



Pathophysiological study of pcod (poly-cystic ovarian disease) with special herbal medicine (tab kanchanar guggul, tab gandharva haritaki, lavan-bhaskar churna) - A case study.

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Abstract: PolyCystic Ovarian Disease (PCOD) is a set of symptoms related to an imbalance of hormones that can affect women and girls of reproductive age. It is defined and diagnosed by a combination of signs and symptoms of androgen excess, ovarian dysfunction, and polycystic ovarian morphology on ultrasound. In Ayurveda PCOD is not direct term coined but clinically it is resemble with *Aartavavaha strotas dushti*, *Vishamaartava*, *Granthi*, *Santarponth vyadhi*, *Yonivyapad*. This article aims at PathoPhysiological study of PCOD with special herbal medicine.

Key Words: *Aartavavaha strotas dushti*, PolyCystic Ovarian Disease(PCOD), Ayurvedic treatment.

1. INTRODUCTION :

PolyCystic Ovarian Disease (PCOD) is one of most common female endocrine disorder that affects 6-15% of the female population. PolyCystic Ovarian Disease (PCOD) is a heterogeneous condition which is related to an endocrine reproductive disorder of females. The persistent hormonal misbalance leads to the complexities such as numerous cysts; an irregular menstrual cycle that ultimately leads to infertility among females. According to Ayurveda PCOD is a disorder which involves the three *Doshas* like *Kapha*, *Dhathus* like *Rasa*, *Rakta* and *Meda*. The *Srothas* involved in this condition are *Rasa*, *Rakta* and *ArtavaVaha* which eventually manifests features such as *Anarthava* (amenorrhea), *Vandhyatwa*(infertility) , *Abeeja rutuchakra* (unovularity menstrual cycle).

Artava dhatu is the tissue responsible for reproduction in the female body and the channel that carries the reproductive fluid is called *artavavaha srotas*. PCOD developes when this channels are obstructed by increased kapha, due to obstruction fluid flow is suppressed and PCOD developes. Unhealthy food habits, lifestyle, mental stress, sedentary jobs and long-time intake of hormonal pills are more common causes of PCOD.

2. LITERATURE REVIEW:

PCOS in Ayurveda:

1. *Shandhi YoniVyapad*:

(A) Charak Samhita:

“*Bijadoshattu garbha sthmarutophatshya. Nradweshinyastani chaiv shandi syadanupkramah*”¹ (C.S.Ch. 30/34-35)

- A congenital disorder (*bijadosha*).



- Absence or slight development of breasts.
- Dislike coitus.
- Incurable Disease.

(B) Sushrut Samhita:

“Anartavstna shandi kharsparsha cha maithune. Chasrashvapi chadhyasu
Sarvlingochhitirbhavet”² (S.S.Ut. 38/18-20).

- Primary amenorrhoea (*anartava*).
- No breast development (*astana*).
- the roughness of the vagina (vaginal canal) which is felt at the time of coition.

2. Vandhya:

“Yada hyasyah shonite garbha shyabeejbhagah pradoshmapadyate.
Tada bandhyam janyati”¹ (C.S.Sh. 4/30).

Bijamsa dushti (chromosomal /genetic abnormalities): if part of bija responsible for the development of uterus, is defective then born girl child would be *vandhya* (infertile).

3. Vandhya YoniVyapad:

“Vandhyam nashtartvam vidhyat chashrastpichadyasu bhavantyanilvednah”² (S.S.Ut. 38/10-11).

- Breast developed.
- Has amenorrhoea (*nashtartava* considered as destruction of *artava* of female foetus).

4. Vikuta Jatiharini

“Kalvarnapramanerya vishmam pushpamrichhati. Animittbalglanirvikuta nam sa smrita”³ (Ka.S.K. 6/34-35).

- Oligomanorrhoea and irregular menses.
- General weakness (metabolic manifestation).

5. Pushpaghni Jatiharini

“Vritha pushpam tu yo nri yathakal prapashyati. Sthulalomashganda
vpushpaghni sa api revati”³ (Ka S.K.6/32-33).

- It is curable.
- Woman menstruate in time but it is useless (vyathpushpa i.e unovulatory cycle).
- Has corpulent and hairy cheeks – hirsutism; may be due to hyper-androgenism.

So *Pushpaghni jatiharini* appears like close to PCOD.



- *Sthula purusha* (obese person) in *ashtanindiya* (censurable person) Described by *Acharya Charak* have described 8 faults which include polyuria, polydispepsia and short life. This condition may simulate with hyper-insulinemia condition.

- *Atiloma* person with extra hairs growth is also a slamable person.

Above two conditions may indicate female affected with PCOS.

Common symptoms of PCOD⁴:

Irregular menstrual cycles – menstrual bleeding may be less or more frequent because of irregular ovulation.

