# Pharmacolling Resemble

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Case Study

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## AYURVEDIC MANAGEMENT OF POLYCYSTIC OVARIAN SYNDROME (PCOS): A SINGLE CASE STUDY

Dr. Rujuta Omprakash Dube<sup>1\*</sup>, Dr. Anil Kumar Yadav<sup>2</sup> and Dr. Sharadkumar R. Maurya<sup>3</sup>

<sup>1</sup>Professor & HOD, Department of Stree Roga & Prasutitantra, SNKD Trust's Nallasopara Ayurved Medical College, Taluka - Vasai, Dist. Palghar-401209, Maharashtra, India.

<sup>2</sup>Assistant Professor, Department of Stree Roga & Prasutitantra, SNKD Trust's Nallasopara Ayurved Medical College, Taluka - Vasai, Dist. Palghar-401209, Maharashtra, India.

<sup>3</sup>Assistant Professor, Department of Kriya Sharir, SNKD Trust's Nallasopara Ayurved Medical College, Taluka - Vasai, Dist. Palghar-401209, Maharashtra, India.

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\*Corresponding Author Dr. Rujuta Omprakash Dube

Professor & HOD,
Department of Stree Roga
& Prasutitantra, SNKD
Trust's NallasoparaAyurved
Medical College, Taluka Vasai, Dist. Palghar-401209,
Maharashtra, India.

#### **ABSTRACT**

POLYCYSTIC OVARIAN SYNDROME (PCOS) is common problems among the reproductive age (15-40 year) of women. PCOS become lifestyle disorders now a day's because of sedentary habits, fast food eating, faulty life style follow. PCOS – A metabolic malady the mother of all Lifestyle disorders affecting mainly the women of childbearing age and teenage girls. In Ayurveda PCOS is not direct term coined but clinically it is resemble with *Yonivyapad*, *Artavavaha strotas dushti*, *Santaropnnth vyadhi*, *Jataharini* etc. According to *Ayurveda*, PCOS is a disorder which involves the three *Doshas*, *Dhatus* like *Rasa*, *Rakta* and *Medas*. Present case of 20 year old female patient came with symptoms of irregular delayed menstruation, acne on face, darkening of skin. USG report shows Bilateral Polycystic Ovarian Syndrome (PCOS) with Right ovary volume 47×26 mm and Left ovary volume 42×27 mm, both ovaries are mildly bulky. Undergo

for *Ayurveda* Treatment for 2 months. Result analysis was done on clinical symptoms relief and USG report. This case aim to study PCOS according to *Ayurveda* and Study the safe and effective *Ayurveda* treatment for PCOS.

**KEYWORDS:** Life style disorders, Polycystic Ovarian Syndrome (PCOS), *Yonivyapad, Artavavaha strotas dushti, Ayurveda*.

#### INTRODUCTION

Polycystic ovarian Syndrome (PCOS), an emerging lifestyle disorder involving multiple systems affecting 5- 10% of the women exhibiting the full blown syndrome of hyperandrogenism, chronic anovulation, and Polycystic ovaries. [1] PCOS is a psychosomatic disorder of uncertain etiology characterized by Obesity, Anovulation associated with Primary of Secondary infertility, hirsutism, abnormal menstrual pattern, increased incidence of pregnancy loss, and pregnancy related complications. Polycystic ovarian syndrome is a most prevalent endocrinopathy. Incidence of this disease is increasing nowadays because of sedentary lifestyles, pollution, and excessive intake of junk food. PCOS is affecting 4 to 6 % of unselected women of reproductive age. [2] In Ayurveda, there is no direct reference about PCOS but when we go through the literature there are many references which are nearer to sign and symptom on PCOS. Clinical features of PCOS are nearer to Pushpaghni Jataharini. [3] According to the reproductive point of view, the pathogenesis of PCOS is similar to condition of Nashtartva. [4] Vitiation of Vatakapha († estrogenic state) leads to Avarana of artava (inhibition of FSH) leads to Nashtartva (no proper growth of follicles and chronic anovulation). According to Ayurvedic view PCOS is Santarpanjanya vyadhi and it required Kaphanashak, Medonashak chikitsa primarily.

