A Guide to Diagnosing Hypothalamic Amenorrhea vs. PCOS

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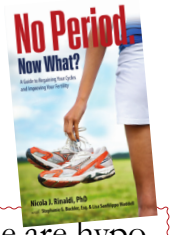

There are two conditions that commonly cause absent menstrual periods or lengthy cycles. These are hypothalamic amenorrhea (HA) and polycystic ovarian syndrome (PCOS). There are a number of features the two conditions share so making a definitive diagnosis can be challenging. This information sheet describes HA and PCOS, and how to determine which is more likely, leading ultimately to the most appropriate treatment plan. References available at http://bit.ly/NPNW-PCOSvsHA.

Criteria for Diagnosing PCOS

PCOS is a complex condition with varied symptoms, making diagnosis difficult. The syndrome manifests in three common ways; experiencing two or more leads to a diagnosis of PCOS. The criteria are:

1. Absent or irregular menstrual cycles
2. Hyperandrogenism
3. Polycystic ovaries (contain multiple small follicles)

Hyperandrogenism is an excess of "male" hormones like testosterone. In some women this manifests biochemically, in measured blood levels. In others, physical symptoms such as excess hairiness (hirsutism), acne resistant to standard treatments, and possibly insulin resistance are evident.

An ultrasound machine that allows for visualization of internal organs is used to look at ovaries. With recent technology, more than 25 follicles or an ovarian volume of more than 10 cc must be seen in order to classify ovaries as truly polycystic. This is important as many women with HA also have multiple small follicles in their ovaries.

Recently, high Anti-Mullerian Hormone (AMH) has been used to diagnose PCOS, however, this can be just as high in women with HA, so is not diagnostic.

Confusion with HA

It is easy to understand the HA/PCOS confusion. Women with HA seem to meet two of the criteria for diagnosing PCOS: absent periods and often "polycystic ovaries." However, it is important to ensure the description of the ovaries as polycystic is by the criteria given above—more than 25 follicles between 2-9 mm or a volume greater than 10 cc. Around 30% of the population has multicystic ovaries that are often mislabeled as "polycystic."

Diagnosing HA over PCOS

Experts in the field of PCOS maintain that a diagnosis can only be made after other possible conditions, including HA, have been ruled out. Therefore, in a woman who fulfills one or more of the following criteria, HA should be suspected and ruled out before a PCOS diagnosis is made:

1. Low BMI and/or weight loss of more than 10 lb
2. Stress fracture or low bone density measured by DXA
3. Restrictive eating habits, either amount or variety.
4. Regular (often excessive but not always) exercise
5. Chronic or acute stress, or perfectionism

A diagnosis of HA over PCOS can be corroborated by blood work. Physical symptoms can also aid in distinguishing between the two.

Hormonal levels in HA and PCOS

Hormone	Normal result*	Expected value in HA	Expected value in PCOS
FSH	3.0–20.0 IU/L	Low to normal (around 6 IU/mL)	Low-normal to normal
LH	2.0–15.0 IU/L	Low to normal, less than FSH	Normal to high-normal, greater than FSH
Estradiol	20–150 pg/mL	Low to normal	Normal to high
Total Testosterone	2–45 ng/dL	Low to normal	Normal to high
Free Testosterone	0.1–6.4 pg/mL	Low to normal	Normal to high
Free Androgen Index (FAI)	7–10	Low to normal	Normal to high
DHEAS	Age 20–29: 65–380 ug/dL Age 30–39: 45–270 ug/dL	Low to normal	Normal to high
androstenedione	28–230 ng/dL	Low to normal	Normal to high

Why Diagnosis Matters

While treatments to encourage ovulation to allow for pregnancy are similar whether the diagnosis is HA or PCOS, many women with HA have difficulty getting pregnant until undereating, overexercising, and stress are addressed. Following a lifestyle designed to combat PCOS will have a negative effect.

Correctly diagnosing HA over PCOS is important as the lifestyle changes to treat each condition are essentially opposite. If HA seems the more appropriate diagnosis based on your lifestyle, it probably is correct. Learn more at www.noperiodnowwhat.com and download the PCOS vs. HA chapter for free!