



“Polycystic Ovarian Syndrome Benefitted by Yoga.”

Gayatri Ramesh Patil*¹, Aayushma², P.R. Kanade³

1. PG Scholar,
2. Lecturer,
3. Guide and HOD

Stri Rog And Prasuti Tantra Department,
PMTS Ayurved College , Shevgaon, Dist. Ahamadnagar, Maharashtra
*Corresponding Author: gayatripatil333@gmail.com ; 8237316448

Abstract:

Now a days PCOS is one of the commonest problems of reproductive age caused by hormonal imbalance. Aims and Objects: To Study PCOS. To assess the effectiveness of Yoga in management of PCOS. To highlight the key messages. Conclusion : Weight reduction is main preventive and therapeutic potential to combat with this. It can be achieved by incorporating lifestyle modifications. Ayurveda dietary regime the wholesome food (Pathya Ahar) and Yoga interventions mentioned in Ayurveda literature are main key

Keyword: , PCOS, Ayurveda Yoga, obesity.

Introduction:

Ayurveda is an ancient science and has explained about all the things in determination of health. Polycystic ovarian Syndrome (PCOS), an emerging lifestyle disorder. It involves multiple systems affecting 5-10 % of the women exhibiting the full-blown syndrome of hyperandrogenism, chronic un-ovulation, and polycystic ovaries. PCOS is a psychosomatic disorder of uncertain etiology characterized by Obesity, un-ovulation associated with Primary or

Secondary infertility, hirsutism, abnormal menstrual pattern, increased incidence of pregnancy loss, and pregnancy related complications. So, it is important to provide Psychic and somatic treatment for complete remission of PCOS.

Modern science has limitations to cure PCOS. They provide symptomatic treatment for it, which has unsatisfactory results lots of side effects and are cost effective. It also includes ovarian drilling. Now on other hand by Yoga practice our divine ancient science cures PCOS without any side effects and free of cost.

Yoga is a complete prescription for the healthy body and mind which can destroy the root cause of PCOS i.e. Obesity and stress. More over yoga is a great stress buster stress in women life can even lead to an unwanted weight gain. Entering into peaceful state lowers the production of the stress hormone cortisol which is one of the most important causes for storage of fat in the body. Yoga basically encourages one step outside of the comfort zone to better understand one's self from a very different perspective, optimistically. Daily yoga for 30 minutes, meditation and Asana helps in weight reduction and stress management which ultimately stabilize the normal

function of hypothalmo- pituitary – ovarian axis and cure PCOS.

●Sign and symptoms

Menstrual disturbance: Primary amenorrhea. Secondary amenorrhea. Oligomenorrhea. → **Infertility:** Due to lack of ovulation.

High level of masculinizing hormones: Acne, Hirsutism, Hypermenorrhea.

Metabolic syndrome: Obesity, Insulin resistance

Other symptoms: Oily skin, Dandruff, Skin discolorations, High level cholesterol, PCOS starts in adolescence but unfortunately, not always diagnosed at that age.

Clinical Presentation of PCOS Adolescent - Menstrual Irregularity, Cosmetic concerns i.e. Acne, hirsutism and hair loss Reproductive- Infertility, Early Pregnancy loss, during pregnancy (PIH and GDM) Menopausal- Metabolic Syndrome, Ca Endometrium

●What is needed after clinical diagnosis PCOS?

- 1) Body weight
- 2) Ideal body weight
- 3) Body Mass Index (BMI)
- 4) Lipid profile
- 5) Fasting blood glucose
- 6) Fasting insulin levels
- 7) Blood pressure
- 8) Medications

Aims and Objects:

1. To Study PCOS.
2. To assess the effectiveness of Yoga in management of PCOS.
3. To highlight the key messages.

Materials and Methods:

- Ayurvedic literature
- Modern literature,

- Magazines and research journals as well as PUBMED, MEDLINE database.

Discussion :

What is Yoga?

Yoga is a psycho-somatic spiritual discipline for achieving union and harmony between our mind, body and soul by practicing specific techniques such as Yoga postures (Asanas), Breathing techniques (Pranayam) and Meditation (Dhyana) to attain highest level of consciousness. Documented scientific evidences strongly indicate that yoga has preventive as well as curative potential. Being a safe therapeutic modality, it can be used as an effective lifestyle adjunct to medical treatment to improve the quality of life in PCOS subjects.

Acharya Charak has greatly emphasized the importance of physical exercise (Vyayam) in oversaturation disease (Santarpanoth Vyadhi) and quote regular exercise (Vyayam nitya).¹ According to study conducted by C.L. Harrison et al. Physical activity has been reported to ameliorate anovulation, insulin resistance, hypertension and high lipid profile in women with PCOS.² Researches has also reported the effect of yoga program (consisting of Asanas, Pranayama and Dhayna) and conventional physical exercise on glucose metabolism and lipid profile in PCOS subjects after practicing it daily for 1hour for consecutive 12 weeks and found that yoga was more effective than conventional physical exercise in improving glucose, lipid, insulin sensitivity.³

Yoga Poses (Yogasanas) Yoga poses (Asanas) designed for PCOS help in opening up pelvic area and promote relaxations.

