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A Disease Review on Polycystic Ovarian Syndrome-Approach of Ayurveda

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ABSTRACT

Polycystic ovary syndrome (P.C.O.S) is one of the commonest metabolic endocrine disorders among the women of reproductive age. It is mainly characterized by combination of – Hyperandrogenism, Menstrual abnormalities & polycystic ovaries. It is a frequently associated with insulin Resistance & Obesity. Basically, it is a systemic endocrine & metabolic disorder. Women with PCOS will give a history of irregularity of menses and skin manifestations include, acne, Hirsutism, Acanthosis nigricans, Alopecia, Obesity & sometimes it leads to infertility cases

In Ayurveda PCOS associated with features are closely related with some of Yoni Vyapads- Puspghani *Jataharini*, *Kashtartava*, *Nashtartava* & *Aartavadushti* have some similarities with this disease. The exact disorder is not explained in Ayurveda. It involves imbalance of Trayo Dosha, Sapta Dhatu means various factors at variant levels are involved. So the potential route of treatment is with by following lifestyle changes that is *Dinacharya* & *Ritucharya*, *Nidan Parivarjana* & *Artavajanan*, *Sanshaman sanshodhana Dravyas*. So this paper is approach to explore ayurvedic concept of PCOS.

Key Words *PCOS, Yonivyapad, Aartavadushti, Ayurvedic approach, Chikitsa*

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INTRODUCTION

PCOS is presumably accrescent health hazard in between women of progenitive age group. It is a clinicopathologic syndrome that characterized by chronic anovulation, Obesity features of androgen excess and ultrasonic appearance of multiple small cysts. The Incidence of PCOS is 6-10% among women in reproductive age group¹. It is frequently associated with Insulin Resistance, Obesity & Hyperandrogenism, all of

which can interfere with implantation as well as development of embryo and also attribute to poor quality of egg and making conception more difficult that may lead to infertility².

Several gynecological disorders are described underneath YoniVyapada (*Arajska*, *Bandhya*, *Lohitakshaya*, *Pushpghani*), *Aartava Dushti* and disorders like *Nashtaartava* described by *Sushrut acharya* separately². Here Ayurveda helps to prevent the disease by following life style

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modifications like Dinacharya & Ritucharya by use of hitakar Aahar- Vihaara, Aushadhi and also with Panchkarma. As the disease name suggest, it is group of disorder hence a single Yonivyapada or any single disease cannot be co related with PCOS.

Ayurveda predominance the maintenance of Shuddha Arthava for a fertile period. All regims Rutumati Charya, Dinacharya, Rutucharya helps to achieve & preserve healthy life.

Not following the all Charyas (regimens) bring a lifestyle affected by stress which leads to the access of unhealthy food interrupting the formation of Rasa Dhathu which causes the vitiation all Dhathu especially Medhodhathu (adipose tissue) and Raktadhathu (blood cells). As per Asrayi AsrayaBhavas, Kaphadosha is affected it leads to avarodha of the Srotasa (bodily pathways) which leads to Vata aggravation, obesity, hormonal imbalance and amenorrhea. Pitta Dushti is manifested as hormonal imbalance.

AIMS AND OBJECTIVES

- ❖ To study etiopathogenesis of PCOS and establish its Ayurved Approach.
- ❖ To estimate symptoms of PCOS with reference to yonivyapada & artavadushti symptoms.
- ❖ To find possible treatment of disease as per Ayurveda texts.

MATERIALS AND METHODS

Sushrut Samhita, Charak Samhita and different classical Ayurvedic text books, was thoroughly examined to compile a list of suitable references. Websites are searched to study papers and study related material to PCOS related researches.

Etiopathogenesis:

The exact cause of PCOS is not known. according to modern point of view Insulin resistance & hyperandrogenism plays an important role. As the level of insulin increased in our body leads to decrease in production of SHBG (sex globulin binding hormone) and decreased IGFBP-I this causes increased androgens³.

So, decrease in SHBG leads to increase bio availability of free androgen. Increase level of IGFBP -I leads to increased level of IGF -I. It also alters increases androgen⁴. Increase level of insulin leads to increase IGF-I and this act on theca cells of leading to increased LH mediated androgen formation, increase LH hypersecretion that leads to production of ovarian androgen. In Ayurveda it all occurs due to agni mandya, excessive eating and Kaphakarak Aahara(foods).

Sign & Symptoms:⁵

1. Dysfunction in menstruation typically occurs in PCOS ranging from oligomenorrhoea to amenorrhea, women with PCOS will give a history of infrequent cycles and may be about three to six cycles per year which leads to endometrial hyperplasia & Ca.

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2. Severe acne in teenagers appears to be a common finding of PCOS.

3. Obesity is around 50% of the patients which leads to increase risk of Diabetes Mellitus & CVS in later life.

4. Insulin resistance & hyperinsulinemia are common in PCOS. It is important biochemical sign of PCOS.

5. Abnormal lipoproteins also seen in PCOS patients. In Ayurveda Jathragni is helpful for proper digestion. It makes Aahar Rasa which nourishes all the dhatus. All dhatus have its own agni called Dhatwagni which works at tissue level. When we eat unhealthy food, it vitiates imbalance of Vata and Kapha Dosha which leads to Mandagni & decreases Pachakaagni. Pitta is unable to perform their work and unable to function of its proper metabolism so produced Aahar rasa will not perform dhatu poshana properly. Rasa Dhatu and its Updhatu is Raja, here we will consider raja as aartav (menstrual flow) so if Ras Dhatu is not nourishing properly it leads to Nashta Aartava or aartava kshinata which is the most common symptom in PCOS patients.⁵ The next dhatu is Rakta & Mamsa Dhatu as we know symptoms like acne, complexion, lazy, generalized weakness, acanthosis nigricans, all are the symptoms of PCOS. If meda dhatu affected it will lead to fat deposition which further leads to (sthaulya) obesity, again a symptom of PCOS. Then next Asthidhatu- Kesh is Updhatu as we seen symptoms in PCOS are Hirsutism, greying of hairs, hair fall/alopecia so it indicates asthidhatu

is not nourished properly again shows symptoms of PCOS. Next Majja dhatu helps in nourishes of brain tissues /cells, dushti of majja dhatu responsible for depression, mood swings, & hormonal disturbances again all are the symptoms of PCOS. Last but not the least dhatu i.e. shukra dhatu if it is not functioning properly which leads to the anovulation.

