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ROLE OF PATHYA AAHARA - VIHARA AND YOGIC PRACTICES IN THE MANAGEMENT OF POLYCYSTIC OVARIAN SYNDROME (PCOS)

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ABSTRACT

PCOS itself is not a disease where as it is sum of disorders of hormone which creates moderate to severe health issue in women body. It is both psychosomatic and life style disorder. Undisciplined living style, diet, stress and anxiety leads to increase in disease incidence day by day which affects both physical and mental health and causes certain disorders and, If not cured or treated may lead to frequent abortion or miscarriage. Women with PCOS have a hormonal imbalance insulin resistance and metabolic problems that can include symptoms such as irregular menstrual cycle, acne, weight gain, fatigue, hirsutism, infertility, anxiety etc. *Yogasana* boost energy system inside the body also helps to enhance the functions of reproductive organ by increasing blood flow to the reproductive organs, relieves menstrual discomfort and normalizes the menstrual cycle.

KEYWORDS: PCOS, Pathya Aahara - Vihara Yogic practices.

INTRODUCTION

PCOS is the most common endocrine disorder in a woman of reproductive age. This heterogenous disorder is characterized by excessive androgen production mainly by the ovaries. In PCOS there is formation of cysts in the ovaries or dysfunction of ovaries along with cardinal features of elevated LH or ratio of LH:FSH IS >3:1. It represent a condition in which there is presence of multiple (\geq 12) follicular cysts measuring about 2-9mm in diameter and develop on one or both ovaries and or the ovaries volume exceeds 10 ml.^[1] In Ayurvedic classics there is no direct mentioning of this disease, majority of gynaecological disorders have been described under the heading of Yonivyapada, though some of the menstrual abnormalities like Asrigdara etc., have been described seperately. Acharya Sushruta described Bandhya Yonivyapada whose main feature is Nashtartava.In this condition Artava is not totally destroyed but it is not evident due to obstruction of its channels and the passage is encircled by Vata and Kapha and ultimately results in amenorrhoea.Word Aartava has been used extensively in Samhita in context of menstrual blood, ovum and ovarian hormones. If Aartava is taken as ovarian hormones, the basic pathology of PCOS in context of Avarana by Dosha can be understood. This Aavarna causing hormonal imbalance due to disturbance in homeostasis of HPO axis and that leads to PCOS.

Nidana (causative factors)

PCOS can be corellated with *Nashtartava* and *Bandhya Yonivyapada*. Their is no specific etiology is described in our classics, so general causative factors for *Yonivyapada* can be considered as etiological factors.

- *Mithyachara*: It includes *Mithyaahara* (faulty dietary habits) such as pizza, burger, bread, oily, cold drinks, spicy and junk food consumption and *Mithyavihara* (abnormal life style) which includes sedentary life style, *Diwaswapna, Ratrijagrana*, stress, competition pressure and other *Mansikbhawa* like *Irshya, Krodh, Dwesh*. These all factors ultimately cause obesity, which play a very important role in appearance of this particular disease.
- *Bijadosha:* It includes various types of abnormalities such as genetic as well as chromosomal.
- *Daiva*: Daiva includes the causes that are idiopathic or unknown.
- **Pradushtaartava:** The word Aartava should Dysregulation of CYP 17 be regard for ovarian hormones. As menstrual blood is a result of cyclic endometrial shedding under the influence of various hormones of HPO axis. Dysregulation of CYP 17, the androgen forming enzyme in both adrenals and ovaries may be the central pathogenic mechanism underlying hyperandrogenism.

These all factors leads to pathogenesis of disease.^[2]

Aim: The aim of this article to describe role of *Pathya Aahara Vihara* and *Yogic* practices in the management of PCOS.

Symptoms of Pcos

- 1. Oligomenorrhea and amenorrhoea.
- 2. Dyspareunia Painful coital act.
- 3. Infertility due to anovulation.
- 4. Acne, oily skin.
- 5. Hirsutism-Presence of terminal coarse hairs in females in a male like distribution.
- 6. Acanthosis- dark patches of skin tan to dark brown or black.

