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#### **UNDERSTANDING PCOD-AN AYURVEDIC PERSPECTIVE**

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# **ABSTRACT**

Poly Cystic Ovarian Disease is one of the most common endocrine disorders of reproductive age with a prevalence of 9.13% in Indian population. It is characterized by hyperandrogenism and chronic anovulation<sup>1</sup>. It can be correlated with *Granthibhutha artavadushti/ pushpagni jathaharini*. Altered lifestyle, change in diet, lack of exercise and stressful environment are considered to be the causative factors. Changes in HPO axis causes increase in luteinizing hormone level, with irregular menstruation with clots, dysmenorrhoea, weight gain and cosmetic problems like acne and hirsutism. Finally affecting follicles to remain in the ovary peripherally arranged leading to multiple cysts. *Granthibhuta artava* dusti<sup>2</sup> is a type of menstrual abnormality where there is association of clots and pain during menses. This is due to association of *vata & kapha* leading to *avarana in artavavaha & rasavaha srotases*. The above clinical condition requires appropriate treatment protocol comprising of healthy life style and dietary management.

**Keywords:** PCOD, *Granthibhuta artavadusti*, Anovulation, Menstrual abnormality.

#### INTRODUCTION

PCOD can be defined as a variable disease that is marked by Amennorhea, Hirsutism, Obesity, Infertility and Ovarian Enlargement & is usually initiated by an elevated level of Luteinizing hormones and androgen, which Results in an abnormal Cycle Of gonadotropin release By Pituitary Gland with the Prevalence of 5-10% of Women of Reproductive age.

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Poly Cystic Ovarian Disease is the most common cause of anovulatory infertility, being found in 75% of cases. PCOD now proves to be a significant fac-

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tor in female infertility with prevalence of 0.6 to 3.4% in infertile couples.<sup>3</sup> With improving laboratory facilities, sonography and with routine laparoscopic evaluation of infertility PCOD has shown a remarkable increase of incidence in recent years. PCOD can dampen the women's life physically and mentally, affecting their physical appearance and

fitness. Various surveys show that psychological disorders, reduced quality of life <sup>4</sup> and hereditary factor are linked with increased prevalence of PCOS and thus affecting the fertility rate. <sup>5</sup>

The subtle difference between PCOS & PCOD is enlisted in Table no. 1 even though the clinical conditions are considered to be one & the same.

**Table 1:** Difference between PCOS &PCOD<sup>6</sup>

SL NO	ISSUE	PCOD	PCOS	
1	Whom does it effect	Upto 33% on ultrasound & no other	12-18% of women reproductive age	
		symptoms	( 70% remain undiagnosed)	
2	Type of disorder	Variant of normal ovaries	Metabolic disorder associated with an unbalanced	
			hormone levels	
3	Genetic nature	May not show early features	Can show symptoms like acne, hair growth in teen	
			years due to metabolic disturbance	
4	Hormonal balance	May possess hormonal imbalance &	Causing high insulin release stimulating produc-	
	disturbance	continue to ovulate regularly	tion of androgens from ovary disturbing	
5	Pregnancy	Not difficult	End up with infertility	

<sup>\*</sup>PCOD: Polycystic ovarian disease \*\*PCOS: Polycystic ovarian syndrome

### Aim & Objectives:

- To understand the clinical features of PCOD according to Ayurveda
- To critically analyze the pathophysiology of PCOD

#### **Avurvedic view:**

Ashta artava dusti can be understood based on physical changes of menstrual blood. Based on the association of doshas one can diagnose the type of artava dushti in granthi artava dushti one finds associated clots in menstrual blood giving an idea of vata & kapha association. Patient may present with the complaint of weight gain, skin discoloration and menstrual abnormalities as mentioned in samhitas as corpulent and hairy cheeks. Based on clinical manifestation further sonological evaluation confirms the pathogenesis of avarana with the formation of multiple cysts leading to anovulation. Both the entities here refers to formation of clots & cyst, can again be correlated to kapha & medo avarana leading to cyst & clots respectively. The woman suffering from asta artava dusti becomes infertile due to abeejatvam, as the ultimate effect of artava vyapada is 'Abeejatva'8 i.e. the clinical manifestation may be regular/irregular cycle, with or without menses leading to anovulation. Acharya Kashyapa has substantiated that *Pushpaghni jatharani*<sup>9</sup> is where the woman menstruates in regular interval but is unable to conceive.

#### Samprapti:

According to Ayurveda, Acharya Sushruta has given the description of 'Granthi', where in the deranged vata etc vitiates the mamsa, shonita, meda & along with kapha combine to produce circular, raised & knotted swelling called 'Granthi', This circular swelling has knotted been defined 'granthi'. (susruta) This type of glandular swelling has been compared with the modern terminology 'cyst'12 which means an abnormal closed epithelium- lined cavity in the body, containing liquid or semisolid material which is again sonologically visualized.

In PCOD, development of follicles has been arrested at one or multiple levels& remains as it is at varying stages of maturation & atresia. These are termed as cysts which are not destined to ovulate. In granthibhuta artava, the artava (ovum) takes the form of granthi i.e. cyst, as seen in PCOD. Thus, this pathology can be compared to granthi bhuta artava dushti.

## Pathology involved (Modern view)<sup>13</sup>

The etiopathogenesis of PCOD are explained in different hypothesis.

