

*Women's Health with
Dr. Minoos Hosseinzadeh*

Polycystic Ovarian Syndrome Part II: Obtaining Treatment to Optimize Fertility

By Dr. Minoos Hosseinzadeh



Minoos Hosseinzadeh, M.D.

Dr. Minoos Hosseinzadeh is a nationally recognized specialist in reproductive endocrinology at the largest and most-established locally-based fertility center in Orange County, Calif., Coastal Fertility Medical Center (<http://www.coastalfertility.com>). Double-board certified in Obstetrics and Gynecology and Reproductive Endocrinology & Infertility, she is also a member of the American Society of Reproductive Medicine, Society for Reproductive Endocrinology and Infertility, American College of Obstetrics and Gynecology and the Royal College of Physicians and Surgeons. She has presented at several national and international fertility meetings and authored numerous papers on hormone replacement therapy and age-related female infertility.

Coastal Fertility Medical Center

4900 Barranca Pkwy., Ste. 103
Irvine, CA 92604
(949)726-0600

www.CoastalFertility.com

In Part II, it was determined that for women of reproductive age who also suffer from polycystic ovarian syndrome, commonly referred to as PCOS, it is important to consult with a physician to determine if the PCOS is inhibiting fertility. Diagnosing PCOS is the first step toward ensuring that fertility is optimized and receiving the necessary treatment. Once a diagnosis has been made and a fertility assessment completed, a reproductive endocrinologist may recommend a specific course of fertility treatment, to be implemented as part of a multidisciplinary approach.

This disorder is multifaceted and there are other side-effects of PCOS which may require consultation with specialists, such as a dermatologist to treat conditions including acne and hirsutism. A primary care specialist will be needed to treat medical conditions of PCOS such as high cholesterol and diabetes.

Reproductive Endocrinology: How Fertility is Optimized in the PCOS Patient

In patients seeking fertility treatment, assuming that other causes of infertility have been excluded, the goal of treatment is ovulation induction, which is to make a woman ovulate. Several steps are available to achieve this goal:

• **Step I: Prepare the Body** – Weight loss is the most physiologic approach to achieving ovulation. Sometimes a healthy diet and adequate exercise are all that is needed to restore ovulation and regular menses. Patients who are found to have insulin resistance should be treated. Glucophage is a commonly used medication, and works by making the body utilize insulin more effectively. As a result, insulin levels as well as androgen levels decrease. It is important to check that patients have normal liver and kidney function prior to initiating therapy.

• **Step II: Begin Oral Medications** – The first line of treatment in ovulation induction involves *Clomiphene citrate*. The goal is to use the lowest dose of the medication required to make a patient ovulate, with a goal of producing one follicle. The medication can be started as early as Day 2 until as late as Day 5 of the menstrual cycle. Monitoring with transvaginal ultrasounds is necessary to assess response. Once ovulating, then either timed intercourse or timed intrauterine inseminations can be

employed. If there is documented ovulation but pregnancy is not achieved, then the same regimen should be repeated without increasing the dosage of the medication. *Aromatase inhibitors* are a new class of drugs that can also be used in women with PCOS who do not ovulate using Clomiphene citrate.

“Approximately 50 percent of women with PCOS will ovulate while on Clomiphene citrate 50 mg. On occasion the dose will have to be increased to achieve ovulation, and for most patients, no more than 150 mg of Clomiphene citrate daily is used. Overall, 80 percent of patients will ovulate on Clomiphene citrate.”

• **Step III: Integrate Injectable Medications**

– For some patients, it may be necessary to use injectable drugs. The injections are composed of one or both of the gonadotropins FSH and LH. The vast majority of these injections are administered subcutaneously on a daily basis starting as early as Day 2 of the menstrual cycle. It is important that patients be monitored very closely by transvaginal ultrasound as women with PCOS can be exquisitely sensitive to these more powerful drugs. As a result, the risk of ovarian hyperstimulation is much higher. This is again combined with timed intercourse or intrauterine inseminations.

• **Step IV: Employ In Vitro Fertilization**

– This procedure involves stimulating the ovaries to produce multiple follicles, harvesting the eggs from these follicles, fertilizing the eggs with sperm in the laboratory and finally, transferring embryos into the uterus. Although this procedure has the highest success rate, it is a treatment of last resort.

It is important to realize that once pregnant, PCOS patients need continued close monitoring as they can have a higher risk of some pregnancy-related complications and, above all, to ensure the delivery of a healthy child. A diagnosis of PCOS need not end a patient's hopes of starting a family. With an appropriate course of treatment, many women with PCOS are able to have both a healthy pregnancy and a healthy child.

OC Life Readers: E-mail questions to Women's Health with Dr. Minoos Hosseinzadeh at DrMinoos@OCLIFEmagazine.com