AYUSHDHARA
ISSN: 2393-9583 (P)/ 2393-9591 (O)
An International Journal of Research in AYUSH and Allied Systems

Case Study

SUCCESSFUL MANAGEMENT OF INFERTILITY DUE TO PCOS USING AN AYURVEDIC REGIME

Sonia Sharma[1]*, Bihani Sanjyal[1], B.Pushpalatha[2], K.Bharathi[3]
*[1]PG Scholar, [2]Professor, [3]Professor, HOD, Department of Prasuti Tantra Evam Stri Roga, National Institute of Ayurveda, DU, Jaipur, Rajasthan, India.

Article info
Article History:
Received: 01-09-2023
Accepted: 26-10-2023
Accepted: 05-11-2023

KEYWORDS:
Polycystic Ovary Syndrome, Infertility, Ayurvedic interventions, *Yoga Basti,* Lifestyle modifications.

ABSTRACT

Polycystic Ovary Syndrome (PCOS) is a common endocrine disorder that often leads to infertility due to irregular menstrual cycles and hormonal imbalances. This case report presents the successful management of infertility associated with PCOS using a comprehensive Ayurvedic regimen. **Case Presentation:** The case involves a 24 years old woman diagnosed with PCOS who had been struggling with infertility for 5 years. **Intervention:** The Ayurvedic treatment plan included dietary modifications, standard Ayurvedic treatment protocol along with lifestyle changes and stress management techniques. **Outcomes:** After one cycle of *Yoga Basti*, patient get urine pregnancy test positive in next cycle. **Conclusion:** This case highlights the potential efficacy of Ayurvedic interventions in managing infertility related to PCOS and emphasizes the importance of a holistic approach in healthcare.

INTRODUCTION

Infertility is now becoming alarming situation all over the world. It is one of the major causes of global burden of morbidity and hospital visits along with its huge psychosocial impact. Among the infertile women, about 15-20% of infertility cases are due to anovulation caused by PCOS. According to WHO recent report, PCOs is significant public health problem and one of the commonest hormonal disturbances affecting women of reproductive age. About 8-13% of women of reproductive age are affected and up to 70% cases are undiagnosed. It also states that biological and psychological effects of PCOS, particularly those related to obesity, body image and infertility, can lead to mental health challenges and social stigma[1]. Till date, exact cause of PCOS remains unknown. Some well-known factors that influence are lifestyle changes, sedentary life, diet and stress[2].

Access this article online
Quick Response Code
https://doi.org/10.47070/ayushdhara.v10i5.1350

Numerous women worldwide of reproductive age are affected by the diverse endocrine condition known as polycystic ovary syndrome (PCOS). This syndrome is frequently linked to enlarged and dysfunctional ovaries, high levels of androgen, insulin resistance, etc.[3] One in ten women are thought to experience PCOS before menopause and struggle with its implications. Exact etiology is still unknown. A recent research article "Polycystic Ovary Syndrome a comprehensive review of pathogenesis, management, and drug repurposing" concluded all responsible factors behind PCOS which includes epigenetics, environmental toxicants, stress, diet as external factors, insulin resistance, hyperandrogenism, inflammation, oxidative stress, and obesity as internal factors. Lifestyle modifications and complementary and alternative medicines are preferred first-line therapy in many cases[4].

Depending upon population study criteria, in India only study showed prevalence rates of PCOS is 3.7% to 22.5%. According to numerous studies, its pathophysiology includes anomalies in leptin-adiponectin, oxidative stress, and autoimmune as well as gene connection. The diagnosis is based on the clinical characteristics, hormonal evaluation, and ultrasound. Menstrual abnormalities, androgen access indicators, obesity, and occasionally hirsutism are among the main symptoms. For the treatment of PCOS,

modern science uses both medical and surgical treatments. Oral contraceptives, progestins, anti-androgens, and ovulation inducers continue to be routine treatments in allopathic medicine.

Ayurveda, an ancient system of medicine, offers a holistic approach that aims to address the root causes of health issues, including infertility.

This case report illustrates the successful management of infertility in a PCOS patient using an Ayurvedic treatment plan.

