

OCCURRENCE OF PCOS IN SEDENTARY LIFESTYLE

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ABSTRACT

PCOS - Polycystic Ovarian Syndrome is a multifactorial disease involving endocrine and metabolic aspects. It is also known as Stein - Leventhal Syndrome. Prevalence rate of PCOS is 4% - 20% globally effecting women of reproductive age group. Menstrual abnormalities such as amenorrhoea, oligomenorrhoea, menorrhagia, Anovulation, infertility, obesity, excessive hair growth, acne are the characteristics of PCOS. PCOS is mainly as a result of Hyperandrogenism that is excess formation of androgens and insulin resistance which leads to deviation in HPO axis causing hormonal imbalance and menstrual irregularities. Due to excess production of androgens, follicular growth is arrested forming multiple cyst making ovaries bulky and lazy. A sedentary lifestyle is a type of lifestyle with no or irregular physical activity. A person adopts

a sedentary lifestyle called as a slob or couch potato and this condition prevails commonly in both the developed and prolonged hours, watching television, playing video games, little or no vigorous physical exercise. Polycystic Ovary Syndrome (PCOS) is strongly **associated** with a sedentary lifestyle, though inactivity is **not the sole cause**. Evidence shows higher prevalence and more severe symptoms of PCOS among women with low physical activity.

KEYWORDS: PCOS, sedentary lifestyle, couch potato.

INTRODUCTION

POLYCYSTIC OVARIAN SYNDROME (PCOS) is a multifactorial and polygenic condition. PCOS is the most common endocrine disorder of reproductive aged woman and

affects approx 4 to 12%. Although symptoms of androgen excess vary between ethnicity, PCOS appears to equally affect all races and nationalities.

It affects about 10% of women in reproductive age. The worldwide prevalence of pcos ranges from 2.2 to 26%. According to national health portal of india. The prevalence rate of PCOS in mumbai was noted to be 22.5%.

- Diagnosis is based upon the presence of any two of the following criteria of ASRM/ESHRE.
 - 1) Oligo and /or anovulation,
 - 2) hyperandrogenism clinical or biochemical,
 - 3) Polycystic ovaries as per obesity is very common finding in PCOS parients.

Polycystic ovaries were only recognised as a typical manifestation of PCOS during the 2003 Rotterdam Conference.^[1]

Sedentary behaviours may be represented by both their posture (sitting or reclining), and smaller expenditure of energy which ranges from 1.0 to 1.5 METs (where one MET represents the average resting energy expenditure of a young, healthy adult—i.e., 3.5 ml/kg/min). Sedentary life style means irregular or no form of physical activity ultimately results in weight gain and elevated blood cholesterol.^[2]

- **Overall prevalence of PCOS:** ~6–10% of women of reproductive age worldwide (varies by criteria and population).
- **Sedentary lifestyle effect:** Women with low physical activity have a **significantly higher risk** of developing PCOS and worse symptom severity.

A sedentary lifestyle does not directly cause PCOS, but it **significantly increases its occurrence and severity** by promoting insulin resistance, obesity, and hormonal imbalance. Active lifestyle acts as a **protective and therapeutic factor**.

MATERIALS AND METHODS

Authentic classical texts of ayurved, classical manuals and textbooks of mental disorders, published articles from Ayush Portal, PubMed, and other peer reviewed journals.

RESULTS

The detailed analysis of PCOS is discussed here, the occurrence of PCOS in sedentary lifestyle is also elaborated here.

