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AN OVERVIEW OF PCOS IN PERSPECTIVE OF AYURVEDIC LITERATURE

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ABSTRACT

PCOS occurs when a hormonal imbalance affects the development of follicles during the ovarian cycle. Instead of bursting and releasing an egg, the affected follicle remains in the ovary. The follicle then turns into a cyst, and in each ovarian cycle several new cysts may appear. "Poly" means many, hence the name: polycystic ovary syndrome. The ancient science of Ayurveda considers all diseases to be an imbalance. Ayurveda classifies PCOS as a kapha disorder. Arthava dhatu is the tissue responsible for reproduction in the female body and the channel that carries reproductive fluid known as artavavaha srota. PCOS occurs when excess kapha blocks the naturally balanced flow of these fluids and channels. Movement is impeded, metabolism is inhibited, and PCOS symptoms may occur. Improper diet and lifestyle, including mental stress and lack of exercise, excessive and prolonged use of hormonal contraceptives are major causes of PCOS.

KEYWORDS: Irregular menstruation, cyst, Medodusti, artava, Bahudosha avastha.

INTRODUCTION

• PCOS is a heterogenous disorder defined as a combination of signs and symptoms of androgen excess with a wide spectrum of presenting features including menstrual irregularities, anovulation, infertility, obesity, hirsutism, insulin resistance, etc. Initially described in 1935. It affects multiple systems of the body and Metabolic derangements and associated complications include insulin resistance and diabetes, hypertension, fatty liver, and sleep apnea. So, it requires a wide-ranging perspective on health care for effective management. Chronic anovulation leads to infertility, irregular menstrual cycle, obesity, hirsutism, and other presenting symptoms of PCOS.

In Ayurveda, direct correlation of PCOS with a particular disease is not possible. Ayurveda describes different gynecological disorders under the heading of *Yonivyapads, Arthava Vyapads, and Beeja Dosha*. PCOS is a disease of artav vah shrotas. Symptoms of Diseases like Vandya, Nashtartava, Artavakshaya and Puspaghni Jataharini defined by Acharaya kashyap can be related to PCOS at some extent. PCOS is of Bahudoshavastha Condition. Aavarana is the main pathogenesis of PCOS. Kapha Medo-related dosha dushyasamurchana is seen here. In PCOS numerous granthis are seen in the ovary. Granthis are developed due to sangha in srotas caused by snigdha and guru guna of kapha dosha. These granthis with a strong Kapha platform inhibit the aartav leading to artav rodha.^[1]

The current diagnosis of PCOS is done by Rotterdam criteria. Two out of the following three criteria should be present to diagnose PCOS:

- 1. Oligomenorrhoea or amenorrhea
- 2. Hyperandrogenism
- 3. In USG string of pearl sign is present in the ovary (i.e., cysts of 2-9 mm in diameter, more than 12 in number arranged peripherally, and ovarian volume should be greater than 10ml)

MATERIALS AND METHOD

Ayurvedic Samhitas, modern textbooks, online articles, and journals were reviewed regarding this topic, and the information was critically reviewed to attain the following observations.

OBSERVATIONS

As it is a syndrome, the exact correlation is not possible, but the clinical symptoms of the disease can be correlated under the following headings. The metabolic symptoms like obesity, Insulin resistance can be included under *Sthouly*a and *Prameha*. Hyperandrogenic symptoms such as acne and baldness can be correlated with *Mukhadooshika* and *Khalathi* respectively. Anovulation resulting in amenorrhoea or irregular menstrual cycle is described under the disease *Vandhya* and *Pushpagni jaataharini* by *Acharya Kasyapa*. Clinical symptoms like menstrual irregularities (amenorrhea) and bloating of the abdomen can be seen in *Raktha Gulma*.

AYURVEDIC CONSIDERATION

- Pcos is a disease of artav vah shrotas.
- Pcos is of bahudoshavastha disorder.
- ✤ Aavarana is the main pathogenesis occur in PCOS.
- Kapha Medo- associated dosha dushyasamurchana is seen here.
- In pcos kapha dominant numerous granthis are seen in the ovary. Granthis developed due to sangha in srotas caused by snigdha and guru guna of kapha.
- These granthis with a strong kapha platform inhibit the aartav leading to artav rodha.

Nidana

The aetiological factors include

- Mithya Ahara vihara,
- Pradushtarthava dusthi, and
- Beeja dosha

Mithyahara including the consumption of junk food and fast food. Mithyahara includes the concept of *Virudhahara*. As per the definition explained by Charaka, those food substances and their blends that encourage adverse action on the dhathus can be called *Virudhahara*.

Mithya vihara - The sedentary lifestyle along with improper diet, irregular sleeping patterns, and psychological factors such as stress, anxiety, and pressurized competition point to the *Mithya vihara* of modern society. The presence of these factors adds the impaired metabolism. Chronic anxiety and depression are the most psychological pattern in PCOD patients.

