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CRITICAL APPRAISAL ON PCOD/PCOS & ITS TREATMENT IN *AYURVEDA* AND ALLOPATHY

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ABSTRACT

As Polycystic Ovarian Syndrome (PCOS)/Polycystic Ovarian Disease (PCOD) is multifaceted problem with reproductive endocrine and metabolic dysfunction. PCOS is also called as Stein-leventhal Syndrome after two doctors who first described it in 1935[1] PCOS is one of the most endocrinopathy affecting women.[2] The Rotterdam 2003 criteria defines PCOS as incidence of any two of 3 key criteria namely, oligo ovulation and anovulation, hyper androgenism and polycystic ovaries [PCO].[2][3] PCOS is found to be the most common reason for menstrual irregularities in 4-12% of women of reproductive age [12-45 yrs old].[4][5] 5-10% of women develop PCOS during their teenage or child bearing years.[6] Worldwide PCOS affects up to 6-7% of the population. However, the prevalence specific to the country vary extensively. In India, the incidence of PCOS/PCOD is on the hike; nearly 35% of women suffer from it. Symptoms of PCOS/PCOD are irregular, infrequent periods within 3 or 4 years of starting menstruate light or very heavy bleeding during period weight gain, excessive hair growth to varying degrees on face, chest, and lower abdomen. In this review paper the treatment of PCOS with different medicinal system namely *Ayurveda*, and Allopathy taken into account to compare and analyse best curable medicinal system for PCOS. Allopathy helps in managing and controlling effects, there is hormonal treatment or surgery in treating PCOS while *Ayurveda* can be considered as best cure and promising treatment with no side effects.

Keywords: PCOS/PCOD, polycystic ovaries syndrome, follicles, GnRH, *Ayurveda*, Allopathy

INTRODUCTION

Polycystic Ovarian Syndrome also known as PCOS OR PCOD [Polycystic Ovarian Disorder] is a very common hormonal disorder and a leading cause of female infertility worldwide. PCOS is also called as Stein-leventhal Syndrome after two doctors who first described it in 1935[1] PCOS is one of the most endocrinopathy affecting women.

[2] TheRotterdam 2003 criteria defines PCOS as incidence of any two of 3 oligoovulation keycriteria namely, andan ovulation, hyperandrogenism and polycystic ovaries PCO].[2][3] Poly cystic Ovarian Syndrome (PCOS) is a condition in which women typically have many number of small cysts around the edge of their ovaries. Polycystic ovaries mean the ovaries containing a large number of cysts that are not bigger than 8mm and develop more follicles than normal every month. Polycystic ovary start maturing at least twice as many follicles compared normal most of which enlarge and mature but do not release an egg. The cysts are the egg containing follicles that do not develop properly because of hormone A imbalance.

Some women go on to develop PCOS [Polycystic Ovarian Syndrome] which means they have other symptoms including polycystic ovaries. PCOS may be heredity as well. Studies shows that women with family history of polycystic ovaries are 50% more likely to develop PCOS. PCOS is found to be the most common reason for menstrual irregularities in 4-12% of women of reproductive age [12-45 yrs old]. [4][5] 5-10% of women develop PCOS during their teenage or child bearing years.[6] Worldwide PCOS affects up to 6-7% of the population. However, the prevalence specific to the country vary extensively. In India, the incidence of PCOS is on the hike; nearly 35% of women suffer from it. Symptoms like irregular, infrequent periods within 3 or 4years of starting menstruate lighter very heavy bleeding during period weight gain, excessive hair growth to varying degrees on face, chest, and lower abdomen. Moderate abdominal discomfort during periods, acne, and excessive skin growth on neck or in armpit also called as skin tags. Bone pain [arthralgia] and hair loss [alopecia], constipation, flauntulence, and indigestion. PCOS is also called as polycystic ovary disease [PCOD], Stein-Leventhal syndrome, ovarian hyperthecosis and sclerocystic ovary syndrome.

Aim: To study PCOD/ PCOS in Ayurveda and Allopathy.

Objective

1. To compare Allopathic treatment with Ayurveda.
2. To state that Ayurvedic treatment is best for PCOD/PCOS.

Pathogenesis

Complete understanding of pathogenesis of PCOS is still lacking due to heterogeity of this disorder. There are most likely multiple underlying pathophysiological mechanisms. Various theories have been proposed to explain the pathogenesis of PCOS/PCOD. [7] They are as follows:

a) An alteration in gonadotropin releasing hormone secretion results in increase of LH secretion. [lutenizing hormone]
b) An alteration in insulin secretion; leads to hyperinsulinemia and insulin resistance.
c) Defect in androgen synthesis that leads to increase in ovarian androgen production.