The treatment of PCOS is not totally satisfactory is spite of advanced modern technology and medicine. Here in this case study of PCOS the following *Ayurvedic* management proved successful.

#### AIMS AND OBJECTIVES

#### Aim

To evaluate the *Ayurvedic* treatment modalities in the management of Polycystic Ovarian Syndrome (PCOS).

#### **Objectives**

- 1. To Study the Ayurvedic Management of Polycystic Ovarian Syndrome (PCOS).
- 2. To Study Polycystic Ovarian Syndrome (PCOS) through *Ayurvedic* point of view.
- 3. To provide safe, cost effective treatment.

since 1 year

#### MATERIALS AND METHODS

- 1. Literary information about the study has compiled from *Ayurvedic* texts.
- 2. Various publications, textbooks, research papers have considered to collect the literary material.
- 3. For all the procedures various *Ayurvedic* text are referred.

**Centre of study:** SNKD Trust's Nallasopara Ayurved Medical College & Hospital. Department of *Stree Roga* and *Prasutitantra*. Simple random single case study.

#### **CASE REPORT**

A 20 Y/F patient come at OPD of *StreeRoga* and *Prasutitantra*, SNKD Trust's Nallasopara Ayurved Medical College & Hospital, Taluka - Vasai, Dist. Palghar, and Maharashtra on 03/06/21.

#### Chief complain

- 1) Irregular infrequent Menses
- 2) Blackish discoloration on neck & axilla
- 3) Pimples on Face (Acne)
- 4) Abdominal Pain
- 5) Psychological S/S- Stress, Sleep Disturbance

**NO H/O** – HTN, DM, Asthma, and TB.

#### **History of present illness**

The patient was normal 1 year back. Since then patient have been suffering from above complaints. For this patient took treatment from different Doctors. Then she comes to our hospital-SNKD Trust's Nallasopara Ayurved Medical College & Hospital, Taluka - Vasai, Dist. Palghar, Maharashtra in *Prasuti Tantra* and *Stree Roga* department OPD.

**Personal History** – Occupation – Student

#### O/E (On Examination)

GC -Fair

BP-120/80 mm of hg

Pulse-78/min

RR-19/min

#### S/E (Systemic examination)

AEBE= Clear

CVS-S<sub>1</sub>S<sub>2</sub> Normal

**CNS-Conscious Oriented** 

#### **Local Examination (L/E)**

- 1) Blackish discoloration on neck (acanthosis nigricans)
- 2) Blackish discoloration on B/L axillary & groin region.
- 3) Pimples on face (acne)

#### Per Speculum / Per Vaginal Examination- Not done due to patient is unmarried

#### Ashtavidh Pariksha

- 1. *NADI* (pulse) 80/min
- 2. MALA (stool) Normal
- 3 MUTRA (urine) Normal
- 4. JIVHA (tongue) Niram
- 5. SHABDA (speech) Normal
- 6. SPARSH (skin) Khara, Anushna
- 7. DRUK (eyes) Normal
- 8. AKRITI Madhyam

Weight- 49 Kg

Height- 165 Cms

Built - Thin

**BMI-**  $18 \text{ Kg/m}^2$ 

#### **Menstrual History**



L.M.P.-22/02/2021

 $O/H - G_0 P_0 L_0 A_0$ 

Menarche History – at the age of 13 years

Marital Status- unmarried

Contraceptive history (CO/H) - Nil History of previous treatment – nil.

#### **USG**

Patient Came Along With USG Reports Dated On- 02/06/2021 As Follows-Ovaries: Both Ovaries Visualized, Appears Mildly Bulky.