Case Presentation

A 24-year-old Hindu married housewife, residing in Amer, Jaipur, Rajasthan, visited the Prasuti Tantra and Stri-Roga OPD of the National Institute of Ayurveda, Jaipur, on December 23, 2022. She came with a complaint of infertility despite having regular unprotected sexual intercourse for the past 5 years. Additionally, the patient reported experiencing irregular menstrual cycles for the past year and gradual weight gain.

The patient's menstrual history revealed irregular cycles lasting for 3 days, with intervals between two consecutive cycles ranging from 30 to 45 days. Last day of menstrual period was 16 December 2022 and day of cycle was eighth. The menstrual flow was moderate, without pain, and included clots, with the menstrual blood appearing blackish in color.

Obstetrics History

G1P0A1L0

The patient has a history of one induced abortion at one and half months of gestational age. This abortion was done by using MTP (Medical Termination of Pregnancy) pills in 2017 due to the patient's unwillingness to continue the pregnancy.

Past Medical History

The couple took allopathy treatment for infertility for a continuous period of 3 years but did not achieve satisfactory relief.

Past Surgical History

Diagnostic laparoscopy was performed on June 12, 2020.

Family History

There is no relevant family history.

Personal History

The patient has a regular bowel and bladder habit, good appetite, and experiences disturbed sleep.

Clinical Findings

General Examination

- The patient's general condition appears fair, with normal vital signs, including a blood pressure of 110/70mmHg and a pulse rate of 78 beats per minute.
- The patient is overweight, with a BMI of 28.7, calculated based on her weight of 69kg and height of 155cm.
- Pallor and edema are not observed in the patient.
- The patient exhibits mild hirsutism and acne on the face, chin, and neck.

Pelvic Examination

On Inspection

Vulva examination reveals a healthy condition.

Per speculum Examination

- Speculum examination shows a healthy cervix without any abnormal discharge, and the vaginal wall appears healthy and pinkish.

Per vaginal Examination

- Per Vaginal examination indicates an anteverted, anteflexed uterus with a normal shape and size. The cervix is mobile, firm, and smooth, with the absence of cervical motion tenderness.

Timeline

Date	Events	Treatment/Remarks
22/8/2020	C/O anxious for issue for 3 years	Treatment and investigation initiated as per modern medicinal protocol
6/12/2020	Diagnostic Laparoscopy was done	Laparoscopy findings- Uterus normal shape and size Both fallopian tubes normal B/L spillage seen Normal study Treatment continue as per modern medicinal protocol for 1 year
31/08/2021	USG of whole abdomen	USG Findings- Multiple small cysts in B/L ovaries predominantly arranged at periphery with thickened appearing ovarian stroma.
17/11/2021	C/O Absence of menses for 1.5 months	Wait for menses

	Nausea, vomiting Urine pregnancy test was done, found negative	
26/11/2021	She got her menses	Stop treatment for 1 year due to unsatisfactory relief
23/12/2022	She came to NIA OPD with C/O anxious for issue for 5 years With associated c/o irregular menses and gradual weight gain LMP-16/12/22	Ayurvedic treatment and therapy started

Diagnosis

Provisional diagnosis: *Vandhytwaa* with *Artavakshaya* (oligomenorrhea), PCOS.

Differential diagnosis: *Artavakshaya*, *Vatik artavadushti*, *Ksheena artavadushti*

Diagnostic Assessment

1. Serum FSH, LH and prolactin was done and report was normal.
   - FSH-4.99mIU/ml
   - LH-4.2 mIU/ml
   - Prolactin -16.46ng/ml
   - TSH -3.40 uIU/ml
2. Diagnostic laparoscopy was performed on June 12, 2020, with the following findings:
   - Uterus normal shape and size,
   - Both fallopian tube normal,
   - Bilateral spillage seen.
   - Normal study
3. A whole abdomen ultrasound (USG) was conducted on August 31, 2021, with the following findings:
   - Multiple small cysts in B/L ovaries predominantly arranged at periphery with thickened appearing ovarian stroma.
   - Normal liver, gall bladder, pancreas, spleen, b/l kidneys, urinary bladder and uterus.
3. The semen analysis of the husband revealed results within normal limits.

