

Polycystic Ovary Syndrome

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Polycystic ovary syndrome, also known as PCOS, is an endocrine disorder that causes hormonal imbalances in the reproductive hormones (estrogen and progesterone), among women

of reproductive age. This condition can cause cysts to grow in or on the ovaries resulting in hormonal imbalances that affect the menstrual cycle and egg development. There is no definitive cause of polycystic ovary syndrome, but research has shown that genetics plays a key role in the development of the disorder. A woman has a greater chance of developing PCOS if her mother or another close female relative has the disorder as well. Other causes may be due to excess insulin, low-grade inflammation, excess androgen levels, and or obesity. Excess insulin can cause an excess in androgen production that leads to difficulties in ovulation. Research has shown that woman with PCOS have low-grade inflammation which causes the ovaries to produce more androgens which lead to heart and blood vessel problems. A woman is at a higher risk of developing PCOS if she is obese, which can cause the condition and symptoms to worsen in overweight or obese women.

The signs and symptoms of polycystic ovary syndrome vary greatly among each individual. Most women begin to show symptoms around the time of puberty when they have their first menstrual period. Other's symptoms may not begin to show or develop until later in life and this is usually due to excessive weight gain. Some women go undiagnosed for years because their symptoms are misconstrued. There are many possible symptoms of PCOS which are: irregular periods, excess androgen levels, polycystic ovaries, hirsutism (excessive hair growth in places women do not usually grow hair), acne, thinning hair on the scalp, weight gain or difficulty losing weight, darkening of the skin, and or growth of skin tags. Not all women show every symptom, some present with a few whereas others may present with multiple in varying degrees.

There are many complications and other disorders that can arise in women with PCOS. The complications include infertility, gestational diabetes, miscarriages or premature births,

depression, anxiety, eating disorders, and or abnormal uterine bleeding. The disorders that can develop alongside PCOS are nonalcoholic steatohepatitis, metabolic syndrome, Type 2 diabetes, sleep apnea, and or cancer of the uterine lining. These complications and disorders are typically more severe in women who are obese.

The medical specialists that are involved in the treatment of this condition can include a primary care physician, gynecologist, endocrinologist, and if the individual is trying to conceive a fertility specialist. There isn't a definitive test that can diagnose polycystic ovary syndrome, but the first step towards diagnosis a discussion of the individual's medical history. This will include a history of the individual's menstrual cycle and weight changes. The physician will also conduct a physical exam that will include checking for signs of acne, excessive hair growth, and insulin resistance. Other important diagnostic tests are a pelvic exam, blood tests, and an ultrasound. The pelvic exam allows the doctor to look at your reproductive organs and check for masses, growths, and abnormalities. The blood tests will check the different hormone levels and "exclude possible causes of menstrual abnormalities or androgen excess that mimics PCOS", according to Mayo Clinic. An ultrasound will allow the doctor to look at the appearance of the ovaries and the lining of the uterus. If the individual is diagnosed with PCOS, the doctor may order additional tests to help monitor complications which could include: blood pressure, glucose tolerance, and cholesterol checks, screening for depression and anxiety, and screening for obstructive sleep apnea.

Polycystic ovary syndrome is not a curable disorder but it is a manageable one. The treatments are based on the individual's symptoms, their plans on having children, and their risk of developing complications and long-term health problems. Most women have a combination of treatments, some being lifestyle changes and some being medications. Losing weight in

overweight and obese patients is the most recommended treatment for PCOS because it will help reduce the severity of the individual's symptoms and improve their condition. Losing weight can also help with effectiveness of the medications prescribed and can help with infertility. Not all women with PCOS need to lose weight. For individuals that want their menstrual cycles to be regulated, they are usually prescribed a combination of birth control pills. The pill will contain progesterone and estrogen and decrease androgen production. The pill helps regulate the imbalanced hormones. If the individual needs help to ovulate they can be prescribed Clomiphene, Letrozole, Metformin, or Gonadotropins. For those that want to reduce their excessive hair growth they can be prescribed, birth control pills, Spironolactone, and or Electrolysis.

When being diagnosed with polycystic ovary syndrome, it can be very overwhelming at first. There are many different things that will get thrown your way and be hard to deal with alone. It is important to ask as many questions as you need to and have a support system. PCOS is a life long condition, but with the right treatments and support these women can live a long and healthy life.

References

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