- PCOS-afflicted women are more likely to develop a number of illnesses, such as endometrial cancer, depression, obesity, metabolic syndrome, type 2 diabetes mellitus, cardiovascular disease, and impaired glucose tolerance.
- The diagnostic symptoms of PCOS are anovulation, hirsutism, sonographic findings suggestive of cyst in ovary.
- PCOS is a highly complex endocrine disorder.
- It is a leading cause of infertility, menstrual disturbance and is associated with obesity, hirsutism and chronic anovulation.
- PCOS can't be correlated with a single entity in Ayurveda but has some resemblance with pushpaghnijatiharini. Others are shandi yoni vyapad, bandhya of Charak, bandhya yoni vyapad of Sushruta, vikutajatiharini of Kashyap.
- Obesity is the main cause and symptom which can be prevented by following dincharya and ritucharya and can be reduced by pathyaahar, vihar, aushadha and restriction of apathyaaaharvihar
- It is a complex disorder debilitating self-esteem of a woman by changes in physical appearance as well as affecting mental stability. Changing life style, dietary habits, stress and impatience has led to negative impact on health causing numerous disorders.
- PCOS is a classic example of lifestyle disorder which needs to inculcate *Ayurvedic* modifications. *Ayurveda* is a blessing as the guiding principle is to cure both physical and mental health and so there is an immense need to heal up the health loss and prevent further deterioration.
- In India 9.3% of women are diagnosed with PCOS. High androgen levels, irregular menstruation, and tiny cysts on one or both ovaries are the hallmarks of PCOS which is a complex condition. Changes in lifestyle, unhealthy eating patterns, inactivity, and stressful life events are contributing causes to PCOS. Reproductive health of a woman is disturbed due to PCOS.
- PCOS causes weight gain, irregular menstruation, and physical appearance changes that exacerbate psychological issues. Therefore, early identification is crucial to preventing more serious consequences that could result in metabolic dysfunction.
- Recent researches state that Sedentary Behaviour (SB) has in an escalated state exhibits

that a multitude of serious health risks linked to "prolonged" and "excessive" sitting. Sedentary Behaviour science is still emerging, however the evidence to date is compelling. A variety of studies warn that sedentary lifestyles are likely to be causing as many deaths as smoking. Senescent cells are special type of cells called contribute to diseases associated with age.

- Many researchers states that exercise restrains premature senescent cell accumulation and defends against the harmful effects of an unhealthy diet as well as the deficiencies in physical, heart and metabolic function. Inadequate physical activity is one of the foremost reason of preventable death worldwide.^[3]
- Technology has brought about more inactive modes of transit, caused an increase in desk jobs and has developed more activities that can be done while sitting (i.e. watching TV, surfing the web, playing video games). Ironically, sitting down to work can actually lead to health complications like PCOS. This review poses overall reasons for sedentary lifestyle and PCOS.

