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IMPORTANCE OF AAHARA IN AND VIHARA POLYCYSTIC OVARIAN SYNDROME

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ABSTRACT

Polycystic ovarian syndrome (PCOS) is a female endocrine disorder occurring during the reproductive age and affecting approximately 5-12% of the female population. It is most common endocrinopathy in women of reproductive age, resulting from insulin resistance and the compensatory hyperinsulinemia. This results in adverse effect on multiple organ systems and may result in alteration in serum lipids, anovulation, abnormal uterine bleeding and infertility. Improper diet and lifestyle, including mental stress and lack of physical exercise, as well as prolonged and excessive consumption of hormonal contraceptive pills are major causes of PCOS. Therefore, the mainstay of management is changing one's way of life through *Aahara* (diet) and physical exercise (Yoga therapy, meditation, *Pranayama*, etc.).

Healthy dietary strategies, such as limiting caloric intake, avoiding high-carbohydrate diets, restricting fat intake, eating a high fiber diet, properly spacing meals, and avoiding junk food, are crucial for preventing weight gain. Yoga and brisk walking are two forms of physical

activity that are important modifiable lifestyle elements in its management. By implementing all these therapies, PCOS-stricken women's quality of life can be improved, and better metabolic and reproductive outcomes can be achieved.

KEYWORDS: PCOS, Aahara, Vihara Yoga.

INTRODUCTION

Polycystic ovarian syndrome (PCOS) is a female endocrine disorder occurring during the reproductive age and affecting approximately 5-12% of the female population. Polycystic ovarian syndrome (PCOS) may clinically be manifested in young women of reproductive age as oligo-ovulation, biochemical or clinical hyperandrogenism, hirsutism, male pattern baldness, acne, acanthonsis, nigracans and polycystic ovaries. But PCOS has a long prodrome with detectable abnormalities that present as the metabolic syndrome like hyperinsulinemia, obesity, dyslipidemia related to decrease high density lipoprotein cholesterol and hypertriglyceridemia, hypertension, atherosclerosis, increased risk of development of type II diabetes and cardiovascular disease throughout the life of affected women.^[1] Etiology of this disease is found to be both genetic and environmental. The increase incidence of PCOS is attributed to change in dietary habits in most part of world because of noticeable shift from eating fresh home cooked food to ready to eat processed food on daily bases which lacks adequate nutritional value and dietary fibers. Adding to the woes, there is increased use of preservatives and flavoring agents in food disrupts are endocrine system and lead to these catastrophes. Nowadays obesity and insulin resistance are strongly implicated in its etiology. Approximately 60 percent of women with PCOS are obese and 60 to 70 percent have insulin resistance and both are enough to wreak complete havoc on the body.

According to Ayurveda PCOS can correlate with several conditions described in Ayurvedic literature i.e. *Granthi, Artavkshayam, Nashtartavam Pushpaghni, Jataharini, and Raktagulmam, Arajaska Ksheenartava*. In all these conditions *Kapha* and *Vata* are aggravated *Doshas, Medas, Mansam* and *Rakta* are the vitiated *Dushyas*. While analysing clinical features and manifestations of PCOS the disease *Pushpaghni Jathaharini* can be clearly visualized in this case. It is a condition mentioned by *Acharya Kashyapa*; the women may have regular cycles but will be fruitless (anovulation), *Sthoulya* (obesity) and *Lomasa Ganda* (hirsutism) are mentioned as clinical manifestations of *Pushpaghni Jathaharini*. *Vata*

and *Kapha* are the major *Doshas* vitiated here.^[2] *Vatakapha shamak Ahara* and *Vihara* should be used to prevent and treat the PCOS.

MATERIAL AND METHODS

Charaka Samhita, Sushruth Samhita, Kasyap Samhita and different classical Ayurvedic books, was thoroughly examined to compile a list of relevant references. Web sources are searched to locate study papers and related material to PCOS related researches.

