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Case Report

Secondary Infertility Due to Polycystic Ovarian Syndrome (PCOS): A Case Report with Unani Therapeutic Approach

Rummana Kauser Shabbir Ahmed[1*], Shaheda Rahmani[2], Ansari Tahzeeb Afroz[3]

[1]*Assistant Professor, Dept. of Ilmul Qabalat wa Amraze Niswan, Mohammadia Tibbia College and Assayer Hospital, Malegaon, Maharashtra, India*
[2]*Reader, Dept. of Ilmul Atfal, Mohammadia Tibbia College and Assayer Hospital, Malegaon, Maharashtra, India*
[3]*Assistant Professor, Dept. of Ilmul Jarahat, Mohammadia Tibbia College and Assayer Hospital, Malegaon, Maharashtra, India*

KEYWORDS:

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Secondary Infertility
Unani Medicine
Safoof Darchini
Majoon Dabeed-ul-Ward
Habbe Hamal

ABSTRACT

Polycystic Ovarian Syndrome (PCOS) is a common endocrine disorder and a major cause of secondary infertility in women of reproductive age. Unani medicine offers a holistic approach by addressing the imbalance in temperament (*Mizāj*) and humors (*Akhlāṭ*). A 30-year-old female with a history of secondary infertility for four years, following one full-term delivery and a molar pregnancy, presented with oligomenorrhea and ultrasound-confirmed polycystic ovaries. She was treated with *Safoof Darchini* 5 g twice daily and *Majoon Dabeed-ul-Ward* 10 g at bedtime for two months, followed by *Habbe Hamal* 1 tablet thrice daily from Day 1 to Day 10 of each menstrual cycle. *Safoof Darchini* included *Darchini, Rewand Chini, Abhal, Mushkatramashee*, and *Asgandh*. The patient conceived in the second treatment cycle without any allopathic intervention, and her menstrual regularity improved. This case demonstrates the potential of Unani treatment as a safe, non-hormonal alternative in managing PCOS-related infertility.

INTRODUCTION

Polycystic Ovarian Syndrome (PCOS) is one of the most prevalent endocrine disorders among women of reproductive age, affecting approximately 8–13% of women globally, depending on the diagnostic criteria used. (Teede et al., 2018) It is characterized by a combination of oligo/anovulation, hyperandrogenism, and polycystic ovarian morphology.

Secondary infertility refers to the inability to conceive after one or more previous pregnancies, regardless of the outcome. (Zegers-Hochschild et al., 2009) In women with PCOS, secondary infertility is primarily due to chronic anovulation, hormonal imbalances, insulin resistance, and disrupted folliculogenesis. (Goodarzi et al., 2011) While conventional therapies like clomiphene citrate, letrozole, and metformin are commonly used, they may pose limitations due to side effects, cost, and poor response in some women.

In the Unani system of medicine, PCOS-like conditions are understood through the lens of derangement in temperament (*Mizāj*) and humoral imbalance (*Sū'-e-Mizāj Balgham*), often manifesting as *Sū'-e-Mizāj Barid Yābis* of the reproductive organs. (Khan, 2003; Majoosi, 2010; Sina, 2010) Unani therapeutics emphasize the normalization of menstrual cycles, toning of the uterus (*Taqwiyat-e-Raḥim*), and restoration of temperament (*Mizāj*) using herbal formulations.

In this report, we present a case of a woman with secondary infertility associated with PCOS who was successfully treated with Unani treatment. The regimen included *Safoof Darchini*, a polyherbal powder with known uterine tonic, ovulation-

* *Corresponding author. Department of Ilmul Qabalat wa Amraze Niswan, Mohammadia Tibbia College and Assayer Hospital, Malegaon, Maharashtra, India*
Email: rummanakauser22@gmail.com

promoting, and metabolic-regulating properties; *Majoon Dabeed-ul-Ward* as a hepatic tonic to correct humoral imbalance; and H*abbe Hamal* to support conception. The case highlights the potential of Unani medicine as a safe, cost-effective alternative in the management of PCOS-related infertility.

CASE PRESENTATION

A 30-year-old female, married for 12 years, presented with complaints of failure to conceive for the past four years. She had a history of regular unprotected intercourse during this period without conception. Her obstetric history revealed a full-term normal vaginal delivery of a male child 11 years ago, which occurred one year after marriage. Four years ago, she had a molar pregnancy for which dilatation and curettage (D&C) was performed. Since then, she had been experiencing secondary infertility.

The patient reported irregular menstrual cycles, with intervals ranging from 35 to 50 days, and occasional weight gain but no signs of hirsutism or acne. There was no history of thyroid disorders, diabetes mellitus, or any chronic illness. On physical examination, her vitals were stable, and BMI was mildly elevated (27 kg/m²). No clinical signs of virilization or galactorrhea were observed.