Final diagnosis: *Vandhyatwa* with *Artavadushti*/ Secondary infertility with PCOS

Treatment Principles

Dietary Modifications: The patient's diet was customized based on her Ayurvedic constitution and imbalances. *Rajaswala paricharya* was strictly advised in every cycle for 3 days. Patient was also counselled about the hazards of fast food and junk food.

Medical management: *Shamana* and *Shodhana*

Yoga basti as *Shodhana* was planned as it is called *Ardhachikitsa* i.e., half treatment according to Ayurveda text.

Lifestyle Changes: Stress management techniques, including *Yoga* and meditation, were recommended to reduce stress levels and promote hormonal balance. The patient was encouraged to adopt a regular exercise routine.

Therapeutic Intervention

Date	Observation/ Remarks	Treatment
23/12/2022	C/O anxious for issue for 5 years with associated irregular menses and gradual weight gain LMP-16/12/22	1.*Bala beeja Churna* - 3gm BD with milk
		2. *Phala Ghrut* - 2 TSF BD with milk
		3. Cap. Metostab - 1 BD with water
		4. *Yoga Basti* • *Anuvasana* with *Dashmoola taila* • *Aasthapana* with *Dashmoola kwath*

Schedule of *Yoga basti*

23-24 Dec. 2022 - *Anuvasana basti*
25 Dec. 2022 Morning –*Aasthapana basti,* Evening – *Anuvasana basti*
26 Dec. 2022 Morning –*Aasthapana basti,* Evening – *Anuvasana basti*
27 Dec. 2022 Morning –*Aasthapana basti,* Evening – *Anuvasana basti*

Follow up and Outcomes

Following the *Yoga Basti* for one cycle (8 *Basti*) and oral treatment, patient did her urine pregnancy test on 24/01/2023 and was found positive. USG was done on 05/02/2023 finding suggestive of single live intrauterine pregnancy of 6 weeks 3 days gestational age, cardiac activity present, 142 bpm. Subsequent prenatal care continued to incorporate Ayurvedic principles to support the patient's well-being during pregnancy.

No any adverse effect of the treatment was noticed.

DISCUSSION

Even though there is no direct reference of PCOS in Ayurveda texts, it can be understood through *Dosha, Dushya, Prakriti* and treated accordingly. Ayurveda treatment is giving hope for the successful management of PCOS. To treat any disease in Ayurveda, *Samprapti* is most important aspect to identify. Then treatment part is focused in *Samprapti vighatan*.