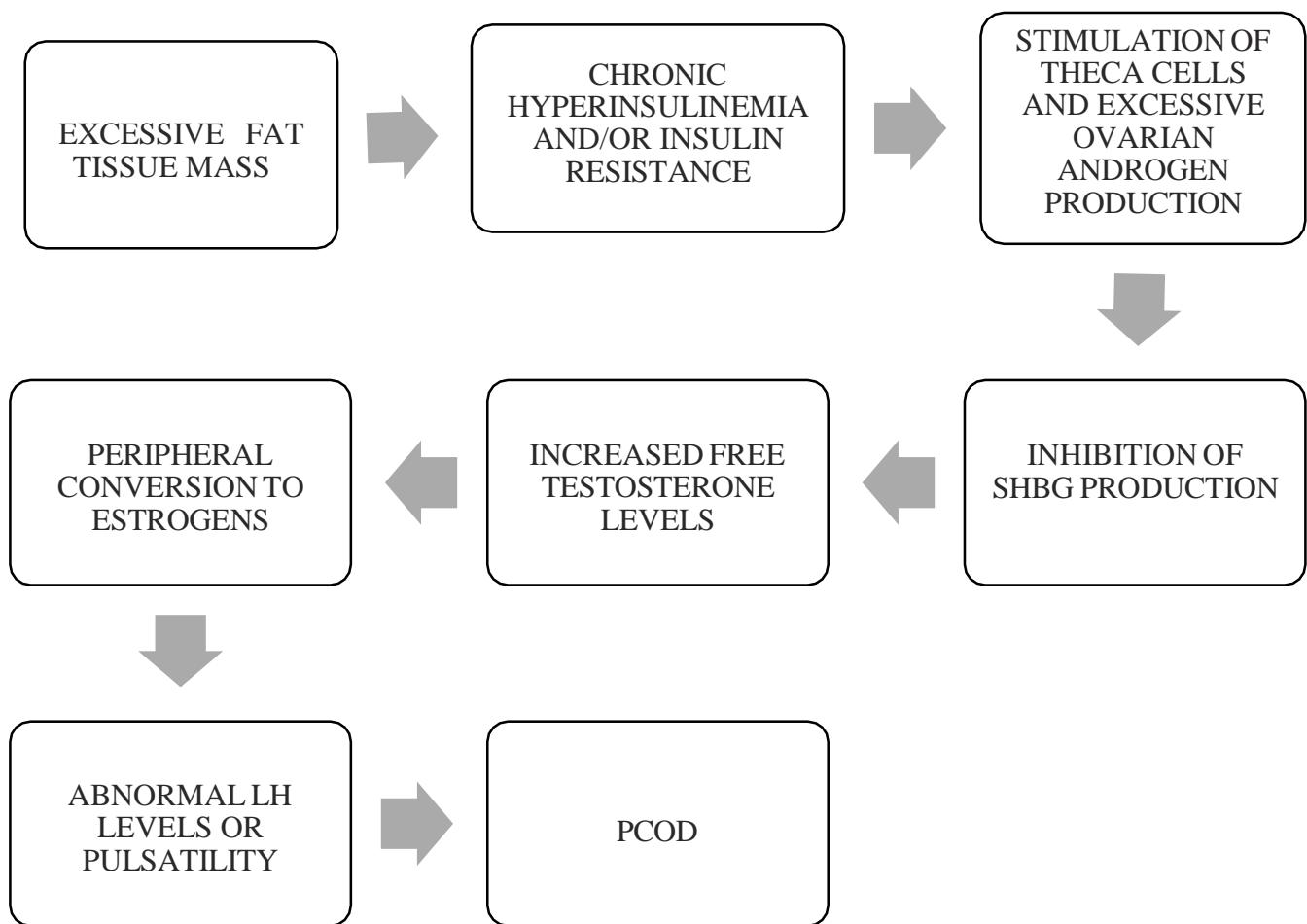
DISCUSSION

This chronic and heterogeneous disorder manifests itself as menstrual dysfunction, infertility, hirsutism, acne, and obesity. It describes a condition where at least one ovary has an ovarian volume greater than 10 mL and at least one ovary has an estimated ten small cysts, with diameters ranging from 2 to 9 mm, develop. It is usually only diagnosed when complications develop that significantly reduce a patient's quality of life (e.g., hair loss, alopecia, acne, and infertility-related problems). According to a systematic screening of women using the National Institutes of Health (NIH) diagnostic standards, 4–10% of reproductive-age women are predicted to have PCOS worldwide.^[4]

Inadequate physical activity increases the loss of lean muscle tissue causes tough task to perform daily and instrumental activities. Loss of vital lean muscle tissue means the body weight will not be maintained in proper and leads to disturbances in our vital body function. Bones, like muscles, needs regular exercise for sustaining their mineral content and strength. Physically inactive persons confront bone loss disease in very fast manner. People with sedentary life style are more likely to become depressed. Physical activity acts as energy booster to diminish mood swings and aids a person to maintain a sense of emotional well being. Prime factor to avoid the hazards of unhealthy living is to acquire a regular dose of physical activity.^[5,6]

Obesity v/s PCOD

Obesity is also regarded as a possible basis for the development of PCOD. It is well known that fat tissue contains significant amounts of aromatase and may thus efficiently convert androgens into estrogen. This leads to excess androgen production causing effect on hormones.^[7]



Preventive measures

1. Active state

By setting alarm one might be actively wake up early in morning with regular task performance. Exercise will rejuvenate our body makes to do our daily work with anxious free state.

2. Walking Meetings

Regular walking by moving our legs with team may reduce the stress to a greater extent which makes our body sends blood to the brain. Additionally weight loss also could be obtained.