RT Ovary: 47×26 Mm, LT Ovary: 42×27 Mm

Both Ovaries Shows Peripherally Arranged Multiple Smaller Sized Follicles with Central Echogenic Stroma

S/O Polycystic Ovarian Disease. IMPRESSION- F/S/O PCO

#### **Treatment Given**

#### Deepan and Pachan (Table no.1)

Aushadhi	Matra/ Kala	Kala	Anupana
Lashunadi Vati	250mg, TDS	Vyanodana	Koshna jala
Dashamool Jeerakam	10 ml BD	Vyanodana	Koshna jala

#### Saman Chikitsa (Table no.2)

Aushadhi	Matra/ Kala	Kala	Anupana
Rajahpravartini	250mg, BD	Apana	Koshna Jala
Phala Ghrita	10ml BD	Rasayan	Koshna Jala
Kamdudha Ras	250mg, BD	Apana	Koshna Jala

#### **Shodhan Chikitsa**

- 1. Sarvang Snehan & Swedan
- 2. Matra Basti with Til Tail (60ml) for 3 days
- 3. Shirodhara with Brahmi + Til Tail for 7 days

**Pathya-Apathya:** - During this period the patient was advised to take balanced and nutritive diet containing *Ragi*, *Lahsuna*, Ghee, milk, fruits, green vegetables, and Luke warm water. Avoid oily, spicy, junk food. She was also advised to do early sleep in night and early wake-up in morning, morning walk, Yoga therapy, Meditation, Pranayama: - During this period the patient was advised Yoga therapy [*Suryanamaskara*, Butterfly pose (*Suptbandhkonasana*), *Chakki chalasana*]Meditation and Pranayama (*kapalbhati*, *Anuloma Viloma*).

Duration: - Management for 2 months.

#### **OBSERVATION AND RESULTS (Table no.3)**

Sr. No.	Complaints	Before Treatment	After Treatment
1.	menses day	1-2 days	3-5 days
2.	menses duration	60 days	35 days
3.	No of pad changed /day	Pad 1/day(only spotting)	Pad 2 /day (complete socked)
4.	Abdominal Pain	+++	+
5.	Acanthosis Nigricans, Acne	+++	++
6.	Psychological Symptoms	++	+

#### **Results of Investigation (Table no.4)**

Investigation	<b>Before Treatment</b>	After treatment (2 months)
	-Endometrial Thickness 8 mm	-Endometrial Thickness 8 mm
	-Right ovary volume <b>47×26 mm</b>	-Right ovary volume <b>34×20 mm</b>
USG	-Left ovary volume 42×27 mm	-Left ovary volume 36×20 mm
	-Multiple smaller sized follicles	-Few smaller sized follicles
	-Bilateral PCOS.	-Residual mild changes PCOS



#### **USG ABDOMEN & PELVIS**

Liver: Normal in size(12.8 cms), shape. Echogenecity is normal. Echotexture is smooth. No focal lesions seen. Portal vein is normal.

Spleen: Normal size [8.8 cms]; shape, echogenecity & shows smooth echotexture. No focal lesions seen.

Gall Bladder: Well distended; wall thickness is normal, no GB calculi or sludge is seen, Intra & extrahepatic biliary system not dilated.

Pancreas: Visualized portion shows normal echogenecity; no focal or diffuse enlargement.
Kidneys: Bilateral kidneys are normal in size, shape, show good cortico-medullary differentiation & wascularity.
RT Kidney: 99X36 mm LT. Kidney:105 X47 mm
Left kidney shows calycial system calculus measuring 5 mm at midpole

No hydronephrosis or hydroureter seen on either side. Urinary Bladder: Well distended, bladder wall appears normal; no calculi or mass lesion is seen.

Uterus: Normal size( 66X 43 X 34 mm); no focal lesion seen.
Endometrial echo complex is central & thickness is 8 mm.

Endometrial echo complex is central & uniconess is 3 min.

Ovaries: Both Ovaries visualised, Appears mildly bulky

RT Ovary: 47X26.mm,LT Ovary: 42X27 mm

Both ovaries shows peripherally arranged multiple smaller sized follicles with central echogenic stroma s/o polycystic ovarian disease

Bowels: Visualised bowel loos are non dialated, without any obvious focal mass lesion & show normal peristalsis. No Free Fluid in abdomen or pelvis/ POD.