RESULT AND DISCUSSION

Lifestyle disorders can be correlated with Santarpanaja Vyadhi of Ayurveda. [3] Santarpanaja Vyadhi are those which arise due to Cheshtadveshi (physical inactivity), Divaswapa (excessive sleep especially in afternoon), Madhura, Guru Aahara including Pishta, Guda, Mamsa, (starchy, non-veg diets, etc). In the view of Ayurveda Jathragni is important for proper digestion. It makes Aahaar Rasa which nourishes all the Dhatus. All Dhatus have its own Agni called Dhatwa Agni which works at tissue level. When we eat junk food, fatty food, it vitiates Vata and Kapha Dosha which leads to Agnimandya and Pachkaagni Pitta unable to do their work and unable to care of its metabolism so Aahara Rasa produced will not nourish *Dhatus* properly. The first *Dhatu* is *Rasa Dhatu* and its *Updhatu* is *Raja*, here we will consider Raja as Aartav (menstrual flow) so if Rasa Dhatu is not nourishes properly it will leads to Aartava Kshaya / Nashta Aartava which is the most common symptom in PCOS patients. The second and third *Dhatu* is *Rakta & Mamsa Dhatu* as we see the symptoms like acne, complexion, lazy, generalized weakness, acanthosis nigricans, all are the symptoms of PCOS. If *Meda Dhatu* is affected it will leads to improper fat deposition which further leads to obesity, again a symptom of PCOS. Then Asthidhatu, Kesh is Updhatu of Asthidhatu as symptoms seen in PCOS are Hirsutism, greying of hairs, alopecia so if asthidhatu is not nourished properly again symptoms of PCOS. Majja Dhatu helps in nourishment of brain tissues / cells, Dushti of Majja Dhatu responsible for depression, mood swings, & hormonal disturbances again all are the symptoms of PCOS. Hence it can be prevented / treated by following Pathya Aahara - Vihara and avoiding Apatya Aahara - Vihara.

Pathya Aahara

Pathyas according to Acharyas are fish, Kulatha, Tila, Masa, Gomutra, Jiggery, Buttermilk & Curd & Pittavardhaka Aahara. Acharyas have advised to include Lahsuna, Jeeraka, Tila &Hingu in diet. Lahsuna is considered as Amrita in Stree Rogas. Ayurveda advices to choose low Glycemic Index (G.I) foods. – Such as cauliflower, tomatoes, onions, peaches, apples,

and grapefruit for those suffering from PCOD. These food items help in lowering the rise in blood sugar levels. The diet plan should be made as per individual requirements and degree of insulin resistance.

Vitamin D plays a physiologic role in reproduction including ovarian follicular development and luteinization via altering anti-müllerian hormone (AMH) signalling, follicle-stimulating hormone sensitivity and progesterone production in human granulosa cells.^[4] (14)

Green Leafy vegetables such as spinach are rich in multiple nutrients and low in calories. They are also rich in Vitamin B. And more than 60% PCOS patients happen to be Vitamin B deficient. Lack of this vitamin is linked to various PCOS symptoms such as irregular periods, excessive hair growth and obesity. Opt for spinach, cabbage greens, kale, broccoli, and other green leafy vegetables.

Omega fatty acids: These fatty acids are essential for regulating one's menstrual cycle. They help in regulating your hormones; they also reduce your body's sensitivity to prolactin— a hormone that can suppress ovulation. Opt for salmon, flaxseed, chia seeds, etc.

Low glycemic index food: Eating low GI food is imperative for weight management. Foods high in GI can cause your blood sugar levels to rise, which has implications for diabetes caused by PCOS. Opt for fruits low in GI such as apples, pear, grapefruit, blueberries, and foods such as oatmeal, sweet potatoes, and legumes.

PCOS also causes type 2 diabetes, in most cases. And whole grains contain fiber, which is necessary for maintaining insulin levels. Also, whole grains such as rye, oats, and buckwheat they slowly release carbohydrates in our body, which does not cause a spike in our sugar levels.