Diagnostic criteria:⁶

Rotterdam criteria for PCOS: -

1. Oligo/anovulation
2. Hyperandrogenism (clinical/ biochemical)
3. Polycystic ovaries (either 12/more follicle or increased ovarian volume $>10\text{cm}^3$) as identified by ultrasound. Diagnosis of PCOS is done after the exclusion of the other causes of anovulation and hyperandrogenism like:

1. Thyroid dysfunction
2. Acromegaly
3. Congenital adrenal hyperplasia
4. Hyperprolactinemia
5. Androgen secreting tumors / Adrenal tumors
6. Drugs
7. Cushing syndrome

a) Therefore, free androgen, serum prolactin, thyroid profile is done. If there is clinical feature of hyperandrogenism and total testosterone is $>5\text{nmol/L}$, 17-OH is estimated to exclude androgen secreting tumors.

Investigation:

1. LH:FSH ratio >3
2. Increased testosterone & androstenedione
3. Insulin resistance, levels raised
4. E1 increased

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5. USG findings as described above

Treatment-

In Modern Practice we advise the patient in following ways:

- Lifestyle Changes/modification and weight loss management.
- In insulin resistance e.g. Metformin advised.
- Ovulation Induction therapy in infertility cases.

In Ayurveda: Ayurveda treats disease by Aahara, Vihara, lifestyle changes, herbal medications and some panchkarma therapies. PCOS mainly involvement of Doshas & Dhatu and their Updhatus, it is not corresponding with several diseases but symptoms resemble with different Yoni Vyapads smillarly Arajka, Lohitkshaya, Pushpghani Jatharini. Ayurveda practices tridoshas so here imbalance of vata dosha results in irregular menstruation and pain. If imbalances pitta dosha results in acne, hirsutism, heart problems and CA. if kapha dosha involves it results in weight gain, cyst, depression like symptoms also involved. So, treatment for PCOS in Ayurveda should be planned with ayurveda pattern

1. Nidanparivarjan (Avoidance of Causative factor): Modification in Aahar-vihara is regularly followed by patients. intake of mithaya aahar like unhealthy junk food strictly avoided. Exercise & Yoga like shavaasan, mandukasan, anulom-vilom helps to reduce weight.

2. Aushadhi (Drugs) like

1. Shatavari play a key role in maintaining the duration of the menstrual cycle, normalize the cycle and blood flow⁷.

2. Ashwagandha it reduces the stress which is the common cause of amenorrhea⁸.

3. Shatpushpa it regularizes periods and increases the chances of ovulation by improving the growth of the follicles⁹.

4. Ashoka used to treat menstrual irregularities, it helps in hormonal balance and the problems like acne, hirsutism¹⁰.

5. Manjishta helps as a blood purifier and balance the kapha & pitta dosha¹¹.

6. Guduchi it fights inflammation, reduce stress, ability to balance blood sugar¹².

7. Latakaranj helps in regulation of menstrual abnormalities like infrequent, irregular or absence of menstrual cycles and some other symptoms of PCOS¹³.

8. Classical formulations like-

- Kanchnaar Guggulu
- Arogyavardhini vati
- Shatavari ghruta
- Pushpdhanwa Ras
- Yograj guggulu

Panchakarma for PCOS: Panchakarma helps to clear Ama and balance Agni.

DISCUSSION

In ayurveda, there are primarily four elements mentioned for conception, with the necessity of sustaining their quality for best pregnancy results.

1. Ritu- the right time (ovulating time)

2. Kshetra is a field (whole reproductive tract)

3. Ambu- a well-balanced diet

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4. Beeja Artava is the most imp of the four factors since the normal physiology of the other three components is dependent on the normal functioning of artava. "streenam garbhoupayogi shyaat artavam Sarva sammtam,". PCOS is a complicated endocrine disorder concerned with obesity, hirsutism, and recurrent anovulation. It causes of infertility & irregular menses.¹³ PCOS is not a single entity in Ayurveda, however it does resemble with different yoni vyapadas pushpaghni jatiharini, shandi yoni vyapad, Charak's & Sushrutas bandhya yonivyapad, and Kashyap's vikuta jatiharini are some of the other names.

PCOD can be avoided by the following of dincharya and ritucharya, as well as pathya aahar, vihar, aushadh.

CONCLUSION

PCOS is a complicated condition in women associated with psychological, reproductive and metabolic features. Insulin resistance and hyperandrogenism both contribute to pathophysiology of PCOS. The direct correlation with PCOS is not mentioned in Ayurveda classic. So, the treatment is planned accordingly by their dosha dushya involvement. To treat a woman with PCOS need balanced diet and exercise for weight reduction as the first line of treatment along with ayurvedic herbal drugs as well as modern medicines depend up on the patients need. It is a Treatable disease with lifestyle changes and medications.

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