- Suryanamshkar - It is an ancient yogic method to worship sun and consists of series of postures (Asanas) with breathing pattern. It balances the whole endocrinal system by direct massaging of glands and increasing blood flow to organ thus regularizes the menstrual cycle.⁴ Sun salutation significantly decreases blood sugar level, increases insulin sensitivity, improves lipid profile and results in weight reduction, improved BMI, low waist hip ratio.⁵
- Suptbandhkonasan (Reclining Butterfly Pose) - Stimulates abdominal and pelvic organs like ovaries, urinary bladder, stretches inner thighs and groin which helps in relieving symptoms of stress and menstrual irregularities.⁶
- Halasana (Plough pose) - It improves cardiovascular health and menstrual irregularities by reducing belly fat.
- Dhanurasan (Bow pose) - It is the best pose to reduce body fat and weight as it stretches the abdominal muscle to fullest of their strength.
- Bhujangasana (Cobra pose) - This asana exerts pressure over the abdomen and boosts the ovarian functions.
- Padmasan (Lotus pose) - This asana stretches the pelvis region.
- Naukasana (Boat pose) - This asana exerts pressure over the abdomen and corrects the functions of organs present in and around the pressurized area. Probable mode of action of yoga poses (Asanas) can be explained by various researches and hypothesis. Yoga therapy focus on energy system present in the body with numerous chakras. Yoga poses like forward bending and backward bending increases second chakras energy flow called as seat of creation where reproductive organs are present. Yoga poses stretches abdominal region which increases blood flow towards

reproductive organs and relieves any kind of tension around reproductive organs. By relieving stress yoga poses helps in improving ovulatory functions.⁷

Yogic practices improve physical and mental health through regulation of hypothalamic pituitary adrenal axis, sympathetic nervous system and modulates neuroendocrine axis. Schmidt et al. found that following yoga therapy there is reduction in urinary excretion of adrenaline, noradrenaline, aldosterone, serum testosterone and LH levels indicating optimal changes in hormones.⁷

Breathing Techniques (Pranayama)
Pranayama is control of breath. Prana is vital energy and Ayam means control. Regular practicing Pranayama techniques increases life span and maintains health by controlling the process of breathing.

- Kapalabhati Pranayam - Kapal means forehead and Bhati means shining. This breathing technique increases blood circulation to organs, corrects glandular secretion and combats oxidative stress. It reduces waist and hip circumference and reduces abdominal fat. This breathing technique regulates brain pancreas endocrine pathway correcting features of metabolic syndrome. Being abdominal respiratory exercise, it directly stimulates pancreas to release insulin and counteract hyperglycemia it also helps in selfhealing of pancreatic cells thereby increases utilization of glucose in tissues.⁸

- Anulom vilom (Alternate nostril breathing) - This breathing technique purify the subtle energy channel (Nadis) thus enabling smooth flow of vital energy (Prana). It calms the mind and body by relieving stress.

- Bhramri - breathing technique to relieve mental tension, agitation and stress. Researchers have proved that practicing

Bhramri regulates normal functioning of endocrinal system.

Controlled breathing techniques tones up nervous system, improves emotional stability eliminate anxiety, improves selfesteem and increases insulin sensitivity.

Meditation (Dhyana) – Meditation is integral part of yogic practices which achieves harmonious balance between body and mind. This breathing technique relives symptoms of PCOS by calming and soothing the mind. Meditation is a practice where an individual focuses their mind on a particular object or activity to achieve mentally clear and emotionally calm state. A study reveals that transcendental meditation modulates physiological response to stress. It significantly reduces blood pressure and insulin resistance components of metabolic syndrome.¹¹

Conclusion:

Now a days PCOS is one of the commonest problems of reproductive age caused by hormonal imbalance. Weight reduction is main preventive and therapeutic potential to combat with this. It can be achieved by incorporating lifestyle modifications. Ayurveda dietary regime the wholesome food (Pathya Ahar) and Yoga interventions mentioned in Ayurveda literature are main key. Breathing techniques (Pranayam) helps a lot in reliving the symptoms of PCOS related to deep rooted mental stress and keep the individual high to fight with this syndrome. Thus, yoga increases the lifestyle and fertility rates in PCOS.

Ethical committee permissions details:

N/A

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postprandial glycemia and insulinemia in healthy young subjects. Indian Journal Physiol Pharmacol 49:319-324.

Conflict of Interest: Non

Source of funding: Nil

Cite this article:

“Polycystic Ovarian Syndrome Benefitted by Yoga.”

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Ayurlog: National Journal of Research in Ayurved Science- 2020; (8) (4):01- 05