The word *Pradushtarthava* denotes the irregularities of the hypothalamic-pituitary-ovarian axis. In PCOS, alteration of the HPO axis occurs, and the manifested biochemical abnormalities Include high LH/FSH ratio, elevated androgen production, and high estrogen levels due to the peripheral conversion of androgens in adipose tissue, leading to the alteration in normal hormonal activity. Various chromosomal and genetic abnormality comes under the heading *Beejadushti*. The genetic origins of the disease are likely polygenic or multifactorial. This complex multigenic disorder results from the interaction between multiple genetic and environmental factors. A high prevalence of PCOS or its features among first-degree relatives is an implicational genetic influence.

SAMPRAPTI

"Without the aggravation of *Vata*, the women's *Yoni* does not get vitiated.^[2] *Vata* is responsible for all movement and *Kapha* and *Pitta doshas* require *Vata dosha* for movement. *Apana Vayu* is responsible for the expulsion of *Shukra*, *Arthava*, *Shakruth*, *Muthra*, and *Garbha*. The action of *Apana vayu* gets blocked by the increase of *Kapha dosha* in the body. The blockage of *Vata* subsequently blocks *Pitta* also. This vitiation interrupts the movement and conduction of hormones, which are thus unable to perform their actions.

The major etiological factors like *Atisnigdha, Madhura, Abhishyanthi* (high-calorie food and junk food) *aharas, Diwaswapna, Alpa vyayama,* etc vitiate kapha dosha. The above-mentioned *Nidanas* lead to the impaired function of *Agni* at various levels (*Jataragni, Dhatwagni,* and *Bhuthagni*). This *Agnimandya* lead to the formation of *Asamyak pachitha ahara rasa* (*Ama*) in the body. The vitiated *Kapha* and *ama rasa* increase the *Snigdhamsha* of the body and causes *Srothorodha* that cause impairment in normal functioning of vata. The vitiated *Vatha* and *Kapha* cause *Avarana* of *Arthava Vaha Srothas that* leads to *Arthava Nasha*.

SAMPRAPTI GHATAK

DOSHA: kapha- (guru,snigdha,manda guna) vaat Dushya: Medodhatu, rasa, rakta Strotus: Artavvahashrotas, medovahastrotas Strotodusti: Sangha Agni: Manda at kostha and dhatu level.

FRAME OF SAMPRAPTI

Agneya property of *Pitta* **Responsible** for the functioning of *Arthava Snigdhamsa* of the body Affects the Agneya property of *Pitta* and hence *Arthava*.

Irregular menstruation & Impaired ovulation

DOSHA

Vata vitiation - Arthava Vaha Srothas - irregular menstrual cycle

Pitta vitiation - Acne, hirsutism, and hormonal imbalances

Kapha vitiation - hyperthecosis, weight gain

DUSHYA

Involvement of almost all the dhatus can be seen in PCOS.^[3]

- RASA -- Srothorodha, Klaibya, Agni Mandhya, Kapha Vridhi Lakshanas like Gaurava, Agnisada, etc
- □ RAKTA -- Asrigdara, Vyangam, Gulma
- □ MAMSA-- Udara Gouravam
- □ MEDAS -- Athisthoulya, Purvarupa of Prameha
- ASTHI -- Kesa Loma Smasru Dosha
- SUKRA -- Vandhyatwa
- ARTHAVA -- Vandhyatwa, Arthava Naasha

Purvaroopa

The term *Purvaroopa* refers to a stage when the mild symptoms of the disease manifest, that is the initial stage before a full-blown manifestation. So, slight irregularities in the menstrual cycle, weight gain, mild acne, etc. can be included under *Purvaroopa* as it gives clues about the forthcoming disease.

Roopa

- ✓ Clinical symptoms like menstrual irregularities (amenorrhea), and bloating of the abdomen can be seen in *Raktha gulma*^[4]
- ✓ Menstrual irregularities such as oligomenorrhea, and amenorrhea are included in various Yonirogas (Vandhya) and Arthava Vyapaths (Arthavakshaya, Nashtarthava, Asrigdara).^[05]
- ✓ Anovulation resulting in amenorrhea or irregular cycles is described under the disease Vandhya and Pushpagni jaataharini by Acharya Kashyapa.^[6]
- ✓ Obesity, described as Sthoulya can be included in Santharpanajanya rogas.^[7]
- ✓ Hyperandrogenic symptoms such as acne and baldness can be correlated with Yuvaan pitika and Khalitya respectively.
- ✓ Hirsutism is described as Athilomatha under Ashtaninditha Purusha lakshana by Charaka. Sthula loma described in Pushpagni jaataharini also refers to hirsutism and acanthosis can be correlated with Karshnya.
- ✓ Hyperinsulinaemia, commonly leading to Type 2 diabetes mellitus is described under *Prameha*.^[8]

Prognosis

It is stated in ayurvedic classics that the diseases arising in *Abhyanthara Rogamarga* are *Sukhasadhya*, *Madhyama* Rogmarga are *Asadhya*, and *Bahya Rogmarga* are *krichrasadhya*.

PCOS is a syndrome with a complex set of symptoms arising in all three *Rogamargas* so we can conclude it as *Krichhasadhya vyadhi*.