LH (Leutinizing Hormone): LH hyper secretion is a main cause of infertility and miscarriage in women having PCOS/PCOD. Many theories have been introduced for the etiology of over secretion of LH by pituitary gland. These include hypothalamic dysfunction, reduced pituitary sensitivity to gonadotropin releasing hormone [GnRH] and increased pulsatality of

GnRH. Increase in LH leads to increase in androgen production by theca cells within the ovary. [8] [9]

Hyperandrogenism or Androgen excess:

Hyperandrogenism is one of the primary symptoms of PCOS/PCOD. Increased or elevated level of circulating androgen is observed in 60-80% of women with PCOS. [10] [11] [12] [13] [14] [15]

Clinical features of hyperandrogenism in women with PCOS include acne, hirsutism, and androgenic alopecia [hair loss].

Hyperinsulinemia and Insulin resistance [IR]:

Hyperinsulinemia is a condition in which there is excess level of insulin circulating in the blood relative to the levels of glucose. Hyperinsulinemia can result from a various metabolic diseases and condition, one of which is PCOS/PCOD. Whereas insulin resistance is a pathological state or condition in which the ability of cells to respond to normal action of hormone insulin is diminished. Insulin resistance further leads to development of Type 2 diabetes mellitus. [16] 30-40%of women affected with PCOS have impaired glucose tolerance and 10% of women to develop type 2 diabetes mellitus by the age of 40 yrs. [17] [18] Insulin acts collaboratively with LH to enhance androgen production in the ovarian theca cells. It also decreases hepatic synthesis and sex hormone binding globulin secretion, hormone which binds testosterone in circulation therefore increasing the amount of free testosterone which is biologically available.[19][20] Women with PCOS/COD and hyperinsulinemia have free testosterone, but the total concentration of testosterone may be at the upper level of normal or modestly elevated.[21]

Causes

The main cause of PCOS/PCOD is unknown both environmental and genetic factors are implicated. Causes of PCOS are as follows: [22]

1. Genetic susceptibility
2. Raised levels of insulin
3. Hormonal imbalance
4. Contraceptive pills
5. Strong stimulation in adrenal in childhood
6. Obesity
7. Hereditary factors
8. Sedentary lifestyle
9. Stress
10. Diaetes
11. Insulin resistance
12. Hyperprolactinemia
13. Cushing's syndrome
14. Congenital adrenal hyperplasia

Signs & symptoms

Symptoms of PCOS vary from women to women. [23] Some of them are as follows:

1. Infertility- by ovulation.[24] preventing
2. Irregular, scanty, absent menses
3. Amenorrhea [30-40% of women]
4. Oligomenorrhea women]
5. Hirsutism
6. Hyperandrogenemia [85-90%]
7. Acne, oily skin, dandruff
8. Depression or anxiety
9. Pelvic pain
10. Hair loss or of male pattern baldness[21]
11. Weight gain or obesity[25]
12. Metrorrhagia
13. Swollen breasts before period
14. Bleeding with uterine fibroids during menses
15. Neuralgic pain during menses
16. Hysteria
17. Itchy vagina and vulva
18. Heavy periods

19. Sleep apnea
20. Cysts on ovaries
21. Skin tags
22. High blood pressure [26] [27]

Progression:

The condition PCOS is a very common hormonal disorder that can occur any time in women's life. Depending on when it occurs effects vary. PCOS caused during adolescence and adulthood will cause reduced or no periods or menses, polycystic ovaries, obesity, and excess sex hormone levels. Whereas if caused in ageing individuals it causes diabetes, high blood pressure, abnormal blood lipid i.e. cholesterol level also called as metabolic syndrome.[28] The term " Syndrome XX "has been coined as name for PCOS.[29]

Diagnosis:

There are several tests to diagnose PCOS/PCOS. Doctor follows following steps to confirm PCOS/PCOD:

a) Medical history: Menstrual periods, weight changes and other symptoms are observed.
b) Physical Examination: Measure blood pressure. Body Mass Index [BMI], and waist size, checking the areas of increased hair growth for Hirsutism.
c) Pelvic Exam: Examination for enlargement of ovaries or swollen by increase number of cysts.
d) Blood Test : Blood test for hormone androgen and glucose levels.
e) Vaginal sonogram/sonography: ultrasound Use of sound waves to take picture of pelvic area for ovarian cysts and for checking the endometrium thickness of womb.

Treatment

PCOS/PCOD has received scant attention in social science literature. The approach to manage PCOS, first line of treatment is by *Ayurveda*, and Allopathy.

Ayurveda:

In *Ayurveda* there is no direct reference about PCOS but when we go through the *Ayurvedic* literature there are many references which are nearer to signs and symptoms of PCOS. In *Ayurveda* PCOS can be related to *kapha* disorder/*doshas*. *Vata* is responsible for movement of follicle during ovarian cycle the rupture of the ovarian wall release the matured ovum to the movement of fimbriae the finger like projections that guide the ovum into fallopian tubes and movement of ovum towards the uterus.

