

POLYCYSTIC OVARY SYNDROME – THE CHRONIC LIFESTYLE DISORDERS IN WOMEN

Dr. Nikita Jaiswal¹ Dr. Ramadevi G²

P.G. Scholar¹, Professor²,
Department of Prasooti Tantra and Stree Roga,
Shri Dharmasthala Manjunatheshwara College of Ayurveda, Kuthpady, Udupi.*

INTRODUCTION

Poly cystic ovarian syndrome (PCOS) is the most common endocrine disturbance affecting the women between age group of 15 to 30 years. PCOS was first described by Stein & Leventhal in 1935, and insulin resistance is further described by Burghen in 1980. 73% of women suffering from PCOS experience infertility due to anovulation. Chronic anovulation leads to persistent increase in the levels of serum estrogen which is a risk factor for cancers like ovarian cancer, endometrial cancer etc. PCOS has become a burning problem in young women of today's era. We can't correlate any single disease of Ayurvedic science to PCOS, but all the symptoms of this syndrome can be seen in many different diseases as told in our classics. Menstrual irregularities - can be considered as Artava Kshaya. Obesity, skin tags, type 2 DM, hyperadrenogenism – all these symptoms can be considered under Rasa and Medho prodoshaja laxanas.

विकारनामाकुशलोनजिहीयात्कदाचन।
नहिसर्वविकाराणां नामतोऽस्तिध्रुवास्थितिः॥
सएवकुपितोदोषःसमुत्थानविशेषतः।
स्थानान्तरगतश्चैवजनयत्यामयान्बहून् ॥

ROLE OF AYURVEDA

The allopathic line of treatment for PCOS is in the form of hormone replacement therapy or surgical interventions which in term rather tend to have an adverse effect on other systems of the body. Ayurvedic medicine provides on the other hand presents a fair opportunity for such females to regain their normal physiology without having supply of these hormones synthetically but to improve the body's mechanism to produce them. Solution for the disease condition is not the only goal of the Ayurveda, but also to make sure that the route cause is tackled with. This approach to a disease has made the science complete in itself. *Samprapti vighatanam eva chikitsa*- as per Ayurveda breaking the disease process itself is treatment. Our Acharyas have told, rather than naming any disease, it is very important to understand the disease process and plan the treatments accordingly. So here we have made an attempt to understand the pathophysiology of PCOS as per Ayurveda.

NIDANA / CAUSES FOR THE DISEASE

Modern medicine has been able to pinpoint a number of important factors indicating the disease determinants; however the exact cause of the disease is unknown. Some of the probable causes explained in the texts are as follows.

सन्तर्पयतियःस्निग्धैर्मधुरैर्गुरुपिच्छिलैः।
 नवान्नैर्नवमद्यैश्चमांसैश्चानूपवारिजैः॥
 गोरसैर्गौडिकैश्चात्रैः^[3]पैष्टिकैश्चातिमात्रशः।
 चेष्टाद्वेषीदिवास्वप्नशय्यासनसुखेरतः॥
 रोगास्तस्योपजायन्तेसन्तर्पणनिमित्तजाः।
 प्रमेहपिडकाकोठकण्डूपाण्ड्वामयज्वराः॥
 कुष्ठान्यामप्रदोषाश्चमूत्रकृच्छ्रमरोचकः।
 तन्द्राक्लैब्यमतिस्थौल्यमालस्यंगुरुगात्रता॥
 इन्द्रियस्रोतसांलेपोबुद्धेर्मोहःप्रमीलकः।
 शोफाश्चैवंविधाश्चान्येशीघ्रमप्रतिकुर्वतः॥

रसवहस्त्रोतोदुष्टिः

गुरुशीतमतिस्निग्धमतिमात्रंसमश्रताम्।
 रसवाहीनिदुष्यन्तिचिन्त्यानां चातिचिन्तनात्॥

मेदोवहस्त्रोतोदुष्टिः

अव्यायामाद्दिवास्वप्नान्मेद्यानां चातिभक्षणात्।
 मेदोवाहीनिदुष्यन्तिवारुण्याश्चातिसेवनात्॥

Ayurveda has given number of causes for this kind of diseases under the broad heading of santarpanottavyadhi's. 90% of pcos patients will be suffering with obesity, this makes it clear that it is a type of santarpanottavyadhi, caused due to intake of snigdha, madhura, guru, picchila, navaanna, navamadhya, cheshtadweshha, divaswapna, asana sukha, these all nidana's can be probably compared with sedentary life style, junk food, improper work schedules, stress etc which are consumed by almost all women in today's era.