Although PCOS is not a completely curable disease, the adverse features of the disease can be managed with medications and lifestyle modifications. So, it can be included in the category of yapya roga also.

TREATMENT PROTOCOL

The main aim of *Chikitsa* is *Samprapti Vighatanam*. As PCOS is primarily concerned with Stri beeja formation and ovulation and to some extent medodhatu, much attention should be given to these while treating the conditions.

Treatment Principle:

- Correcting the ama dosha
- Achieving koshta shuddhi and
- Regularizing tridoshas.

The management approach to PCOS should concentrate on:

- 1. Correcting agnimandya at jataragni and dhatwagni level by Deepana (carminatives) and Pachana (digestives) drugs.
- 3. Alleviating sroto avarodha (shodhana) purificatory therapies based upon the grade of doshic vitiation and site of affliction).
- 4. Regularization of apana vata(vatakaphahara medicaments)
- 5. Samksepatha: kriyayogo nidana parivarjanam".^[9]

Nidan parivarjana: Avoidance of kaphakara ahara & vihara.

SHODHAN

"Tatra samsodhanam aagneyaanam cha dravyaanam vidhivat upayoga^[10]

- As PCOS is a condition of bahudoshavastha and the Doshas are vitiated extremely so they must be ejected out through the nearest external opening with the help of Panchakarmas and by the use of Agneya Dravayas.
- It clears the Srotas, purifies the Dhatus, and produces Vatanulomatha.

SHAMAN CHIKITSHA

- **1. Lasun erandadi kashaya -** lasuna, erand, punarnava Removes avarana and useful for reduction in circulating androgens
- 2. Sukumar kashaya acts on pakwashay, corrects apan vaigunya
- **3. Varanadi kashaya** varun, saireyak, shatawari, chitrak-removes avaran, useful in insulin resistance.
- **4. Rajaha pravarthini vati** kumari, kasis, hingu-Aartavpravrthak
- 5. Kanchanar guggulu Indicated in granthi
- 6. Kuberaksha vati lasuna, latakaranj -indicated in granthi
- 7. Phal ghruta corrects hormonal imbalance, regulates arthav
- 8. Vridh badhika vati balances vaat & kapha.
- **9.** Chandra prabha vati for obesity, metabolic disorder, corrects vaat and pitta vitition.
- **10. Punarnava mandoor** works in obesity, metabolic disorders.
- 11. Gokshuradi guggul corrects apaan vayu.

BASTI

For Minimising Kapha related granthis in ovary and to correct avaran and vaat vaiguna...

- Erandmuladi shodhan basti
- Lekhan basti
- Uttarbasti Phulghritt, kasisadi tail, sahchar tail, bala tail etc.

BAHIR PARIMARJAN

- UDWARTAN Kapha medo shaman
- AVGAH SWEDA Pakwashyavaat shaman
- SHIRODHARA
- SHIROPICHU

ASANA FOR PCOS^[11]

- Setubandhasana (Bridge)
- Bhujangasan (Cobra)
- > Ardhamatsyendra asana (Seated half spinal twist)
- Dhanurasana (Bow)
- Natrajasana (Supine dancing shiva)
- Surya namaskar (Sun salutations)
- Chakki Chalanasan (Churning mill pose)

DISCUSSION

- PCOS can be managed by medications and lifestyle modifications.
- Exact correlation of PCOS is not found in Ayurvedic classical texts.
- The various symptoms associated with PCOS show similarities with Raktajgulma, Prameha, Sthoulya, etc.
- *Pushpagni Jaataharini* mentioned in Kasyapa Samhita found to be similar in clinical presentations of this disease.
- *Nashtarthava, Arthavakshaya,* and *Vandhya Yonivyapath* mentioned In *Susrutha Samhita* can also be taken into account.
- Avarana of Artavavaha Srotas due to vitiated Vatha and Kapha leading to Arthavanaasha and Vandhyatvam can be considered as the basic underlying pathology.
- Through *ama pachan* then shodhan (*vaman*, *virechan* and *basti*) and then after *shaman chikitsha* we can manage irregular menstruation and other symptoms of PCOS.

CONCLUSION

PCOS cannot be directly correlated to single disease entity in Ayurveda. Amenorrhea in PCOS can be correlated as Nashtarthava, Yadhochita kala adarsana (delayed cycles) and Alpata (decreased quantity) as Arthavakshaya. Anovulation resulting in Amenorrhoea (Artava kshaya and nastaartav) or Irregular menstrual cycles is described under the Vandhya yonivyapad. Sthoulya and Prameha Poorvaroopa lakshanas are also seen in PCOS. PCOS can be said to Bahudoshaavastha vyadhi along with vitiation of Agni and Srotases. Involvement of dhatus - Rasa, Rakta, Mamsa, Meda, Asthi and Arthava vaha srotases are seen with their Dushti lakshanas. Among Dhatus Mamsa and Medas shows more vitiation among PCOS. Avarana of Artavavaha Srotas due to vitiated Vatha and Kapha leading to Arthavanaasha and Vandhyatvam can be considered as the basic underlying pathology.

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