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A Review on Polycystic Ovarian Syndrome

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Review Article

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ABSTRACT

Poly Cystic Ovarian Syndrome is one of the major found hormonal syndromes which are seen in almost 12 % of the women. The main aim of this review article is to provide a clear picture of this syndrome and possible remedies to overcome this.

INTRODUCTION

Poly Cystic Ovarian Syndrome

Poly Cystic Ovarian Syndrome is a set of symptoms which correlate with each other and result in a specific disease. PCOS is similarly the same which is defined as Poly cystic Ovarian Syndrome (bunch of symptoms together).

Polycystic ovary disorder (PCOS) is a standout amongst the most widely recognized endocrine disorders among women of regenerative age [1-11]. It is a condition in which a woman's levels of the sex hormones estrogen and progesterone are out of balance. This leads to the growth of ovarian cysts (benign masses on the ovaries). Ladies with PCOS have broader ovaries that contain liquid called follicles situated in both or any one ovary. The "cysts" in polycystic ovaries are not true cysts, yet rather antral follicles which have captured being developed and this is brought on because of hormonal imbalance [11-23].

PCOS is a metabolic disorder and mainly occurs due to life style changes. Earlier people were more prone to physical activities and thus the metabolism was correct but now a days as the technology is developing we are far away from doing any sort of physical works and thus results in such type of diseases. The % of PCOD affected persons are mostly from diabetic family background and genetically it has proved that if mother or sister has PCOD then mostly that women can be affected. In case of diabetic patients the person develops resistance towards insulin which in turn alters the LH AND FSH hormones which concludes in alterations in menstrual cycle [24-39].

CONSEQUENCES OF PCOS ON MENSTRUAL CYCLE

The ovaries at the time of production have, tiny fluid-filled sacs called cysts. As the egg grows, the follicle builds up fluid and once the egg matures, the follicle breaks open, and the egg is released, and this egg travels through the fallopian tube to the uterus (womb) for fertilization this is called ovulation but in case of

women with PCOS, the ovary is unable to produce all the essential hormones which are needed for an egg to fully mature. The follicles may start to grow and build up fluid however ovulation does not develop. Rather, a few follicles may remain as cysts [4,8,17]. Thus, ovulation does not happen and the hormone progesterone is not made. Without progesterone, a lady's menstrual cycle is sporadic or missing [40-55]. Furthermore, the ovaries make male hormones, which additionally counteract ovulation.

SYMPTOMS

Symptoms include either excessive or absence of mensuration, Excessive hair growth or Hirsutism which occurs due to presence large no of male hormones, Acne, Drastic weight gain and one of the major symptom i.e. difficulties in conceiving [56-59].

LONG TERM EFFECTS DUE TO PCOS

Generally women are more prone to diabetics and slowly after few periods they then tend to develop most of the major diseases like cardiovascular disorders, endometrial cancers, hypertension and infertility etc.

TYPES OF PCOS

Insulin-Resistant PCOS

Also known as Type 1 PCOS, and is one of the major symptoms of PCOS.

PCOS additionally showcases capacity for growing diabetes and elevated testosterone levels each of which can be virtually resulting from the underlying insulin and leptin resistance.

The goal for treating Insulin-Resistant PCOS is to improve insulin sensitivity [60-83].

Non-Insulin Resistant PCOS

There can be a variety of causes for this type of PCOS, including Vitamin D or Iodine deficiency, hormone-disrupting toxins, thyroid disease, and adrenal stress. For women experiencing Non-Insulin Resistant PCOS, anti-Diabetic drugs will have no effect on the condition, and neither will help in reducing the weight which is gained due to hormonal imbalance [9, 17,84-90].

The treatment options in this case contribute to be more natural. Patients may be influenced to avoid dairy while also being prescribed supplements such as Iodine, Vitamin D, Magnesium, and Zinc, along with herbal formulas to reduce testosterone [91-96]. Natural progesterone may also be prescribed in order to improve the hormonal imbalance and induce ovulation.

REMEDY FOR TREATMENT

There is no cure or correct reason for PCOD but by life style modifying we can control it to a major extent. By introducing low Glycaemic foods in our daily intake one can maintain the insulin level which gets elevated due to PCOD. Low glycemic foods include low carbohydrate foods, fibrous foods etc. Other than food supplements doing yoga and increasing physical activities in day to day life helps a lot in reducing weight and also ovulating which in turn results in change in the hormones [95-98].

MEDICAL TREATMENT

Treatment varies in two categories

- 1) For being able to conceive
- 2) For developing the menstrual cycle

In case of treatment for getting pregnancy fertility medicines like clomiphene and other hormonal medicines are prescribed. Mostly about 10-15 % of women conceive but the usage of fertility drugs. In case of sub fertile women by the method of laparoscopic drilling around 50-70 % succeed [36,40,42].

After all these techniques then the person can go for IVF or surrogacy which costs a bit higher than the common man's budget but 99.9% results are positive [99-103].

CONCLUSION

In conclusion, PCOS is a health condition, which affects many women in today's society. Because 1 in 10 and 1 in 20 women of childbearing age has PCOS, it is imperative that women are well informed [43-52]. Although this affects as many as 5 million women in the United States, it is something that can be treated by your primary health care physician. However, maintaining a healthy and active lifestyle may decrease the chance of developing this condition.

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