PCOS: Treating Women Trying to Conceive

Polycystic ovary syndrome (PCOS), one of the most common causes of ovulatory dysfunction, affects nearly 15 percent of reproductive age women. Understanding the challenges of the differential diagnosis, knowing the most recent recommendations for first-line treatment, and acknowledging the limitations of first-line drug therapy will help providers more effectively care for patients with PCOS who are trying to conceive.

Diagnosing PCOS through Exclusion

Identifying PCOS can be a challenge as there is no single diagnostic test available. As a result, PCOS is considered a diagnosis of exclusion. According to the Rotterdam Criteria, established in 2003 by the European Society of Human Reproduction and Embryology (ESHRE) and the American Society for Reproductive Medicine (ASRM), PCOS requires two of the following three symptoms to be present:

- hyperandrogenism—acne, excessive hair growth in a male pattern, and varying degrees of alopecia
- menstrual disturbances—such as oligo/amenorrhea, which occur in about 85 percent of women with PCOS
- polycystic ovaries on pelvic ultrasound

However, it is important to know that not all women with PCOS have polycystic ovaries on ultrasound, and not all women with polycystic ovaries have PCOS. In addition to these criteria, a physician must exclude other disorders with similar symptoms—including Cushing’s syndrome, congenital adrenal hyperplasia, and other ovulatory disorders.

Oligo/amenorrhea and hyperandrogenism are the two main clinical symptoms to target when treating PCOS. Some women with PCOS may also have associated metabolic disorders, including insulin resistance, dyslipidemia, and obesity with its accompanying problems. Unfortunately, diagnostic tests for insulin resistance in the office or at a standard laboratory lack accuracy and reliability and are therefore not recommended. However, periodic screening for diabetes is important.

Initiating Treatment with Clomiphene Citrate

In recent years, many practitioners have initiated treatment for women with PCOS who are trying to conceive with several months of metformin therapy, followed by clomiphene citrate (Clomid, Serophene) when pregnancy does not result. However, a randomized study in 2007 showed metformin alone to be far less effective than initially thought, resulting in a 7.2 percent live birth rate, compared with a live birth rate of 22.5 percent for clomiphene alone. As a result, to save time and increase the chance of pregnancy, our recommendation is to start with clomiphene from the outset. Nevertheless, note that metformin still has a role in improving a patient’s overall health—especially in women at risk of diabetes and other conditions.

It is also advised to add transvaginal ultrasound monitoring to a clomiphene treatment cycle to increase cycle control and decrease adverse side effects. Adding monitoring can help:

- better understand the progress of the cycle to allow for mid-cycle changes
- promote the best outcome possible (if excess follicles are produced, the risk of multiple pregnancy can be averted by cancelling the cycle)
- safely care for patients while saving them time

Limiting Clomiphene to Three Cycles or Less

While some patients with PCOS will be successful with clomiphene treatment alone, many others will require intrauterine insemination (IUI) or even more advanced care such as in vitro fertilization (IVF). Providers treating women with PCOS may consider referring patients to a specialist for evaluation and advanced infertility care. Once infertility or PCOS has been determined, a referral may occur immediately or after three unsuccessful clomiphene cycles. This improves patient satisfaction and allows the patient to progress to more effective therapies in a timely manner.

Helping Women with PCOS Conceive

Polycystic ovary syndrome (PCOS) is the most common ovulatory disorder and is believed to affect 15% of all women in their childbearing years. For most patients, diagnosis and treatment occurs while under the care of their OB/GYN. Among the challenges for providers is not only the absence of a single test to positively diagnose PCOS but also the controversies regarding how best to treat this condition. Read the latest guidelines for diagnosing, treating, or referring women with PCOS.