

Polycystic Ovarian Syndrome – An Ayurvedic Perspective

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Abstract:

Women's reproductive health is one of the high priorities for CDC/CDH (center for disease control and prevention). Goal is to improve women's health from menarche to menopause. During reproductive life, state of complete wellbeing in relation to menstrual cycle is menstrual health. Difficulties associated with menstrual cycle impact quality of life including pain, physical discomfort, effect on mental health. PCOS (polycystic ovarian syndrome) is hormonal condition during childbearing age, can affect ability to conceive and overall health. Depending on diagnostic criteria 6-20% of reproductive aged women are affected. Related to reproduction, 'Aartava' in female is the factor responsible for conception. Synthesis, transformation, conduction, excretion of Aartava carried out by Aartavavaha srotasa. Vyandhatwa (infertility) and Aartavanaash (infrequent or absence of menstruation) are abnormalities of Aartavavaha srotasa (Female Reproductive System) according to ayurveda. Manifold concepts such as Yonivyapat, Aartavakshaya, Aartavanaash, kashtartava comparable with several signs and symptoms of PCOS. Study of PCOS in ayurvedic perspective such as etiology, pathogenesis may help to prevent it by normalcy of dosha. Improvement in reproductive health of women may achieved with application of ayurvedic measures in women having PCOS.

Keywords: Aartavakshaya, Aartavavaha srotasa, Polycystic ovarian syndrome, Yonivyapat.

Introduction:

Ayurveda is the science which promote life span with knowledge of life⁽¹⁾. Health is nothing but equilibrium state of Dosha (bodily humors), dhatu (functional elements or tissues) and mala (excretory products) along with normality of Agni (digestive power), proper functioning of Indriya (sensory or motor organs) and mana (mind)⁽²⁾. Deterioration of any of the factor specifically doshas causes disequilibrium leading to diseases⁽³⁾. Saptadhatu maintain functioning of various systems, organs and vital parts of body and play a significant role in development and nourishment of body⁽⁴⁾. Rasadhatu nourishes and replenishes all the tissues. One of the derivatives of rasa having emergence at age 12 in female body is 'Aartava', the factor responsible for conception or reproduction⁽⁵⁾. Related to female reproductive age, dynamic regarding "Aartava i.e formation, normal characteristics, transformation, expulsion have extreme importance. In Ayurveda, abnormalities related to Aartava, aartavavaha srotas explained on the basis of siddhantas (concepts) and treatmental aspects.

Today's era dealing with increasing incidence of infertility. As estimated, 15% of couples having trouble in conception⁽⁶⁾ Globally, 48.5 million couple experiences infertility⁽⁷⁾. Primary ovarian insufficiency, Hyperprolactinemia and polycystic ovarian syndrome are ovulation disorder. PCOS seems to be major endocrinological disorder as contributing factor to infertility. The proportion of women with PCOS is increasing. WHO data suggests about 3-4%, women affected by PCOS. Globally, Modern life style induces insulin

resistance which proved to be cause for increasing incidence of PCOS. Excess insulin leads to PCOS which impairs ovulation. PCOS is difficult to treat according to modern science, so the health risks associated with PCOS are lifelong⁽⁸⁾.

Menstrual irregularity, oligomenorrhea and dysmenorrhea are common symptoms of PCOS. Acharya Sushruta mentioned same symptoms in the conditions "Aartavakshaya". If PCOS is studied with the help of Ayurvedic siddhantas concern with etiology, pathogenesis, treatment, one can overcome major symptoms and thus PCOS.

Material And Methods:

Reviews and References are taken from critical review of available literature of Ayurveda [samhita and Tika] Modern texts related to PCOS and Aartava dushti. Also referred from researches by searching online.

Discussion:

Proper ovulation is one of the important factor essential for conception⁽⁹⁾. According to FIGO about 30-40% causes of infertility concern with ovulatory dysfunction. Ovarian dysfunction is likely to be linked with hypothalamic-pituitary-ovarian axis, PCOS, primary ovarian failure. The disturbance produces oligomenorrhea or amenorrhea due to anovulation⁽¹⁰⁾. Hormonal imbalance affects follicular growth during ovarian cycle which give rise to cyst in PCOS. Several hormones such as LH, Androgen, Estrogen, GnRH, FSH, Insulin, SHBG involved in pathogenesis of PCOS lead to

complexity of disease⁽¹¹⁾. Amenorrhea, oligomenorrhea indicate ovarian dysfunction⁽¹²⁾. Thus PCOS is multifactorial and polygenic condition. Dysregulation of CYP 2 gene, upregulation of enzymes in androgen biosynthesis, Insulin receptor gene on chromosome 19 p 13.2 are involved⁽¹³⁾. About 70 % women have menstrual abnormalities in the form of oligomenorrhea or amenorrhea, 50 % have obesity, 70 % have acne, hirsutism⁽¹⁴⁾. Anovulation leads to infertility.