Pathya Vihara

Yoga and Pranayam therapy

Relaxation is the key in PCOS. *Asanas* (Yoga postures), *Pranayam* (breathing exercises), along with certain soothing meditation helps to detoxify and de-stress the system. Yoga helps to open up the pelvis and promotes relaxation while *Pranayam* is a powerful technique that calms the mind.

Asanas in PCOS

Sarvangasana (Shoulder stand)^[5]

It is beneficial for the reproductive system as it promotes blood circulation to the pelvic region thus increasing the efficiency of the reproductive organs. It strengthens the uterine ligaments and improves the functioning of the ovaries. It also helps to keep a balanced mood and calms the mind.

Ardha matsyendrasana (Half Lord of the fishes pose)^[6]

This pose stretches and tones the abdominal muscles and stimulates the abdominal organs and also relieves stress and irritation.

Bharadvajasana (Seated spinal twist)^[7]

This posture strengthens the muscles and organs of the lumbar region.

Prasaritapadottanasana (Wide-legged forward bend)^[8]

This posture flexes the lumbar and pelvic muscles and improves energy and blood circulation to the ovaries. Besides strengthening and stretching the spine it tones the abdominal muscles. It also eliminates fatigue and combats mild depression.

Baddhakonasana (Butterfly pose)^[9]

This posture improves flexibility and stimulates the reproductive and digestive organs. It is a great stretch for relieving stress and tiredness. Regular practice of this posture is beneficial to the kidneys, bladder, prostate gland, and ovaries.

Pranayama for PCOS

The following breathing exercises if performed gently, without straining the lungs are effective in the treatment of PCOS and infertility.

Kapalbhati (Cleansing breath)^[10]

Kapalbhati Pranayama is practiced before meditation to improvise concentration span while practicing meditation. It tones the abdominal muscles and reduces abdominal fat.

Ujjayi (Ocean breath)^[11]

Ujjayi is an audible breath that is often compared to the sound of the ocean. It is emphasized in a Vinyasa style of yoga which is based on breath-synchronized poses as a way to link the breath with the movement.

Anuloma-Viloma Pranayama (Alternate nostril breathing)^[12]

Practice of *Anuloma Viloma Pranayam* reduces mental tension and worries. It is helpful in contemplation and also gives the strength to meditate for several hours. It keeps the mind calm, peaceful and cheerful and helps in overcoming depression.

Meditation and Relaxation exercises for PCOS

Nispandabhava (Unmoving observations)[13]

Shavasana (Corpse pose)^[14]

Both these poses control stress related disorders and calm the mind.

Apathya Ahara and Vihara

Shleshmala Aahara - This includes consumption of foodstuffs like bakery products e.g bread, cakes, pastries, puddings in excess, also rice, fast foods, oily foods, canned foods, processed foods, overuse of cornflakes and breakfast cereals, etc. Refined carbohydrates cause inflammation, exacerbate insulin resistance, and should be avoided or limited significantly.

- 2) Adhyashan- Dalhana has quoted the meaning to have a habit of overeating without leaving a considerable amount of time in between two meals or eating without a proper hunger trigger. Also Ajirna Bhojana Abhyasina" is stated which means to have food before the complete digestion of previous meals is ceased. Thus, the habit of overeating must be strictly avoided. In a survey study, the eating pattern was irregular and the frequency of eating was high in overweight women with PCOS.
- 3) Avyayama- Physical activity and dietary habits in PCOS that women with PCOS do not achieve the necessary physical activity, and mean % energy is more from fat and the dietary glycemic index is higher in overweight obese women with PCOS as compared to healthy weight women with PCOS. The total sugar intake was high.
- **4)** *Divaswapna-* Adequate sleeping habits must be practiced as abnormal duration and timings lead to a disturbed biological clock.

CONCLUSION

Healthy dietary strategies, such as limiting caloric intake, avoiding high-carbohydrate diets, restricting fat intake, eating a high fiber diet, properly spacing meals, avoiding junk food and

Pranayama & Aasana are crucial for preventing weight gain and other symptoms of Poly Cystic Ovarian Syndrome.

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