Probable *Samprapti* of PCOS- *Santarpanajanya* PCOS

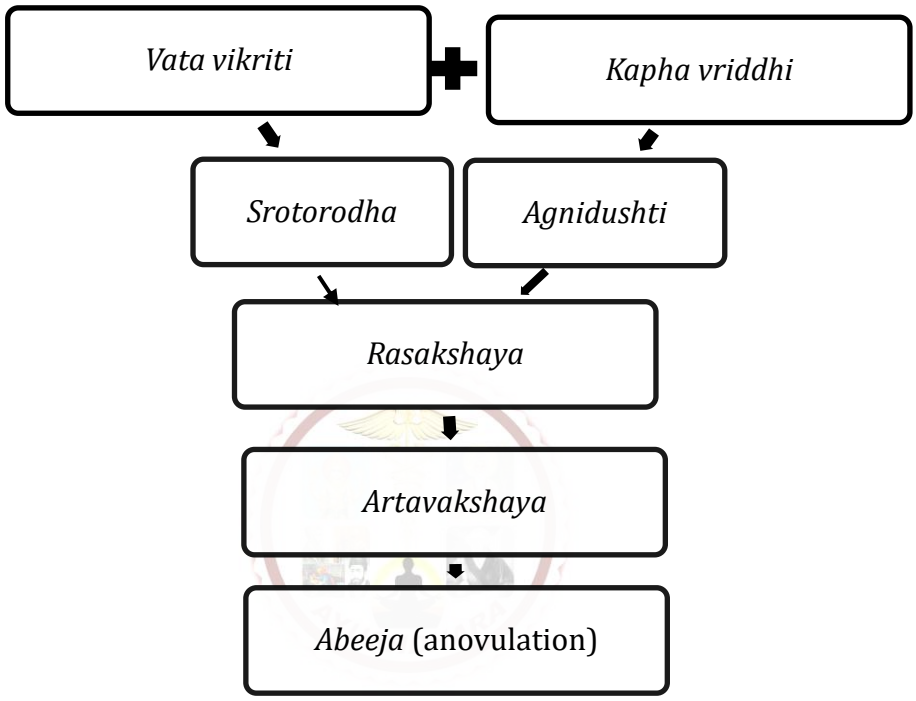


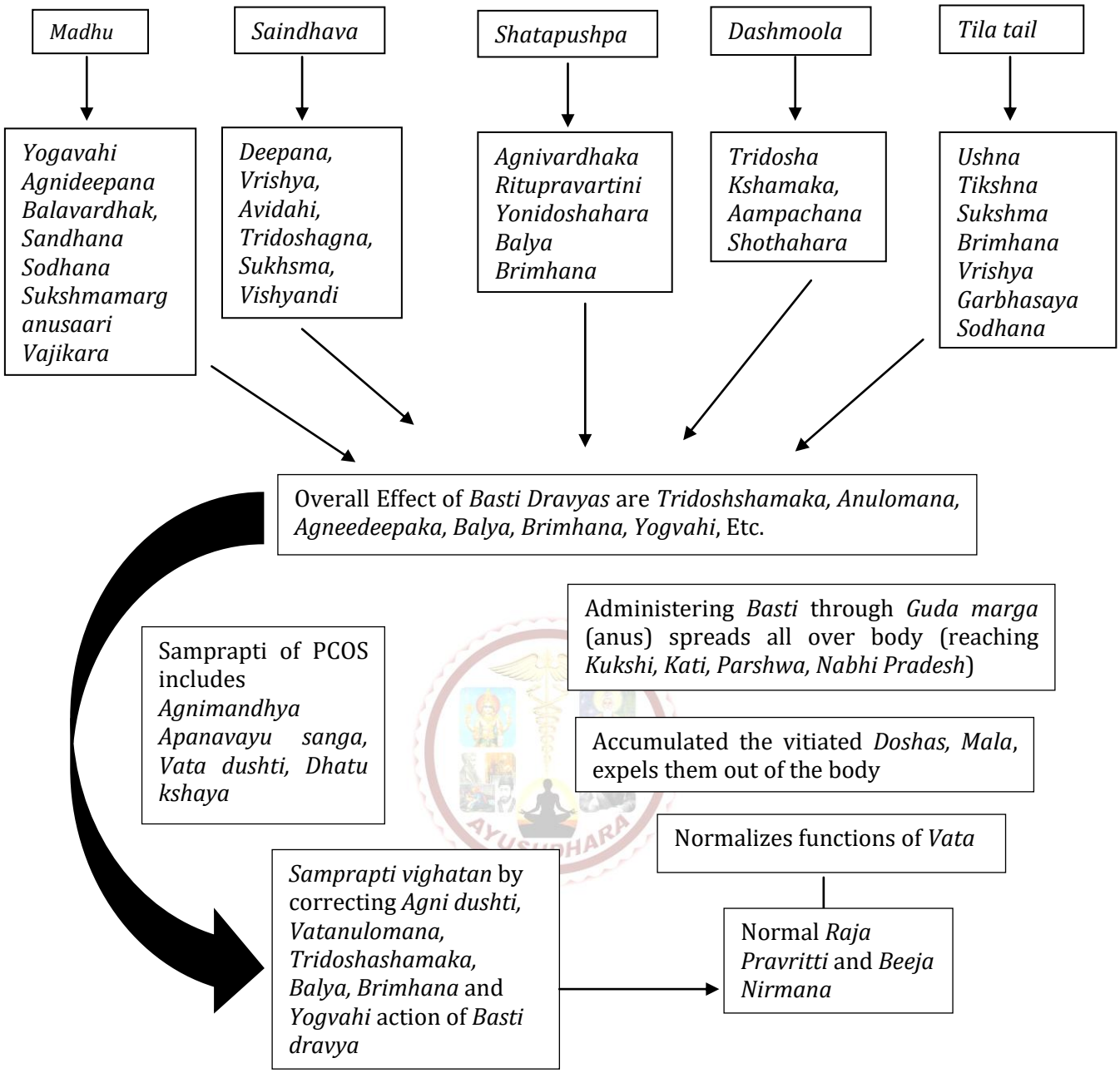
Fig: *Samprapti* of PCOD

According to *Samprapti*, there is vitiation of *Tridosha* especially *Vata dosha*, which causes *Agnidushti* as a result *Aama* formation occurs. *Aama* directly influence *Rasa dhatu* formation which cause improper functioning of *Artavavha srotos* causing *Kha vaigunya, Sanga,* or *Avarana* as a result anovulation and infertility occurs due to PCOS.

The treatment given to the patient directly and indirectly works on *Agni* and hence corrects the condition. Probable mode of action of *Basti* is illustrated below:

Basti treatment is considered half treatment as per Acharya *charaka.*[5] *Basti dravya* normalizes *Apana Vata* leading to normal *Raja pravritti* and normal *Beeja nirmana*[6]. *Basti* in PCOS patients regulates the hypothalamic-pituitary-ovary axis, resulting in normalization of the ovarian cycle as well as the menstrual cycle. *Apana Vata* function could be attributed to parasympathetic activity. *Basti* is introduced through the rectum and may stimulate the parasympathetic nerve supply, which aids in the development of follicles and the release of ovum from the ovary[7].

Mechanism of action of *Basti* and *Basti Dravyas* [8-13]



Mechanism of Action of Drugs

Bala beeja churna - *Bala* have *Madhura rasa* with *guru, Snigdha guna, Sheeta, Veerya* perform action of *Vata pitta shamana* and work as *Balya, Vrishya, Oja vardhaka*. *Bala* is best mentioned for *Vataja* disorders[14]. PCOS is *Vata* dominant disorder which is corrected by treating vitiated *Vata*.