Amenorrhoea – no menstrual bleeding for many months or years.

Extra facial or body hair growth

Acne

Scalp hair loss

Reduced fertility – unable to conceive due to unovulation

Mood changes – including anxiety and depression

Obesity

Insulin resistance

3. Materials:

Place of study- Dr. D. Y. Patil College of Ayurved & Research Centre, Pimpri, Pune.

Case Report- 24 year old unmarried woman approached the *Prasuti Tantra* and *Stree Roga* OPD of Dr. D. Y. Patil College of Ayurved & Research Centre, Pimpri, Pune with complaints of irregular menstrual cycles, gradual weight gain and hair loss since 5 months. Her USG finding shows Bulky ovaries with peripherally arranged follicles within with echogenic stroma.

Family History: Father was diabetic and has hyper tension for 5 years.

Past History: No relevant history

Menstrual History:

| | |
|-------------------------|-----------|
| Age of Menarche | 13 years |
| Cycle | irregular |
| Interval | 2 months |
| No. of days of bleeding | 4 days |
| No. of pads/day | 4 |
| Pain | ++ |
| Clots | Present |
| Discharge | Present |

Personal History:

| | |
|----------|----------------|
| Diet | Non Vegetarian |
| Appetite | Reduced |



| | |
|--------------|--------------------|
| Bowel Habits | Constipated |
| Bladder | Normal micturition |
| Sleep | Excessive |

Marital History: Unmarried

USG Findings: Bulky ovaries with peripherally arranged follicles within with echogenic stroma.

On the basis of clinical history, physical examination and USG reports the patient was diagnosed with PCOS.

Blood Investigations: Haemoglobin-13g/dl, FBS-98mg%, PPBS-130mg%, Thyroid profiles were within normal limits.

Treatment plan: Patient was treated on OPD basis.

- 1) *Kanchanara Guggul*⁵ 250mg 2-2 tablets B.D. After meal with warm water.
- 2) *Lavanbhaskar Churana*⁵ 5gm B.D. Before meal with warm water
- 3) *Gandharv Haritak*⁵i 1000mg 1 tablets H.S. with warm water

This Ayurveda Treatment is given for 2 months. Result analysis was done on Clinical symptoms relief. Based on the clinical features, treatment principles adopted were *Aamapachana*, *Vata anulomana*, *Kaphapittahara* and *Arthava janana*. After 2 months of internal medications, symptoms reduced markedly and menstruation was normal

Pathaya Apathaya Kalpana:

Following regimen should be followed while running medicine.

- 1) Avoid milk and milk products
- 2) No Fruits (only pomegranate ok)
- 3) Pickle, papad, lemon, sour food
- 4) Avoid Fermented foods, floury foods, Chinese, Bakery foods, stale foods, cold water.
- 5) 30 minutes daily walking.

4. METHOD:

Diagnostic criteria:

Patient with classical signs and symptoms of PCOD with USG report.

Subjective Parameters- Signs and symptoms of patient are assessed after 2 month and results are drawn.

Objective Criteria- Patient was investigated USG before treatment.

Investigation: USG lower abdomen.

Counselling- As patient was psychologically upset, hence proper counselling was done. She has made aware of the signs and symptoms clearly. Patient was made confident that her condition is treatable.

Follow up and outcome after 2 months: Along with strict diet-periods become regular; 3kg reduction in weight was also seen. Follow up USG reveals normal uterus and ovaries.

Scoring pattern of subjective parameters-



| SR. NO. | PARAMETERS | SCORE |
|---------|--|-------|
| | DURATION OF MENSES (DAYS) | |
| 1 | 5 | 0 |
| 2 | 3-5 | 1 |
| 3 | 1-2 | 2 |
| 4 | Spotting for 1 | 3 |
| | INTERVAL OF MENSES | |
| 1 | ≤35 | 0 |
| 2 | 36-45 | 1 |
| 3 | 46-55 | 2 |
| 4 | ≥56 | 3 |
| | PAIN ASSOCIATED WITH MENSES | |
| 1 | No Pain | 0 |
| 2 | Bearable Pain | 1 |
| 3 | Requirement of Oral Analgesics | 2 |
| 4 | Requirement of Injectable Analgesics | 3 |
| | ACNE | |
| 1 | Mild Black Head & White Head (Stage 0) | 0 |
| 2 | Mild Inflammation(Stage 0+), Frequent Breakout (Stage 1) | 1 |
| 3 | Papule (Stage 1+) | 2 |
| 4 | Nodule/Pustule/Cyst | 3 |
| | HIRSUTISM (DEPEND ON HAIR DISTRIBUTION PATTERN ON DIFFERENT BODY PART) | |
| 1 | Mild Coverage | 0 |
| 2 | Moderate Coverage | 1 |
| 3 | Complete Light Coverage | 2 |
| 4 | Heavy Coverage | 3 |