IMPRESSION: Transabdominal USG of Abdomen & Pelvis reveals:

LEFT RENAL NON OBSTRUCTIVE CALCULUS.

F/S/O PCOS

ADV: CLINICAL/LAB CORRELATION



#### USG ABDOMEN & PELVIS

Liver: Normal in size[12.8 cms], shape. Echogenecity is normal. Echotexture is smooth. No focal lesions seen.

Portal vein is normal.

Spleen: Normal size (8.8 cms); shape, echogenecity & shows smooth echotexture. No focal lesions seen.
Gall Bladder: Well distended; wall thickness is normal, no GB calculi or sludge is seen. Intra & extrahepatic

biliary system not dilated.

Pancreas: Visualized portion shows normal
echogenecity; no focal or diffuse enlargement.
Kidneys: Bilateral kidneys are normal in size, shape,
show good cortico-medullary differentiation & vascularity.
RT Kidney: 98X36 mm LT. Kidney:102 X42 mm

No hydronephrosis or hydroureter or calculi seen on either

Urinary Bladder: Well distended, bladder wall appears normal; no calculi or mass lesion is seen. Uterus: Normal size( 66X 46 X 37 mm); no focal lesion

Endometrial echo complex is central & thickness is 8 mm.

Ovaries: Both Ovaries visualised, Size reduced as

compared to previous scan
RT Ovary: 34X20 mm,LT Ovary: 36X20 mm
Both ovaries shows peripherally-arranged few smaller sized follicles with central echogenic stroma s/o polveystic

ovarian disease.

Bowels: Visualised bowel loos are non dialated, without any obvious focal mass lesion & show normal peristalsis.

No Free Fluid in abdomen or pelvis/ POD.

IMPRESSION: Transabdominal USG of Abdomen & Pelvis reveals:

· F/S/O PCOS

ADV: CLINICAL/LAB CORRELATION





**USG Report Before treatment (Fig.1)** 

**USG Report After treatment (Fig.2)** 



Uterus: Normal size( 66X 43 X 34 mm); no local lesion

Endometrial echo complex is central & thickness is 8 mm. Ovaries: Both Ovaries visualised, Appears mildly bulky RT Ovary: 47X26 mm, LT Ovary: 42X27 mm

Both ovaries shows peripherally arranged multiple smaller sized follicles with central echogenic stroma s/o polycystic ovarian disease

Bowels: Visualised bowel loos are non dialated, without any obvious focal mass lesion & show normal peristalsis. No Free Fluid in abdomen or pelvis/ POD.

IMPRESSION: Transabdominal USG of Abdomen & Pelvis reveals:

LEFT RENAL NON OBSTRUCTIVE CALCULUS.

F/S/O PCOS

#### **USG Report Before treatment (Fig.3)**



Uterus: Normal size( 66X 46 X 37 mm); no focal lesion

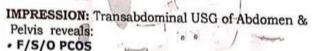
Endometrial echo complex is central & thickness is 8 mm.

Ovaries: Both Ovaries visualised, Size reduced as compared to previous scan

RT Ovary: 34X20 mm, LT Ovary: 36X20 mm

Both ovaries shows peripherally-arranged few smaller sized follicles with central echogenic stroma s/o polycystic ovarian disease.

Bowels: Visualised bowel loos are non dialated, without any obvious focal mass lesion & show normal peristalsis. No Free Fluid in abdomen or pelvis/ POD.