RISK FOR PCOS

- 1. Insulin resistance Insulin is a hormone that regulate or control the amount of sugar (glucose) in the blood.With insulin resistance ,the body's cells don't respond normally to insulin.Glucose can't enter the cells as easily,so it builds up in the blood which can lead to type 2 diabetes.
- 2. Infertility -Large amount of testosterone is secreted in PCOS which possibly prevent ovaries from releasing an egg each month,thus causing infertility.
- 3. Hypertension
- 4. Dyslipidemia
- 5. Weight gain
- 6. Psychic symptoms like anxiety, depression, insomnia, loss of concentration.

Many women with PCOS demonstrate challenge to feminine identity and body image due to obesity, acne etc and these all symptoms and risks compromise their quality of life.

Yogic Practices in PCOS and its Benefits^[4]

By practicing specific techniques such as *Yoga* postures (*Aasans*), breathing techniques (*Pranayama*) helps to regulate the endocrine glands in the body there by beneficial in maintaining the hormonal balance, adrenal and cortisol level of stressed out PCOS females.

- Suryanamskar: Suryanamskar helps to regularizes the menstrual cycle by direct massaging of glands and increasing blood flow to organ. Suryanamskar brings down the blood sugar level, improves metabolism, lipid profile and result in weight reduction.
- **Baddhakaonasana:** This Asana works on pelvic region and enhances the relaxation which leads to stress reduction and eliminates discomforts related to mensturation.
- *Chakki chalanasana:* It influences the endocrine glandular functions which results in enhancing the efficiency of hormonal secretions.
- *Paschimottanasana*: This *Asana* stretches the lower back, hips, hamstrings and relieves stress.It also tone the abdominal pelvic organs, regulates the menstrual cycle and improve fertility.

- *Naukasana:* This *Asana* enhances the functions of the ovaries by increasing blood flow to the reproductive organs and also helps in reducing the stubborn
- *Halasana:* It improves metabolism and reduces belly fat which regularize menstrual cycle.
- *Bhujangasana:* This *Asana* stretches all the abdominal organs as a result enhances the blood flow to the pelvic organs and boosts the ovarian function.
- *Dhanurasana*^[5]: This *Asana* normalizes the menstrual cycle and relieves menstrual discomfort by stimulating the function of reproductive organs.
- Shavasana: Shavasana is a relaxing posture which is beneficial for PCOS because it helps to relax the body and mind and relieve stress and anxiety effectively.

Breathing techniques (Pranayama)^[6]

- Anulom Vilom (Nadi Shodhan Pranayama): Nadi means 'Channel' or 'flow' of energy and Shodhana means 'Purification'. Nadi Shodhana, therefore means that Practice which purifies the Nadis'This Pranayam increases the vitality and lowers the level of stress and anxiety by harmonizing the Prans.
- **Brahmri Pranayama:** Relieves stress and cerebral tension so help in alleviating anger, anxiety, and insomnia including the healing capacity of the body. The vibration of humming sound creates a soothing effect on the mind and nervous system.
- *Kapalbhati Pranayama*^[7]: *Kapalbahti* is basically a type of *Shatkriya* .It is derived from two words *Kapal* meaning forehead and *Bhati* means light. This breathing technique increases blood circulation to organs and improving oxygenation to tissue and cleanses the body as whole. It reduce abdominal fat This breathing technique corrects glandular secretions and regulates brain pancreas endocrine pathway, correcting features of metabolic syndrome, hyperglycemia and dyslipidemia.

PATHYA - AAHARA

Treatment in Ayurveda for PCOS should be planned with following consideration.

- Nidan Parivarjana: It includes elimination of both *aharaja* as well as *viharaja nidana*.
- Prefferably low glycemic index foods should be taken.
- Food products which have the property of *deepana* pachana, vata anulomana and kapha shamaka.

Rules of healthy diet and life style

- Avoid junk fried, cold drinks and packed food/Excessive fats/sugar and carbohydrates.
- Avoid plastic packaging and use tin container.
- Eat freshly prepared food.
- Walk for 30 minutes daily at least five days per week.

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- Include *Yoga* and *Pranayama* in daily routine. (Initially for 15 minutes and gradually increases)
- Bed time and wake up time should be fixed accordingly and sleep of 6-8 hours is required.