Menstrual irregularities i.e. oligomenorrhea, amenorrhea with dysmenorrhea which are main symptoms of PCOS due to androgen excess mentioned as *Aartavakshaya*. *Aartava* is the factor responsible for conception in female body. *Yathochit kala adarshanam* (oligomenorrhea), *alpartavam* (hypomenorrhea) and *Yonivedana* (pelvic pain) collectively termed as *Aartavakshaya*⁽¹⁵⁾. *Aartavakshaya* mentioned as one of the *aartavadushti* (vitiated form of *aartava*) and also *Aartavavaha srotodushti lakshana*⁽¹⁶⁾. Reduced *aartava* is unable to conceive⁽¹⁷⁾ same as that of 'anovulation in PCOS result in infertility'. Reduction in menstruation is involved in *Arajaska yonivyapat*, *Lohitakshaya yonivyapat* and *vandhya yonivyapat* and is caused by *vata-pitta* vitiation⁽¹⁸⁾.

As seen earlier, due to multifactorial and polygenic pathogenesis, PCOS is difficult to treat or considered as incurable condition. If we study pathological aspects of PCOS in view of *Ayurveda*, it will be easy to treat and improve fertility rate.

1. Etiology in View of Ayurveda:

Vitiation of dosha is root cause of any of disease. Related to menstrual abnormalities in PCOS, following are etiological factors.

- *Kshinartava* (reduction in menstruation)- *Vata-Pitta dosha* vitiation
- *Aartavakshaya* - *Pitta Rakta* vitiation
- *Aartavakshaya* in *Arajaska yoni- Pittajanya rakta dushti*
- *Aartavakshaya* in *Lohitakshaya yoni- Pitta dosha* vitiation
- *Aartavakshaya* in *vandhya yoni – Vata dosha* vitiation

As a whole, vitiation of *vata* and *pitta dosha* found to be chief etiological factors.

- As *aartava* is derivative of *rasa dhatu* (prime *dhatu*), improper synthesis of *rasa dhatu* and *rakta dhatu* may also causes *Aartavakshaya*.

2. Pathogenesis in view of Ayurveda:

- Obstructive pathogenesis i.e. *Srotorodha* is main event in reduction of *Aartava*.
- Inadequate synthesis of *rasa* lead to *aartavakshaya*.

3. Clinical manifestations in view of Ayurveda:

- *Kshinartava* (reduced menstruation)

- *Nashtartava* (amenorrhea)
- *Vandhyatwa* (inability to conceive)
- *Aartavakshaya* (oligomenorrhea + hypomenorrhea + dysmenorrhea)
- *Kashtartava* (dysmenorrhea)
- *Yonivyapat* (gynecological disorders)

4. Treatmental aspect in view of Ayurveda to enhance fertility:

- As vitiation of *vata* and *pitta* is predominant cause for PCOS, *Shodhan chikitsa* should be done.
- For vitiated *vata dosha*---*Basti chikitsa*⁽¹⁹⁾
- For vitiated *pitta dosha*---*Vaman chikitsa (Ashtang hruday)*
- *Rajonaash* is *vata vikara* ---*Basti chikitsa*
- *Agni chikitsa* –for proper synthesis of *dhatu*
- *Raktavardhak chikitsa*

Conclusion:

As PCOS is multifactorial and polygenic pathologic condition, difficult to treat so incidence of infertility and menstrual irregularities going on increasing.

PCOS interlinked with other endocrine disturbances so it causes long term consequences.

Study of PCOS in *Ayurvedic* perspectives focus over etiological factors, possible events in pathogenesis, clinical manifestations etc in view of involvement of *dosha*, *dushya*, *srotorodha* and *chikitsa*.

One can overcome PCOS with Ayurveda treatment (*agni, dosha dushya, shodhan, aushadhi chikitsa*) if it is understood with the concepts of *Ayurveda*. Thus it will help to maintain Women's reproductive health.

Conflict of Interest: Nil

Source of Support: Nil

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