Patient ID	ARR/111/2020-2021/3545	Gender	FEMALE
Reffered By	Dr. RAGNI BHELSEKAR	Date	31-07-2023

USG ABDOMEN AND PELVIS

Liver	**Liver measures 11.9 cm.** Echotexture appears normal. No evidence of solid or cystic focal lesions. IHBR are not dilated. PV is normal. CBD is normal.
Gall Bladder	Gall Bladder is distended. No obvious e/o intraluminal calculi seen at present. GB wall thickness appears normal.
Spleen	Normal in morphology. Echotexture appears normal. No evidence of any focal lesions.
Pancreas	Normal in morphology and echotexture. No evidence of any focal lesions. No calcifications. MPD is not dilated.
Right Kidney	**Measurements : 9.5 x 3.7 cm** Normal in morphology. Echotexture appears normal. No evidence of any focal lesions. Corticomedullary differentiation is normally maintained. No hydronephrosis. No obvious renal calculi seen.
Left Kidney	**Measurements : 10.5 x 3.7 cm** Normal in morphology. Echotexture appears normal. No evidence of any focal lesions. Corticomedullary differentiation is normally maintained. No hydronephrosis. No obvious renal calculi seen.
UB	Distended well. The wall thickness is normal. No obvious calculi noted. UV junctions appear normal.
Uterus	**Measurements : 6.6 x 2.8 x 4.1 cm** Normal in morphology. Echotexture appears normal. No e/o focal lesion / fibroid. Endometrium is central and shows no lesions. **Endometrium measures 4.9 mm.**
Both Ovaries	**Right ovary measures: 3.8x2.3x2.4 cm, approx vol: 10.9 cc.** **Left ovary measures: 3.2x2.2x2.8 cm, approx vol: 10.7 cc.** **Both ovaries are bulky and shows multiple tiny peripherally arranged follicles with central stroma.** No obvious e/o focal lesion noted at present.
Others	No free fluid in the abdomen or pelvis. No obvious lymphadenopathy. Aorta and IVC are normal. Visualised bowel loops appears normal in calliber and peristalsis.
Impression	• **Both ovaries are bulky and shows morphological changes of polycystic ovaries.** • **Rest USG abdomen and pelvis appears normal.**

Dr. Ansari Sana mohammad sakir
M.B.B.S, D.M.R.E (Reg. No. 2015041788)

Fig. 1. Pre-treatment ultrasound report of the patient.

Baseline investigations revealed normal CBC, Urine report and thyroid function. Pelvic ultrasonography showed **Bilateral polycystic ovarian morphology** with multiple small peripheral follicles and increased ovarian volume, consistent with a diagnosis of PCOS. Routine urine examination was within normal limits. No male factor infertility was reported as the husband had fathered a child previously, and semen analysis was normal.

Based on clinical history, sonographic findings, and exclusion of other causes, a diagnosis of secondary infertility due to PCOS was made (Fig. 1).

This case study was conducted at Amraze Niswan OPD at Assayer Hospital, Mansoora, Malegaon. A 30-year-old female patient diagnosed with secondary infertility due to polycystic ovarian syndrome (PCOS) was evaluated and managed with Unani treatment. Clinical history, physical examination, and relevant investigations were used to confirm the diagnosis. The patient had regular menstrual cycles prior to her molar pregnancy and developed oligomenorrhea and anovulation thereafter.

The diagnosis of PCOS was based on **Rotterdam criteria**, with evidence of:

- Oligomenorrhea/amenorrhea
- Polycystic ovarian morphology on ultrasound
- Signs of hyperandrogenism and
- Exclusion of thyroid dysfunction and hyperprolactinemia

After obtaining verbal informed consent, the patient was started on the following Unani treatment protocol:

THERAPEUTIC INTERVENTION

***Safoof Darchini*:** 5 grams twice daily after meals with lukewarm water (Ingredients: *Darchini, Rewand Chini, Abhal, Mushkatramashee, Asgandh in equal quantity*)

Majoon Dabeed-ul-Ward: 10 grams at bedtime. This combination was continued for 2 months.