Early Morning: One should start a day with

- Drinking warm water.
- Drink one glass of water having one tsf of chia seeds soaked overnight. (Chia seeds contain more than 60% omega 3 fatty acids and 20 % protein. It improve egg quality from ovary and thus improve fertility and also balances testosterone level.^[8]
- Soak one tsf *Methi* seeds in one glass of luke warm water overnight and drink it in morning and chew the seeds too.(Studies showed that ovary volume and cyst size were significantly reduce by the use of seed extract of *Methika*).^[9]

Breakfast: In breakfast take

- Yava(lekhan,agnivardhak,kapha janya vikar nashaka)/bajra/puraan godhoom chokryukt atta (laghu kaphahar) roti with Broccoli, Cabbage, Mushroom, Cauliflower,Tomatoes, Bhindi, Green beans,carrot (having low GI index which lowers insulin resistance and glucose level and prevent the incidence of DM 2).
- Cheela with vegetables: For the flour use besan/makki ka aata/barley and for vegetables use methi,grated carrot,beetroot,spinach etc(use only one tsf of ghee for cooking).
- **Poha:** It is a good source of iron, antioxidant, rich in fibre, essential B vitamins.
- **Oats:** Oats are rich in fibers that helps to lower blood sugar level and cholesterol level because of the soluble fibre found in oats which slows down fat and sugar absorption.

Oats are great source of B vitamins which reverses the PCOS in women by increasing the progesterone levels.

Between Breakfast and Lunch

Take seasonal fruits sprinkle with trikatu churna/panchakol churna.

In Lunch and Dinner go with the meals especially containing

Puraan Rakta shali chawal (tridosha nashaka) with (Chana dal,Soya beans, Kidney beans, Masoor, Yellow Moong dal,Chick peas, Moong,Kala chana having low GI index) with lahsun/pudeena chatni.

Yava(lekhan, agnivardhak, kapha janya vikar nashaka)//bajra/puraan godhoom chokryukt atta (laghu kaphahar) roti with Broccoli, Cabbage, Mushroom, Cauliflower, Tomatoes, Bhindi, Green beans, carrot (having low GI index which lowers insulin resistance and glucose level and prevent the incidence of DM 2).

At Bed Time

Take 1/2 tsf of cinnamon powder with luke warm water.(cinnamon improve insulin sensitivity).

1 glass low fat milk with turmeric powder (antiinflammatory, anti-oxidant, reduces chances of DM2).

Seed Cycling^[10]

Seed cycling is the rotation of different edible seeds in to the diet at different times in menstrual cycle Consumption of these seeds have been found to help in relieving symptoms of PCOS.

The first 14 days represent the menstrual and follicular phase.During this phase use 1 or 2 tsf of freshly grounded flax seeds and pumpkin seeds.

Flax seeds are rich in lignans (phytoestrogens), plant compounds that mimic estrogen thus assists in eliminating extra androgen produced by the ovaries and balancing the level of female hormones. These seeds are also good source of dietary fibre and omega -3 fatty acids which contribute in reducing sugar and cholesterol level as well as reducing inflammation and risk of metabolic disease.

Pumpkin seeds contains essential fatty acids that helps in regulating hormonal function and menstrual cycle. These seeds also helps in reducing hair loss as well as cholesterol levels as they contain beta -sitosterol which inhibits the enzyme that converts testosterone to DHT.

Second half of menstrual cycle is luteal phase (15-28 days). During this phase use black sesame seeds and sunflower seeds.

Sesame seeds are good source of thiamine, niacin vitamin B6, phytoesterol, calcium and magnesium that helps in regulating hormonal imbalance by increasing progesterone and due to high zinc content of sesame seeds, they act as hormone regulators , helps in ovulation and thus relieve symptoms associated with mensturation.

Sunflower seeds contains vitamin E that boosts progesterone level that promotes formation of strong endometrial lining.

Follow this seed cycling for 3-4 months for best results in balancing the hormones.

CONCLUSION

PCOS is a multi -faceted problem with reproductive, endocrine and metabolic dysfunction which has serious adverse effects on the health of the female and their quality of life. The life style modification, freshly home cooked healthy diet(*Kapha nashak*, *Vata Anulomaka*, *Deepana* and food having low glycemic index) and with regular practice of *Asana* and *Pranayama* in daily life routine are found to be effective in reducing the symptoms of PCOS or even root cause of PCOS.

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