Phalaghrita

Phalaghrita is described in Astanga Hridaya as *Paustika, Medhya, Punsavanam, Pushpam, Yoni pradoshaja vikara nasak*. Various researches are done to establish its role in female infertility and results are promising[15,16]. Research on topic 'Effect of *Phala Ghrita* on Development of Ovarian Follicle Followed by *Beejotsarga* (ovulation) in Patients of Infertility Due to Ovarian Factor in Comparison with Clomiphene Citrate' is ongoing to establish the role of *Phalaghrita* in follicle development. [17]

Cap Metostab

It is well known proprietary medicine most commonly used in hormonal imbalances in women. It contains *Kanchnar, Haritaki, Vibhitaka, Aamlaki, Varuna, Guggulu, Brahmi, Gokshura, Shigru patra, Shilajit, Shushka Kaseesak, Gandhaka, Khatika*.

CONCLUSION

This case report provides a compelling example of the potential efficacy of Ayurveda interventions in managing infertility associated with PCOS. After administering single cycle of *Basti* only, conception achieved. The holistic approach of

Ayurveda, addressing diet, herbs, lifestyle, and stress management, appears to contribute to significant improvements in menstrual regularity, hormonal balance, and successful pregnancy. This case underscores the importance of personalized and comprehensive treatment approaches in addressing complex health conditions such as PCOS-related infertility. Further research and documentation of such cases could contribute to the growing body of evidence supporting integrative healthcare strategies for reproductive health.