PATHOPHYSIOLOGY:

The whole process of formation of cysts and other symptoms starts from mainly four causes first is abnormality in hypothalamo-pituitary axis, and then comes excessive androgen production, anovulation, obesity and insulin resistance. PCOS is a condition where the increased pulse frequency of GnRH leads to increased pulse frequency of LH, thus there will be increase in LH levels as compared to FSH. Excessive androgen production takes place from ovaries due to stimulation of theca cells by high LH level, hyper function of P450 C17 enzyme, and theca cell stimulation by IGF-1. Hyper-insulinemia causes stimulation of theca cells to produce more androgens, and insulin

inhibits hepatic synthesis of SHBG resulting in more free level of androgens, obesity and hyperprolactinaemia will add up to increase presenting complaints.

Thus these all factors affects follicular growth during the ovarian cycle causing the immature follicles to remain in the ovary. The retained follicles form in to a cyst and with each ovarian cycle a new cyst is formed leading to multiple ovarian cysts. The women having this type of cyst will usually have complaints of oligo and hypomenorrhoea with associated symptoms like increased body weight, irregular menstrual cycle, hirsutism, acne vulgaris etc. These symptoms simulates to the laxanas of rasa pradosh and medo pradosh. Where in laxanas like artava dushti, ati abaddha medhas, khalitya, palitya, and prameha purva roopa laxans are observed.

SAMPRAPTI GHATAKA-

- Dosha – kapha, vata
- Dushya – Rasa, Rakta, Mamsa, Meda, Artavavaha
- Srotas – Rasavaha, Raktavaha, Mamsavaha, Medovaha, Artavavaha
- Rogamarga – Abhyantara
- Adhishtana – Garbhashaya
- Vyaktasthana – initial stage of disease garbhashaya, and when reaches later stage sarvashareera
- Udbavasthana – Amapakwasaya
- Dushti prakara – Sanga and granthi
- Agni - Jataragni, Dhatwagni

Clinical features:

Vandhya, Lohitkshya, Arajaska, Nashtartava, Ksheenaartava, Granthyaartava. These are some of the conditions explained in Ayurveda which simulate the clinical manifestation of PCOS. The clinical features according to modern can be categorized as Ovulatory and menstrual dysfunction: anovulation, oligomenorrhoea or irregular vaginal bleeding. Clinical features of hyperandrogenism: hirsutism, acne, androgenic alopecia. Polycystic ovaries: as evidenced by radiological findings.

CHIKITSA SIDDHANTA:

Modern science have explained treatments like Hormone replacement therapy,^[9] life style modification, exercise etc. whereashormonal replacement therapy will have its own side effects,^[10] there comes the role of Ayurveda.

- As rasa and medo pradoshajalaxanas are seen in this condition so by yukti one can implement the chikitsa which will be helpful for both rasa pradosh and medho pradosh like chatushprakarasamshuddhi (comes under dashavidhalanghana).
- Ruksha teekshna basti, udvartana, vamana, and virechana are going to help in large extent. Ushna veeryadravya`s like tila, masha, surashukti are always helpful in this condition. yoga, meditation, and life style modification plays a very important role in supporting the main line of treatment.

AYURVEDIC MANAGEMENT:

- The first step towards treatment is Nidanparivarjana^[20]. I.e. avoiding the causes which are at the root of the disease. As vatadosha and dushtamedas are keyelements involved, ahara and vihara causing vataprakopa and medovridhhi should be avoided.
- The management approach to PCOS should concentrate on treating Agni- mandya at jatharagni and dhatwagnilev- el and alleviating srotovarodham and ul- timately regularizing the apanavata.
- Amapachan and agnideepana through chitrakadivati/ panchkolachurna/ shadu- shanachurna.
- Vaman Karma- To eliminate vitiated kapha and soumaya substances from body resulting into relative increase in agneya constituents of the body, consequently artava also increases.
- Uttarbasti- Removes the sanga in aarta- vavahasrotas.
- Pathadikwatha described by sushruta in vata-kaphaja artavadushti when given orally along with satapushpa tail matrabasti for seven days after cessation of menstruation is found to be effective. Aampachan, srotoshodhan and vata-kapha shamak properties may be responsible for efficacy.
- Sukumaraghrita described by Acharya vagbhata reduces the size of ovariancyst.
- Satapushpa churna: Balya, Deepana, Pachana, yonivishodhana and helps in ovulation, is the drug of choice in any disease relatedtoartava,vata-kapha shamak,pitta-var dhaka, due to its katutikta rasa, usna- virya and tikshanasnigdha guna
- Narayan tail:with its katutikta rasa, lag- hu, rukshaguna, usnavirya, katuvipaka, vata kaphashamak and ultimately leads to karma such as deepan , pachana, vilayan, anuloman and srotoshodhan resulting in aampachan and vata kaphashamak which may removes sanga and aavarana lead- ing to proper function of vayu regulating beejagranthi karma resulting in beejotsarga(ovulation.)
- Use of various lekhandravayas like takra, vyoshadyasattu as described by Acharya charak along with lifestyle modification including regular exercise is useful in management of medovridhhi. Dietary modifications are also useful.
- Dincharya of the patients should be adjusted according to that described in ayurveda as far as possible.

DISCUSSION:

- According to Ayurveda, PCOS is a disorder involving pitta, kapha &vata doshas. Rasa &medadhatu, rasa, rakta &artavavaha strotasa.
- The given treatment works to improve hormone utilization ®ulates overall hormone balance. The powder of herbal drugs is also quite beneficial in curbing the three aggravated Doshas&bringsbalance&strengthtothemenstrualsystem&ithelpstoregulateartavadhatu.The propertiesofdeepana&pachana drugs help to elevate the Jatharagni, Dhatvaagnias well as Artavaagni.
- The Ayurvedic medicines used have properties of prajasthapana, garbhashayya daurbalyahara, balya bruhana &ojovardhana. There is also reduction of kapha, thus Ayurvedic medicines drugs helps to relieve from symptoms PCOS.
- In basti, the treatment principle is to clear obstruction in pelvis, normalize metabolism ®ulate menstrual system (artava dhatu) , here uttarbasti is most effective treatment in such gynecological disorders. Shatavari oil &sahachar oil contains tila taila & it is very good for

resolving the menstrual problems. Its polysaturated fatty acid which ultimately intensifies the penetration of oil based substances through cell membrane which is composed of lipid bilayer which has inherent capability of movement & this movement is directly proportional to temperature, this may be the reason to heat the oil in mild temperature before administration ofuttarbasti.

- General Basti regulates the nervous control &uttarbasti regulates CNS controlling the pelvic organs. Hence by governing axis through hypothalamus it helps in maintenance of follicular growth (oil of sahadara could be used to help to destroy cysts in ovaries & stimulate the follicular maturity. Oil of shatavari would help to bring balance & strength to the menstrual system because it contains phytoestrogens.)

CONCLUSION

- Rather than going to allopathic medicine which has adverse effect it is better to go as Ayurvedic line of treatment as to be earlier for regularizing menstrual cycle, Restoring shuddha artav, improving the quality of beeja, getting a shreyasi praja.
- The syndrome PCOS cannot be correlated to any one particular disease in Ayurveda. Detailed analysis of PCOS showed dominance of kapha and Vata. Through Understanding the lakshanas, doshic involvement and samprapti, an effective treatment can be planned which helps in pacification of dosha, and samprapti vigatana, which in turn controls the disease effectively. Vamana karma followed by Nastapushpantaka rasa and shatapushpa churna helps in regularising the menstrual cycle, correcting the secretion of Luteinising hormone and follicular stimulating hormone.
- However it is a known fact that shodananga snehapana initiates in losing body weight, this factor will add up to improvement in condition by decreasing in body mass. In this study two patients with more than 6 months amenorrhea showed no improvement. These patients were consuming hormonal preparations for inducing menstruation since 3-5 years. Probably these patients may require repeated shodhana followed by shamanoushadi.
- Nastapushpantaka rasa and shatapushpa churna is effective in the management of PCOS as it initiates in decreasing body weight, normalises the menstrual cycle, and regulates ovulation. A longer observation period may be taken as there will be scope to analyse the effect comprehensively. A comparative study may be taken between Vamana and virechana modalities of treatment.

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