

## **Polycystic ovary syndrome and fertility**

Polycystic ovary syndrome (PCOS) a common heterogeneous endocrine disorder among females. Characterized by irregular menses, hyperandrogenism and polycystic ovaries.

Risk factors for PCOS in adult include different types of diabetes (type1, type 2 and gestational diabetes), overweight or obesity, Long-term use of the seizure medicine valproate (such as Depakote) and a family history of PCOS, diabetes.[1]

Insulin resistance affects 50-70% of women with PCOS leading to a number of comorbidities metabolic syndrome, hypertension, dyslipidemia and glucose intolerance. [2]

Infertility is a unique medical condition because it involves a couple, rather than a single individual. It is defined as failure of a couple to conceive after 12 months of regular intercourse without use of contraception in women less than 35 years of age; and after six months of regular intercourse without use of contraception in women 35 years and older, Some clinicians use the term sub fertility to describe this failure to conceive unless the couple has been proven to be sterile. [3]

PCOS is thought to be one of the leading causes of female infertility and the most frequent endocrine problem in women of reproductive age [4]

Prospective study had conducted at 2014 in at Peking university third hospital demonstrated that “Both PCOS and obesity were accompanied by follicular amino acid metabolic disturbances, with obesity exerting a more pronounced effect on amino acid metabolic profiles. The disruptions in specific amino acids in the follicular fluid might account for the inferior pregnancy outcome in obese patients and increased risk of abortion in PCOS patients “, therefore these finding indicate that there a strong relation between pcos and infertility [5]

A single retrospective study had conducted at 2003 demonstrate that “There appeared to be a slight difference in the number of pregnancies prior to and including index of pregnancy 1.6 in pcos group and 2.08 in the control “ but they claim that difference between other studies result due “Among the other results, we found a significant difference in the number of pregnancies prior to and including the index pregnancies , which could be explained by the fact that the PCOS patients were treated for infertility treatment “ these finding indicate PCOS patient can be fertile only if treated [6]

In conclusion all study demonstrating that PCOS is one of the important causes for infertility and direct strong relationship connect between them.

## **References:**

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