REFERENCES

1. World Health Organization. "Polycystic Ovary Syndrome (PCOS)." WHO, www.who.int/news-room/fact-sheets/detail/polycystic-ovary-syndrome. Access done on 13-09-1013
2. Shaw W. Howkins J. & Hudson C. N. Shaw's textbook of operative gynaecology (18th ed.). Churchill Livingstone; Distributed in the U.S. of America by Longman. pp.320
3. Witchel S.F., E Oberfield S., Peña A.S. Polycystic Ovary Syndrome: Pathophysiology, Presentation, and Treatment With Emphasis on Adolescent Girls. J. Endocr. Soc. 2019; 3: 1545–1573. doi: 10.1210/js.2019-00078.
4. Sadeghi HM, Adeli I, Calina D, Docea AO, Mousavi T, Daniali M, Nikfar S, Tsatsakis A, Abdollahi M. Polycystic Ovary Syndrome: A Comprehensive Review of Pathogenesis, Management, and Drug Repurposing. Int J Mol Sci. 2022 Jan 6; 23(2): 583. doi: 10.3390/ijms23020583. PMID: 35054768; PMCID: PMC8775814.
5. Shastri K., Chaturvedi G., editors. Charaka samhita of Agnivesha, Siddhi sthana; Kalpanasiddhi adhyaya: chapter 1, verse 39-40. Chowkhambha Bharati Academy; Varanasi: Reprint 2013. p. 971
6. Ibidem. Charak Samhita, Siddhi Sthana. 1/44-45
7. Bawane, Vishnu & Deshmukh, Manasi. (2022). Role of Basti in the Management of PCOD (Artavavyapad). Journal of Ayurvedic Herbal and Integrative Medicine. 2. 10.29121/ jahim.v2.i2. 2022.24.
8. Shastri A., editor. Ayurveda Tatvasandipika of Sushruta Samhita, sutra sthana, Dravyasangrhania: chapter 45, verse 132, Chowkhambha Publications; Varanasi: Reprint 2021. p.232
9. Shastri K., Chaturvedi G., editors. Charaka samhita of Agnivesha, Sutra sthana; Annapaanavidhi adhyaya: chapter 27, verse 300. Chowkhambha Bharati Academy; Varanasi: Reprint 2011. p. 561.
10. Vriddha Jivaka. Kashyapa Samhita Vidyotini Hindi Commentary. Kalpasthana. Shatapushpasatavari kalpa adhayaya. 7th ed. Varanasi: Chowkhamba Sanskrit Pratisthana; 1994. Verse 5-6, pp-280
11. Shastri A., editor. Ayurveda tatvasandipika of Sushruta Samhita, Sutra sthana, Dravyasangrhania: chapter 38, verse 72,81, Chowkhambha Publications; Varanasi: Reprint 2021.p.189
12. Shastri A., editor. Ayurveda Tatvasandipika of Sushruta Samhita, sutra sthana, Dravadravyavidhi: chapter 45, verse 112, Chowkhambha Publications; Varanasi: Reprint 2021.p.229-230
13. Shastri K., Chaturvedi G., editors. Charaka samhita of Agnivesha, Siddhi sthana; Kalpanasiddhi adhyaya: chapter 1, verse 40-41. Chowkhambha Bharati Academy; Varanasi: Reprint 2013. p. 971-972
14. Dr.Nidhi Bajpai. (2020) Baladi churna in management of anovulatory factor of infertility (Avaranatmak apana vata dushti): a case report. Indian Journal of Research, 9(7), 102-104. DOI : 10.36106
15. Dr.S.P. Otta, Dr, R.N. Tripaty. (2002). Clinical trial of Phalaghrita on female infertility. Ancient Science of life, 12(2), 56-63.
16. Shalini Biala, Tiwari R. Efficacy of Phala-Ghrita On Female Infertility. Ayush [Internet]. 2015 Dec.8 2(2). Available from: https://ayushdhara.in/index.php/ayushdhara/ article/ view/47
17. Yende, M., Pradnya, D., Preeti, D., Sheetal, T., & Kalpana, T. (2022). Effect of phala ghrita on development of ovarian follicle followed by beejotsarga (ovulation) in patients of infertility due to ovarian factor in comparison with clomiphene citrate. International Journal of Health Sciences, 6(S2),956–967. https://doi.org/10.53730/ijhs.v6nS2. 5060

Cite this article as:
Sonia Sharma, Bihani Sanjyal, B.Pushpalatha, K.Bharathi. Successful Management of Infertility due to PCOS Using an Ayurvedic Regimen. AYUSHDHARA, 2023;10(5):178-183.
https://doi.org/10.47070/ayushdhara.v10i5.1350
Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr. Sonia Sharma
PG Scholar
Department of Prasuti Tantra Evam Stri Roga,
National Institute of Ayurveda,
DU, Jaipur, Rajasthan.
Email: sonia.sharmasog@gmail.com