- Insulin resistance and hyperandrogenism play an important role.
- There is no defect in Hypothalamo Pituitary Ovarian axis but normal function is masked by inhibition of ovarian follicular development and inappropriate feedback to pituitary.
- The high oestrogen production is largely due to conversion of androgen to estrogen in the ovary and peripherally.

- It causes increase in luteinizing hormone (LH) and decrease in follicle stimulating hormone (FSH).
- A vicious circle is established for the increase in luteinizing hormone induces thecal hyperplasia and increased androgen synthesis in the ovary
- High level of androgen results in increase in the peripheral production of the sex hormone binding globulin (SHBG).
- Further if left untreated leads to PCOS which further leads to increased level of free androgens to produce hirsutism and to be converted to estrogen
- The hyperthecosis is related to an over production of androgens which reduces granulosa cell proliferation and maturation, as well as stimulating fibrosis of surrounding stroma and capsule resulting in anovulation and infertility.

#### Ayurvedic perspective:

Evidence/ Symptom	Doshas	Type Of Doshas	Dhatu	Vrudhhi/Kshaya	Srotas
Irregular Menses/	Vata	Apana	Shukra, artava rasa	Both	Artavaha Rasavaha
Cyst/ Granthi	Kapha	-	Shukra	Vrudhhi	Shukravaha
Sthoulya/ Obesity	Kapha	Avalambhaka	Medas	Vruddhi	Medovaha

#### **SAMPRAPTI GHATAKAS:**

- Dosha- Vata Apanavata, Samanavata, vyanavata
- o Pitta –Pachaka pitta
- o Kapha –Kledakakapha
- o Dushya- Rasa, Rakta, sarvadaihikashukra
- o Upadhatu- Artava
- o Agni Jataragni, Dhatavagni
- o Srotas-Rasavaha, Artavahasrotas, Medovaha
- o Srotodusti- Sanga
- Udbhvastana Amapakwashaya
- o Adhisthana- Garbhasaya
- o Sancharasthana- Sarvashareera
- Vyaktasthana Yoni, Garbhasaya.

#### Possible line of treatment:--

A classic description of the PCOD remains elusive. The pathophysiological mechanisms indicate that the aetiology is multi-factorial. It is probable that PCOD is occurring by *kapha* vitiation, leading to *artavavaha srotorodha* and subsequently causing *vatavaigunyata*. The clinical management of patients with PCOD is primarily symptomatic. <sup>14</sup>

- Correction of menstrual disturbances
- Management of hyperandrogenism
- Treating infertility

In Conventional system PCOD management involves ovulation induction drugs, oral contraceptive pills and anti-androgen therapy. Although there are multiple treatment modalities available for PCOD as mentioned, it may increase the risk of abnormalities such as acne, hirsutism, weight gain etc. Ovarian

drilling is one of other treatment which may lead to failure of ovarian reserve or Pre Maturation ovarian failure & thus leading to infertility.<sup>15</sup>

#### **Treatment and Management**

In Ayurveda for PCOD should be planned with following considerations:

- 1. Nidanparivarjana
- Intake of Mithya Aahara should be avoided
- PCOD patients tend to have irregular food habits, lack of exercise, & sedentary life style which needs to be corrected by doing regular exercises and avoiding junk foods.
- Daily exercise, practice of *Yoga & Pranayama* will help in weight reduction as well as in hormonal regulation.
- Rutucharya & Dinacharya can be followed as mentioned in classics.

#### 2. Samshodhana

- Samshodhana is a process by which waste products and harmful products are eliminated by Adhomarga or Urdhwamarga.
- According to Acharya Dalhan for purification only *Vamana* should be used *as it* removes Saumaya (*Kapha*) substance resulting in relative increase of *Aagneya* constituent of body, thus increases *Aartaya*<sup>17</sup>
- Acharya susruta says that use of both vamana & virechana procedures should be done for the same. Artava is aagneya in nature. Aagneya Dravya is said to be having Vata- Kapha shamaka and Pitta prakopaka properties. It also increases the amount of Aartava and also helps in removal of Kapha and Vata Aavarna and Scures the disease. 18

### DISCUSSION

With all the modern needs of contraception rising on one side, infertility is still a major challenge to the gynecologist on other hand. Understanding the pathophysiology of changes in HPO axis is need of the hour. Although PCOD cannot be eradicated, ayurvedic intervention, life style modification & yo-

ga can be better adopted for proper management. PCOD can be described with the involvement of Doshas, Dhatu and Upadhatu. Kapha predominance manifests as increased weight, subfertility, hirsutism, diabetic tendencies and coldness. Pitta predominance manifests as hair loss, acne, and painful menses. Vata predominance manifests with painful menses, scanty or less menstrual blood and severe menstrual irregularity. So here, understanding of dosha involvement and avarana concept will help to revert back pathogenesis. As per Acharyas, avoiding mityaachara will lead to regulation of artava dusti which in turn will increase the rate of fertility.

#### CONCLUSION

In present era drastic changes in lifestyle, food habits, environmental exposure to toxic substances along with hereditary predisposition for metabolic syndrome and stress have contributed to the common problem faced by today's female population. PCOD is hard to pin point classically. No direct correlating condition is found in classical text books. However pushpaghni, jataharani & granthibhuta artavadusti are comparable to clinical manifestation. So one has to understand clinical presentation from the point of doshic vitiation and plan the treatment, care has to be taken not to vitiate the vata while treating the kapha. So treatment includes saamadosha vatasyaopakrama, pachan aartavajanaka dravyasevan, following rutucharya and dincharya as mentioned in classics.

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