**USG Report After treatment (Fig.4)** 

#### **DISCUSSION**

There is always a high level of inflammatory changes in patients with PCOS. Inflammation is also linked to excessive weight gain which can be correlated with Samavastha (metabolic toxins) in Ayurveda. Apathya Aahara Viharas (unwholesome diet and lifestyle) causes the formation of Aama in Rasadhathu which in turn causes Arthava Upadathu Dushti. This vitiated condition leads to improper selection and maturation of ovum. The Aama thus produced, vitiates the remaining *Dhathus* which manifests as excessive weight gain and hair loss. Hair being the Mala Roopa of Asthi, unwanted hair and hair loss occurs in Asthi Dhathu Dushti (bone tissue degeneration). Kapha and Medho Dushti happen due to excessive intake of Mamsahara along with Avyayama and Divaswapna (day sleep). These vitiated Dosha and *Dhathus* reaches the ovary which hampers its morphology. To normalize this condition drugs having the action such as *Aamapachana*, *Agni deepana* (carminative), *Pachana* (digestive), *Vatanulomana*, *Lekhana* and *Artava* janana (ovulation induction) properties should be used.<sup>[5]</sup>

#### Mode of Action of Dashamool Jeerakam

Dashamool Jeerakam is Deepan, Pachan in action. It balances the Apan vayu. It has Carminative, digestive property. [6]

#### Mode of Action of Rajpravartini Vati

*Kumari* (Aloe vera), *Kasisa bhasma* (Blue Vitriol), *Tankana* (Borax), *Hingu* (Asa foetida) the contents of *Rajpravartini Vati* is *ushn*a.so it is *Vata*, *kapha nashak*. it acts on *Aartavaha Strotas*, balance the Apan *vayu*. It is useful in Oligomenorrhea, delayed menstruation.<sup>[7]</sup>

#### Mode of Action of Phala Ghrita

Sharangadhara, Vagabhatta, Yogaratnakar and Bhavaprakash mentioned Phalaghrita in the treatment of Vandhyatva. 9-13 Vandhyatva is a Vata dominated Sannipataja vyadhi. Ghrita is Tridoshaghna due to its properties and milk is also Vata-pitta shamaka, Jivaniya and Rasayana. So, Phala-ghrita has the properties of Ghrita, milk and other ingredients. Phala-ghrita contains mainly Tikta, Madhura and Katu rasa, Laghu, Snigdhaguna, both Katu and Madhuravipaka and also Ushna and Sheetavirya. It also has Dipana, Pachana, Lekhana, Anulomana, Shothahara, Krimighna, Balya, Prajasthapana and yoni Pradoshanashaka actions. Hence this drug was selected for oral administration in the present study.

#### Mode of Action of Matra Basti

As the basis of Ayurveda, *Vata* plays a major role in all kinds of gynecological disorders, and it governs *Pitta* and *Kapha* also. When considering PCOS, same theory can be applicable as Vata stands for proliferation, division of cells and rupture of the follicles. Hence *Vata* Shaman *Basti* is the best treatment for Ovulation Induction of PCOS. As mentioned in *Charaka Samhita Siddhisthana*, *Basti* effects are not limited only up to rectum, and it produced widespread systemic effects. Therefore, in this study *Matra basti* which is reduced by half in quantity (day after day or at suitable periods), does not produce any complications which cannot be prevented, used as *panchakarma* procedure at the Ovulation Period.

#### Mode of Action of Shirodhara

A standardized *Shirodhara* leads to a state of alert calmness similar to the relaxation response observed in meditation. The clinical benefits observed with *Shirodhara* in anxiety neurosis, hypertension, and stress aggravation due to chronic degenerative diseases could be mediated through these adaptive physiological effects.<sup>[12]</sup> The procedure of Shirodhara brings the Sanjnavaha Srotas in peaceful state of rest which helps in inducing sleep.

#### **CONCLUSION**

PCOS is an increasing public health problem which is very common and leading cause of infertility in women. Polycystic ovarian syndrome or PCOS is a condition in which a women's level of sex hormone like oestrogens and progesterone are imbalanced. Allopathic medicines are limited, comparatively Ayurveda have various options of medicine without any side effects for every symptom of PCOS. In Ayurveda there is no direct description of this disease in the ancient text. But clinically it is resemble with Yonivyapad, Artavavaha strotas dushti, Santaropnnth vyadhi, Jataharini etc. From this case study Polycystic Ovary Syndrome (PCOS), Patients can be managed by Ayurveda Treatment. This is single Case Study but large study need with more number or patients of Polycystic Ovary Syndrome (PCOS).

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