## Polycystic ovarian syndrom and fertility



Running Head: Polycystic Ovarian Syndrome Introduction In every woman, ovaries are very essential organs as far as fertilization is concerned. They play an essential role of producing eggs for fertilization in a woman's body. Polycystic Ovarian Syndrom (PCOS), a condition that has excited massive interest and debate, affects the ovaries thereby leading to complexities such as infertility among other conditions. This paper defines polycystic ovarian syndrome, gives its symptoms, the possible causes, explains how it affects fertility, and as well as its treatment.

Polycystic (meaning multiple cysts) Ovarian Syndrom, also known as the Stein-Leventhal syndrome, is possibly the commonest endocrine disorder, which accounts for most of cases of anovulatory infertility, hirsutism and menstrual disturbance in women. This quite prevalent condition has diverse manifestations and as a result, it may present to dermatologists, gynaecologists, endocrinologists, general practitioners, specialists who deal with cardiovascular and metabolic diseases, infertility specialists, among others. In other words, the condition can affect almost every organ of a woman. Over time, both the condition's nature in the patient as well as the presentation may vary (Balen, et al., 2005).

Elsheikh and Murphy explain that this condition is known to cause excessive hair growth in the body and the face, acne, scalp hair thinning and worse still, infertility. Other symptoms include menstrual cycle disturbance, hyperandrogenism, and obesity. Apparently, gaining weight/obesity aggravates the symptoms since hormonally active fatty tissues produce oestrogen, which disrupts ovulation. These symptoms may occur either in combination or singly. The risk of developing heart disease and diabetes is high among its victims. Cases of multiple pregnancy, early pregnancy as well

as later complications of pregnancy are common among women with this condition, following conception, spontaneous and following infertility treatment.

Although scholars believe that the exact cause of PCOS is unknown, investigations have proved that it is genetically transmitted and that it is more prevalent among women who come from families with a history of diabetes. Many women with this condition have reduced insulin sensitivity and their bodies overcompensate by producing excess insulin levels, which some experts believe to be the underlying cause of PCOS since insulin stimulates the production of androgen and effects follicular development (follicles are egg-containing sacs within the ovaries). High levels of insulin secretion also culminate into high production of testosterone by the ovaries, which can cause acne and excess hair. This imbalance of menstrual cyclecontrolling hormones disrupts the menstrual cycle thereby ensuing into anovulation, a major cause of infertility (Elsheikh & Murphy, 2008). In explaining another cause of infertility among PCOS patients, Cahill explains that polycystic ovarian disease is characterized by the presence of multiple small cysts in the ovaries. The ovaries, which are usually bigger than average, are polycystic, with numerous tiny follicles scattered underneath the ovary (usually over 10 or 15 in each ovary) and almost none in the middle. Generally, these small and immature follicles do not exceed 10mm in size, and rarely grow to maturity and ovulate - they neither develop fully nor ovulate to produce an ovum capable of being fertilized. This means that the woman is less fertile as she rarely ovulates (Cahill, 2010). Some of the treatments for this condition include weight loss, surgery using laparoscopy, and ovulation induction using drugs such as Metformin and a

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combination of clomiphene and dexamethasone in low-doses
(dexamethasone is a steroid that suppresses the production of androgen from the adrenal glands).

## Conclusion

Due to a number of reasons causing polycystic ovarian syndrome, and considering the unawareness of PCOS with most women, they should take the initiative of visiting qualified endocrinologists for PCOS examination rather than suffering ignorantly. It is also imperative for women to keep their body mass indexes fit, limit the amount of both sugar and fat they consume as well as ensuring proper control of cholesterol level to avoid risks of getting heart attack later. Paramount still, women experiencing the aforementioned possible symptoms should consult reliable physicians in order for them to clear any doubt of polycystic ovarian syndrome.

## References

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