consent statement

The authors affirm that they have a patient's signed authorization form for the dissemination of clinical data that obscures the identities of specific people.

Conflict of interest: Nil

Source of support: None

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