5. DISCUSSION:

PCOS occurs primarily due to the imbalance state of *doshas* especially *vata* and *kapha*. The deranged *vata* vitiates the *mamsa*, *rakta* and *meda* mixed with *kapha*; they produce a circular, raised and knotted inflammatory swelling called *granthi* which can be compared with a cyst. Due to *Srotorodha* and suppression of *Agneya Guna* of *pitta* by the vitiated *Kapha*, the process of *Beeja nirmana* cannot be completed. *Apana Vata*, could not function normally for *Beejotsarga* and *Artava Pravritti*. This pathology is responsible for *Anartava* as well as *Vandhyatva* due to anovulation. Role of *Ama* along with *Dhatvagnimandya* in the *Samprapti* has also been found. Here, multiple small cysts found in the periphery of ovaries can be taken as *Ama*. When production of androgens from these undeveloped or immature cysts becomes high and they circulate as free or unbound in the blood circulation, they produce all the symptoms. When *Dhatvagni* of a particular *Dhatu* is diminished, the formation and utilization of that *Dhatu* becomes incomplete and *Ama* is produced. This type of pathology can be seen in PCOD i.e. formation of *Beeja* is not been completed, hence the process of *Beeja Nirmana* renders at the level of follicular stage and becomes cysts. These cysts can be taken as *Ama* produced in *Artavavaha Srotas* due to *Dhatvagnimandya*. These cysts produce androgens which are not converted into oestrogens and thus prevent ovulation. So, this *Ama* is responsible for all symptoms of PCOD.

6. ANALYSIS:

Mode of action of drugs:-

The approach towards *Ayurvedic* treatment for PCOS includes *vata kaphara chikitsa*, *Sroto shodhan*, *ama pachan* along with management of *agnimandya* at both *dhatvagni* and *jatharagni* levels.

*Kanchanar Guggulu*⁵ is effective in balancing the *Kapha*. The bitter, astringent and pungent taste of *guggulu* helps in burning belly fat and from other areas the body and also enhance the process of digestion. Furthermore, this



ayurvedic medicine boosts metabolism and helps in losing weight and ovarian cyst. According to Ayurveda, the aggravation of *Kapha* and *Manda Agni* is considered responsible for PCOS. *Kanchanar guggulu* establishes action of *pachakagni* to balance *kapha* in body. Altogether, it helps improve the function of the ovaries.

*Lavanbhaskar Churna*⁵ is *Vata*, *Kapha nashak*, *Gulma niharaka* and *Vata shool nashak*. It aids in digestion and help in *Sroto Shuddhi*. The properties of *Dipana* and *Pachana* elevate the *jatharagni*, *dhatwagni* as well as *artvagni*

Herbal formulation of *Gandharva Haritaki*⁵ *vati* is gentle purgative, laxative, promotes appetite & assists digestion. These agents causes copious watery evacuation of bowels, removes impurities through the purgation's. The salts used are having stomachic properties essential for removing toxins and evacuating bowels. It causes *apana vayu anulomana*. Ayurveda applies a holistic approach towards managing PCOS. Personalised treatment aims to address the root cause of the disease and bring balance to the body.

7. FINDINGS:

Assessments of the signs and symptoms of the patient was done after 2 months of treatment. There is significant 80-95% relief in all signs and symptoms of PCOD, which means the selected management is effective in the management of PCOD.

Before treatment Subjective criteria

| | |
|-----------------------------|---|
| Duration of menses | 1 |
| Interval of menses | 3 |
| Pain associated with menses | 1 |
| Acne | 1 |
| Hirsutism | 1 |

After treatment Subjective criteria

| | |
|-----------------------------|---|
| Duration of menses | 1 |
| Interval of menses | 1 |
| Pain associated with menses | 0 |
| Acne | 0 |
| Hirsutism | 0 |

USG report before treatment-

Bulky Ovaries with peripherally arranged follicles within with Echogenic Stroma. Right Ovary – 12.8ml; Left Ovary – 17.2ml . Suggest clinical correlation to rule out PolyCystic Ovaries.

After treatment USG Report-

Right Ovary – 9.46ml; Left Ovary – 6.03ml. No Significant abnormality.

8. CONCLUSION:

PCOS is mainly due to *Avrana* of *Vata* and *Kapha* so *Vatanulomak*, *Kapha Shaman*, *Aamapachana*, *Artava Janana Chikitsa*, are effective. So, we are advising this treatment for polycystic ovarian disease. This medicines have properties which helps easily reduce body mass and also PCOS complications. So to treat a woman affected with PCOS need controlled and balanced diet and exercise for weight reduction along with medication, preventive measures are more important. So it will be more beneficial to follow mode of life as mentioned in Ayurveda and to use modern medicine, if needed, to get conceived.



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