After 2 months of this phase:

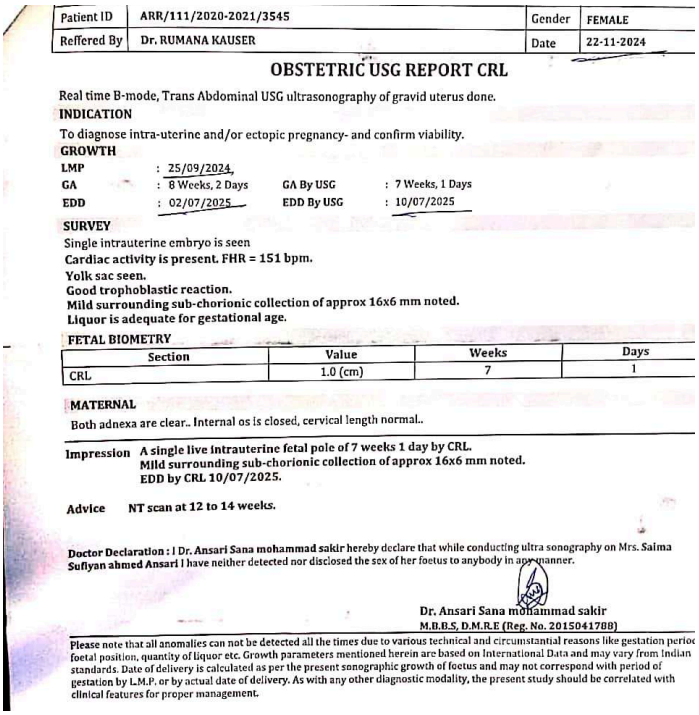
***Habbe Hamal**:* 1 tablet thrice daily from Day 1 to Day 10 of the menstrual cycle was introduced for ovulation support and uterine strengthening.

The patient was also advised regarding timed intercourse during the fertile window (10th to 19th day of the cycle). Compliance and menstrual response were regularly monitored. The primary objective of this intervention was **successful conception**. Pregnancy was confirmed in the second treatment cycle through a positive urinary β-hCG test and transabdominal ultrasonography, demonstrating a viable intrauterine gestation (Fig. 2).

DISCUSSION

Polycystic Ovarian Syndrome (PCOS) is a common endocrine-metabolic disorder contributing to a high proportion of anovulatory infertility cases. Secondary infertility, as seen in this patient, often arises after a history of normal conception, suggesting an acquired or progressive dysfunction of ovulation. The pathophysiology includes disrupted folliculogenesis, insulin resistance, hyperandrogenism, and failure of dominant follicle selection. (Fauser et al., 2012)

From the Unani perspective, such cases are often attributed to *Sū'-e-Mizāj* (deranged temperament), especially *Barid Yabis Mizāj* of the reproductive system and *ghalba balgham* (viscous, sluggish blood) impairing normal ovarian and uterine functions. Management, therefore, focuses on correcting the temperament, improving uterine tonicity (*Taqwiyat-e-Raḥim*), and facilitating ovulation (*Tabveez*). (Khan, 2003; Majoosi, 2010; Sina, 2010).



Patient ID	ARR/111/2020-2021/3545	Gender	FEMALE
Reffered By	Dr. RUMANA KAUSER	Date	22-11-2024

OBSTETRIC USG REPORT CRL

Real time B-mode, Trans Abdominal USG ultrasonography of gravid uterus done.

INDICATION

To diagnose intra-uterine and/or ectopic pregnancy- and confirm viability.

GROWTH

LMP : 25/09/2024,
GA : 8 Weeks, 2 Days GA By USG : 7 Weeks, 1 Days
EDD : 02/07/2025 EDD By USG : 10/07/2025

SURVEY

Single intrauterine embryo is seen
Cardiac activity is present. FHR = 151 bpm.
Yolk sac seen.
Good trophoblastic reaction.
Mild surrounding sub-chorionic collection of approx 16x6 mm noted.
Liquor is adequate for gestational age.

FETAL BIOMETRY

Section	Value	Weeks	Days
CRL	1.0 (cm)	7	1

MATERNAL

Both adnexa are clear.. Internal os is closed, cervical length normal..

Impression A single live intrauterine fetal pole of 7 weeks 1 day by CRL.
Mild surrounding sub-chorionic collection of approx 16x6 mm noted.
EDD by CRL 10/07/2025.

Advice NT scan at 12 to 14 weeks.

Doctor Declaration : I Dr. Ansari Sana mohammad sakir hereby declare that while conducting ultra sonography on Mrs. Saima Sufiyan ahmed Ansari I have neither detected nor disclosed the sex of her foetus to anybody in any manner.

Dr. Ansari Sana mohammad sakir
M.B.B.S, D.M.R.E (Reg. No. 2015041788)

Please note that all anomalies can not be detected all the times due to various technical and circumstantial reasons like gestation period foetal position, quantity of liquor etc. Growth parameters mentioned herein are based on International Data and may vary from Indian standards. Date of delivery is calculated as per the present sonographic growth of foetus and may not correspond with period of gestation by L.M.P. or by actual date of delivery. As with any other diagnostic modality, the present study should be correlated with clinical features for proper management.