3. Walk and Talk

Instead of emailing or chatting in internet for long periods, visit to their home directly and spending time may stop being a couch potato. Ordering through phone might be cut off and perform regular walking for shopping.^[8]

A cross-sectional study found that women with PCOS had a **much higher rate of sedentary lifestyle** compared with non-PCOS women.^[10]

A lack of physical exercise or sedentary lifestyle is a common risk factor associated with PCOS phenotypes, alongside obesity and unhealthy diet.^[11]

CONCLUSION

To treat a woman affected with PCOS need controlled and balanced diet and exercise for weight reduction along with medication, preventive measures are more important. So it will be more beneficial to follow mode of life as mentioned in Ayurveda and to use modern medicine, if needed, to get conceived.

Physical inactivity contributes substantially to the global burden of disease, death and disability. If pregnant mother follows sedentary life style means obese child may born with other disorders also. In recent decades, affluent populations have become increasingly sedentary, with many adults spending 70% or more of their waking hours sitting. Thousands and thousands of deaths result each year due to a lack of regular physical activity. In addition inactivity tends to increase with age. Women are more likely to lead inactive lifestyles than men. Our diet style should be balanced diet. To combat a sedentary free lifestyle regular physical activity with calm mind is necessary.

Ayurveda correlates sedentary lifestyle as a contributing factor in PCOS through classic principles of *Vihāra* (lifestyle), *Dosha* imbalance (especially Kapha & Vata), impaired Agni, and *Ama* accumulation — all aligning with modern pathophysiology of PCOS.^[9]

A sedentary lifestyle is **not the sole cause**, but it is a **major contributing risk factor** that increases both the **occurrence and severity of PCOS**, mainly through insulin resistance, obesity, and hormonal imbalance.

REFERENCE

1. Dutta D.C. Text book of Gynaecology. 4th edition. Culcutta: New central book Agency LTD; p. 421. (431, 523, 549, 558).
2. Drjyotijain, management of nashtartavawrtpcos.
3. Sedentary Behaviour Research Network. Standardized use of the terms —sedentary|| and —sedentary behaviours.|| Appl Physiol Nutr Metab, 2012; 37: 540–542.
4. Karen Schellong, Sandra Schulz, Thomas Harder, Andreas Plagemann. Birth Weight and Long-Term Overweight Risk: Systematic Review and a Meta-Analysis Including 643, 902 Persons from 66 Studies and 26 Countries Globally. PLoS ONE, 2012; 7(10): e47776.
5. <https://www.ncbi.nlm.nih.gov/books/NBK534854/>
6. A. J. Gaskins, J. Mendiola, M. Afeiche, N. Jorgensen, S. H. Swan, J. E. Chavarro. Physical activity and television watching in relation to semen quality in young men. British Journal of Sports Medicine, 2013; DOI:10.1136/bjsports-2012-091644
7. Dr.Narendra Malhotra, Dr.Jaideep Malhotra, Dr.Pratap Kumar, Dr.Neharika Malhotra Bora. Jeffcoate's principle of Gynaecology, Chapter No. 2, Jaypee brothers medical publishers (P) Ltd, New Delhi, 7th edition, 2008, Page no. 384 – 392.
8. Vessby B, Uusitupa M, Hermansen K, Riccardi G, Rivellese AA, Tapsell L, Nalsen G, Berglund L, Louheranta A, Rasmussen BM, Calveret GD, Maffeone A, Pedersen E, Gustafsson IB, Storlien LH: Substituting dietary saturated for monounsaturated fat impairs insulin sensitivity in healthy men and women: the KANWU-Study. Diabetologia, 2001; 44: 312–319.
9. ayurvedic therapeutic approach for infertility associated with PCOS a case study.
10. *Prevalence And Risk Profile Of Polycystic Ovary Syndrome In Women Of Reproductive Age: Evidence From Urban And Rural Settings.* African Journal of Biomedical Research, 2024-2025.
11. *Prevalence of Polycystic Ovary Syndrome (PCOS) and Its Associated Risk Factors among Medical Students in Two Countries,* International Journal of Environmental Research and Public Health.
12. Dutta D.C. Text book of Gynaecology. 4th edition. Culcutta: New central book Agency LTD, p. 421. (431, 523, 549, 558).
13. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8448320/#pone.0255676.s007>
14. WHO GUIDELINES FOR RESEARCH