Polycystic ovary syndrome

(1) Dear Alice,

This is in reference to your Missed periods Q&A. Another cause of missed or late periods is PCOS (polycystic ovary syndrome). A lot of health care providers don't seem to be aware of this syndrome. In this syndrome, missed or irregular periods are caused by unusual hormone levels, sometimes in combination with insulin intolerance. Because missed and irregular periods cause scar tissue build-up in the uterus (which may cause endometrial cancer) and may cause infertility, it is important that your readers know to ask their health care provider about this syndrome. There are obviously other symptoms and complications, but I just thought that I might mention it to you so that you might read up on it for your readers. Thank you.

(2) Dear Alice,

I was recently diagnosed with polycystic ovary syndrome (PCOS). I'm only 17 and am afraid that this will affect my chance of having children. Should I worry? Also, I know birth control pills will help me regulate my period, but if I take them, will it stop the effects PCOS has on me? Like me gaining rapid weight, missed periods, and losing my hair? This is really worrying me. Can you inform me on this syndrome?

worried

Answer

Dear Reader and worried,

Polycystic ovary syndrome, a.k.a. PCOS or Stein-Leventhal syndrome, occurs when certain hormone levels are out of whack. In general, too much of the male hormone (androgen) and too little of the female hormone (estrogen) is produced, preventing the ovaries from ovulating and causing small cysts to form where the egg would have normally been released. Reader #1, you're correct that PCOS can cause missed periods and that it's wise to know more about the condition because it affects around five to ten percent of women. It's also the leading cause of infertility in the United States. And, worried, though that may be the case, the good news is that there are medications that can help with PCOS symptoms and ovulation, thereby increasing your ability to conceive. Additionally, a combination of medication and lifestyle changes can help manage the other issues associated with the condition as well. Read on for more about PCOS and how to address the concerns you've both mentioned.
To begin, the exact cause of PCOS is still unknown, but certain factors may play a significant role:

- **Excess insulin**: Too much insulin may cause an increase in androgen production, which may interrupt the ovulation process.
- **Low-grade inflammation**: Studies have shown that the body's inability to produce white blood cells, the ones in charge of fighting infection, may cause polycystic ovaries to produce androgens.
- **Heredity**: A family history of this condition may increase an individual's risk.

List adapted from the *Mayo Clinic* [3].

Additionally, PCOS is associated with certain characteristics. A diagnosis may be pursued when a person has at least two or more of the following:

- Irregular or absent menstrual periods (indicative of a lack of ovulation)
- High levels of androgens (a hormone) which may manifest physically as atypical hair growth on the face and body, acne that isn't responsive to typical treatments, and hair loss on the head
- Ovarian cysts (more than ten)

If any combination of these characteristics is observed, further investigation with a health care provider may start with physical and pelvic exams. Furthermore, a blood test may be utilized to measure testosterone levels, cholesterol, and blood sugar. An ultrasound may also be in order to look at the ovaries and uterus for cysts and tissue buildup in the uterine lining. It's wise to be evaluated if PCOS is suspected, because there are a number of health complications that folks with this condition are at a higher risk for, including sleep apnea [4], type II diabetes [5], metabolic syndrome, obesity, heart disease, hypertension [6], mood disorders (e.g., depression [7] and anxiety [8]), and endometrial cancer [9] (which may be associated with a buildup of uterine tissue, called endometrial hyperplasia, rather than scar tissue).

For those diagnosed with PCOS, treatment is geared towards management (there is no cure) and is specific to each individual, based on their symptoms, current health concerns, and whether or not they'd like to get pregnant. A first line of management tools is typically addressing lifestyle habits, such as maintaining a healthy weight, getting regular physical activity, and eating a balanced diet? all of which are meant to be utilized in conjunction with other treatment options. Your health care provider might recommend options to help regulate menstrual periods, such as combination birth control methods? oral birth control pills [10], the skin patch [11], or the vaginal ring [12] that all contain estrogen and progestin? or, if methods with both estrogen and progestin don't work for you, progesterone therapy. Another alternative approach is metformin, which is another medication that may be used to help regulate periods, improve insulin levels and resistance, as well as help with ovulation.

Though using oral contraceptives may hinder the ability to conceive, there are several medications that can help with achieving conception for someone with PCOS. One option is clomiphene, an oral anti-estrogen medication taken at the beginning of a menstrual cycle (metformin may help with ovulation when used in conjunction with clomiphene, if clomiphene doesn't work on its own). In the event that the use of clomiphene and metformin do not help with ovulation, another possible option is the injection of gonadotropin hormones such as
follicle-stimulating hormone (FSH) and luteinizing hormone (LH). Lastly, to address excess hair growth (oral contraceptives may also be helpful in this pursuit) there are both medications to block the effect of androgen (which discourages hair growth) and prescription creams that slow the growth of unwanted facial hair.

Worried, it may be beneficial to speak with your health care provider to determine what course of treatment is best to address your concerns. In addition to working with your provider, it may also be helpful to check out some support groups available for women with PCOS. Speaking with others and sharing experiences might be very reassuring. Your provider may be able to help you locate these groups, which are offered online or in-person, depending on where you live.

Alice!
Category:
Reproduction [13]
Fertility [14]
Women's Sexual Health [15]

Related questions
Is it possible to menstruate without ovulating? [16]
What health effects will a woman with one ovary experience? [17]
Missed period, not pregnant [18]
Woman's menstrual cycle [19]

Resources
Medical Services (Morningside) [20]
Medical Services (CUMC) [21]
Published date:
Mar 01, 2002
Last reviewed on:
Mar 18, 2016
If you are in an urgent situation, please visit our Emergency page to view a list of 24 hour support services and hotlines.

Source URL: http://goaskalice.columbia.edu/answered-questions/polycystic-ovary-syndrome-0

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