PCOS is due to *Kapha* blocking *Vata* and *Pitta.* Hence, *Granthiadhar* [cystic swelling], *Arbudha* [glandular swelling] [tumour formation]. *Apanavayudushti* or *Margavarodhjanya* [obstructed channels and transformation process is suppressed]. *Apanavayu* in *Artavavahasrota* becomes *Sanga* or stagnant due to excessive *Kapha* and *Ama* accumulation blocks the channel impeding the flow of *Vata* in the ovarian cycle. *Asvata* is blocked, *Pitta* is also blocked as well, *Pitta* in order to act as the intelligence behind transformation needs the movement of *Vata* in order for its energy to have potential. The accumulated *Kapha* is expressed in formation of cyst in the ovary as it takes on heavy white sticky quality expressing *Kapha* and *Ama.*

Menstrual problems manifest due to aggravation of all *Tridoshas* but mainly due to *Apanavayu*. Therefore it should be treated before *Pitta* and *Kapha* – *Astanga Hrdayam*. Medicines like *Daruhaldi* roots, apple cidar vinegar. Line of treatment in which *Kanchnarguggula, Varunadhi kwath* with bide laxative like *Sagargota* added to these hypoglycemic

drugs. In *Panchkarma* at first *Vaman, Virechan, Bastikriya, Nasyain* induced. Drug or generic preparations like *Ashwagandhaarishta, Ashokarishta, Kumariasava,* M2Tone*, Chandraprabhavati, Abrakhbhasma, Raupyabhasma, Phalghrita* with moderate exercise like *Pranayama, Simhasan, Vjrasan, Shalabhasan,* S*sarvangasan* is also helpful. The treatment are long term in nature apart from being cost effective with no side effects.

Allopathy:

Allopathy treatment depends on basis of hormonal imbalance and the major treatment induces HRT [Hormone Replacement Therapy] where ensuing hormones are administered after evaluation of the patient. Apart from that there is growing misconception that PCOS occurs due to malfunction of the insulin hormone and hence diabetic drugs like Metformin a oldest insulin sensitizer may also be prescribed.[30] Surgery is also exercised where the ovary is pierced or perforated or the cystic tissue is destroyed for better hormonal gain. In taking hormones it further depletes endocrinal system and puts them in sleep. The stuff which has to be naturally released by the body once received with artificial means put the body in a lazy mode. The HRT treatment may give good results but is not recommended in long run as it causes other problems.

The drugs commonly used in Allopathy for treatment in women with PCOS are Metformin which can lower TSH levels and hypothyroidism. [31] PCOS is strongly associated with pre eclampsia, premature birth, more than double risk of GDM and birth of large for gestational age infants. [5] As a part of treatment sometimes a drug called Clomiphene combined with low doses of Dexamethasone a steroid which suppresses androgen production from adrenal glands. An allopathic medicine doesn't have cure, but their medicines to manage PCOS leads to numerous side effects. If the intake of medicines is stopped PCOS reoccurs. Root cause of the problem should be treated and allopathic medicine fails to do that. Allopathic PCOS treatment are not without fair share of side effects including bloating, pelvic pain, night sweat or vasomotor symptoms, blurred vision, pale yellow eyes and skin, malnutrition, heavy menstrual period or bleeding between periods.

DISCUSSION

Now a day, PCOS is the major problem faced by many women. They usually take Allopathy treatment for quick results. But drawback of modern medicine is that it treat with hormonal medicine or suggest surgery. While in *Ayurveda* it uses treatment like *Panchakarma*, Medicinal treatment, *Pranayam*, Diet control etc. As PCOS is multifaceted problem with reproductive endocrine and metabolic dysfunction. PCOS is characterized by infertility, ovarian dysfunction, hyperandrogenism, insulin resistance and chronic anovulation while major metabolic consequences including obesity, type II diabetes and cardiovascular disease affecting 5-10 % of female population of developed countries.

The treatment of PCOS with different medicinal system namely *Ayurveda*, and Allopathy taken into account to compare and analyze best curable medicinal system for PCOS. The treatment generally focuses on management of main concerns such as infertility, acne or obesity. The comaparison of treatment in *Ayurveda*. Allopathy system is considered to find out the system most effective in treating PCOD/PCOS. Conventional treatment systems varies or differs as per the symptoms and

also has some side effects. Comparing Allopathy, and *Ayurveda. Ayurveda* shows best curable effects compared to Allopathy because Allopathy only aims at managing and controlling diseases while *Ayurveda* provides multidimentional treatment.

CONCLUSION

PCOS is an increasing public health problem which is very common and leading cause of infertility in women. Polycystic ovarian syndrome or PCOS is a condition in which a women's level of sex hormone like estrogens and progesterone are imbalanced. Symptoms like irregular, infrequent periods within 3 or 4 years of starting menstruate light or very heavy bleeding during period weight gain, excessive hair growth to varying degrees on face, chest, and lower abdomen. The treatment of PCOS with different medicinal system namely *Ayurveda,* and Allopathy taken into account to compare and analyze best curable medicinal system for PCOS. As Allopathy is a method of treating disease with remedies/medications that produce effects different from those References caused by the disease itself. Allopathic medicines are limited, comparatively *Ayurveda* have various options of medicine without any side effects for every symptom of PCOS. Allopathy helps in managing and controlling effects of PCOS while *Ayurveda* can be considered as best cure and promising treatment with no side effects.

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