Fig. 2. Post-treatment ultrasound report of the patient.

In the present case, the patient responded favorably to a Unani regimen centered on *Safoof Darchini*, a polyherbal formulation composed of five single drugs — each selected for its reproductive, metabolic, and temperament-correcting properties.

Darchini (*Cinnamomum zeylanicum*) Traditionally regarded as a *Muqawwi Raḥim* (uterine tonic) and *Muṣaffi Dam* (blood purifier), *Darchini* is known to enhance uterine circulation and metabolism. Clinical trials confirm that cinnamon supplementation improves insulin sensitivity and menstrual cyclicity in PCOS patients. (Kort, Lobo, & Lisbona, 2014) It also demonstrates anti-inflammatory and antioxidant properties. (Ranasinghe et al., 2013)

Rewand Chini (*Rheum emodi*) In Unani medicine, *Rewand Chini* acts as a *Mufatteḥ* (deobstruent), aiding in the removal of congestive and viscous humors from the pelvic region. It contains anthraquinones and tannins that have purgative, antioxidant, and phytoestrogenic effects, which may promote ovulation and hormonal balance. (Arvind, Kumawat, & Singh, 2017)

Abhal (*Juniperus communis*) Used as a *Mudirr-e-Tams* (emmenagogue) and diuretic, *Abhal* supports uterine cleansing and hormone regulation. Its flavonoids exhibit mild estrogenic action and uterine stimulatory properties. Preclinical studies have shown that it improves uterine tone and pelvic circulation. (Kar, Choudhary, & Bandyopadhyay, 2009)

Mushkatramashee (*Mentha pulegium*) is traditionally used in Unani medicine as a *Muqawwi Raḥim, Mudirr-e-Tams*, and *Muhallil*. It supports menstruation, reduces pelvic congestion, and improves uterine tone. Phytochemicals like pulegone and menthone contribute to its uterotonic, carminative, and mildly estrogenic properties. (Ghasemi & Heydari, 2015; Ali & Blunden, 2003) When used judiciously in compound formulations like Safoof Darchini, it promotes follicular maturation and prepares the uterus for conception.

Asgandh (*Withania somnifera*) *Asgandh* is a potent adaptogen and endocrine modulator, widely used in both Unani and Ayurvedic systems. It balances the hypothalamic-pituitary-ovarian axis, reduces stress-induced cortisol levels, and enhances ovulatory function. Studies confirm its role in improving reproductive hormone profiles in subfertile women. (Singh et al., 2011; erma, Vyas, & Gupta, 2021)

These five components work synergistically to: promote ovulation, normalize temperament (*Mizāj*), reduce insulin resistance, strengthen uterine function and support hormonal regulation

The addition of *Majoon Dabeed-ul-Ward*, a classical hepatic and humoral corrector, complemented the therapy by improving metabolism and detoxification, critical for hormonal regulation and humoral balance.

After two months of this therapy, the patient was prescribed *Habbe Hamal* from Day 1 to Day 10 of her menstrual cycle. This aligns with the follicular phase, and the drug was used specifically to stimulate ovulation and prepare the uterus for conception. Timely guidance on intercourse during the fertile window further increased the probability of conception.

This case illustrates how a tailored Unani regimen, based on humoral correction and uterine tonics, when combined with practical reproductive guidance, can lead to successful conception in women with PCOS-related secondary infertility, without the need for hormonal or assisted reproductive interventions.

CONCLUSION

This case report documents the successful management of **secondary infertility due to PCOS** with Unani treatment. The therapeutic regimen—comprising *Safoof Darchini*, *Majoon Dabeed-ul-Ward*, and *Habbe Hamal*—along with lifestyle modification and counseling on timed intercourse, resulted in **successful conception** in the second treatment cycle. The achievement of pregnancy, without the use of modern pharmacological agents, highlights the potential of Unani medicine in addressing infertility associated with PCOS. This outcome underscores the need for further clinical studies on larger populations to validate the safety and efficacy of these interventions

List of Abbreviations

PCOS:	Polycystic Ovarian Syndrome
TSH:	Thyroid Stimulating Hormone
USG:	Ultrasonography
D&C:	Dilatation and Curettage
LMP:	Last Menstrual Period
BMI:	Body Mass Index
β-hCG:	Human Chorionic Gonadotropin Hormone

Consent of Publication

Taken from the patient.

Funding

None.

Conflict of Interest

The author gratefully acknowledges the support and encouragement provided by family and the institute, special thanks to the patient for consenting to share her case for academic and research purposes.

Ethics Statement

This study, which involved human subjects, adhered to all pertinent national regulations.

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