

Obesity's Effect on a Patient's Fertility

Weight may be the most modifiable factor affecting a woman's ability to conceive. How many of your patients know this?

As overweight and obesity becomes more widespread in the US—more than 65% of adults in the US are overweight or obese—more women may have trouble getting pregnant. Patients who are overweight or obese are at risk for anovulation and may have undiagnosed polycystic ovary syndrome, a leading cause of infertility.

When discussing their desire to get pregnant with the ob-gyn or fertility specialist, anovulatory obese and overweight patients may expect to hear about prescription drugs that can regulate their menstrual cycle or about other fertility treatments. But, numerous studies have shown that in overweight or obese patients with PCOS, a minimal weight loss of 5% to 10% can improve ovulation and lead to pregnancy. Although more research is needed, fertility experts are extrapolating that data to non-PCOS patients. For more about PCOS, see ACOG's Practice Bulletin *Polycystic Ovary Syndrome* (#41, December 2002).

“Both underweight and overweight patients need to know that they can modify lifestyle, without the use of drugs and they may achieve success with a pregnancy,” said Rebecca S. Usadi, MD, assistant director of reproductive endocrinology at Carolinas Medical Center, Charlotte, NC. “One study demonstrated that by losing a small amount of weight, as little as 2 to 5% of weight a 50% ovulation rate and an 11% pregnancy rate can be achieved without any drugs.”

Dr. Usadi also pointed out that the obese women are not as sensitive to clomiphene citrate and may need higher doses, and moving to gonadotropins increases the risks of multiples and ovarian hyperstimulation syndrome.

In an Australian study 18 anovulatory overweight and obese women ages 22 to 39 with PCOS received diet and exercise counseling for six months (Huber-Buchholz, *The Journal of Clinical Endocrinology & Metabolism*, 1999 v84 p1470). Of the 15 women who completed the study nine began ovulating regularly, with two becoming pregnant. Mean weight losses were between 2% and 5%. Those who responded to the program had reduced waist girth and central abdominal fat and a 71% improvement in the insulin sensitivity index and a 33% decrease in fasting insulin.

In an obese patient who is 5'5" and weighs 192 pounds, a 5% weight loss equals 9.6 pounds and lowers her BMI from 32 to under 31. A 10% weight loss equals 19.2 pounds, lowering her BMI to under 29 and moving her down to the “overweight” category.

“I think generalists can work this into their discussions. They can impress upon patients that weight loss of 10 pounds can be beneficial in many patients,” Dr. Usadi said. “A physician should be comfortable with this counseling. We talk about all the other

factors that can help a patient achieve a healthy pregnancy so we should talk about weight.”

Many ob-gyns continue to struggle with the “weight” issue with their patients. Experts encourage physicians to focus on the health risks brought about by being overweight or obese. Physicians can help patients develop a realistic plan and goals to achieve weight loss to incremental, doable steps.

The initial approach should reinforce the importance of weight loss and exercise and assess the patient’s readiness to make behavioral changes, according to ACOG’s Committee Opinion *The Role of the Obstetrician-Gynecologist in the Assessment and Management of Obesity* (#319, October 2005). The Committee Opinion includes a chart that presents sample dialogue to use with patients, depending on their readiness for change.

Dr. Usadi uses the BMI chart to show patients where they fall on the chart. “It’s amazing how many people are unaware that clinically they are defined as obese”, she said.

“With a young patient, before Clomid, I tell her, ‘take one to two months to devote to weight loss because you may achieve pregnancy or it’ll help you be more sensitive to Clomid.’ Physicians shouldn’t delay fertility treatment indefinitely. You don’t want to say ‘come back and see me when you’re at a normal BMI,” Dr. Usadi said.

Ethical Dilemmas

Providing fertility treatment in conjunction with a weight loss program or after a modest weight loss can be controversial. Some believe that patients should reach a target BMI before receiving any fertility treatments. Obese patients who become pregnant face substantial risks, including hypertension, gestational diabetes, preeclampsia, spontaneous abortion, cesarean delivery, and cesarean delivery complications, and the fetus is at risk for prematurity, stillbirth, neural tube defects, and macrosomia. These risks are outlined in ACOG’s Committee Opinion *Obesity in Pregnancy* (#315, September 2005).

“It’s an ethical dilemma,” said Frances W. Ginsburg, MD, a reproductive endocrinologist at Stamford Hospital, Stamford, CT. “If you have a patient who is 350 pounds and she has failed to lose weight, do you tell her she has to lose the weight before she can have fertility treatment?”

While younger patients may delay fertility treatments while undergoing a weight reduction program, older patients may need to receive pharmacologic fertility treatment concurrent with lifestyle advice, according to Kathleen M. Hoeger, MD, an associate professor of ob-gyn in the division of reproductive endocrinology at the University of Rochester Medical Center’s Strong Fertility Clinic in New York.

“You can’t just say to a fertility patient ‘lose some weight and come back to me in a year.’ That’s generally ineffective and discouraging,” Dr. Hoeger said.

Samantha M. Pfeifer, MD, associate professor at the University of Pennsylvania, agrees: “Some fertility practices won’t treat patients unless they lose 50 pounds, and in my experience they go down the street to another practice, and that doesn’t help anyone.”

Many questions about obesity’s link to fertility are left unanswered.

“Obesity does affect fertility, but we don’t entirely know why. More research is needed,” Dr. Ginsburg said. “At this point, however, it’s important to share what we do know with women well before they attempt to conceive so that they can have at least some control over their future fertility.”

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