## **FERTILITY**

## Infertility treatments getting more sophisticated

BY CAITLIN GRANFIELD Special to the Miami Herald

After three years of trying to conceive with her boyfriend, 32-year-old Ony Hernandez got "the best phone call in the world" that she was pregnant after her first round of IVF treat-

She is now three months into her pregnancy with a baby girl on the way — the couple's first child.

Hernandez, of Miami, suffers from polycystic ovary syndrome (PCOS), an endocrine system disorder where follicles on the ovaries interfere with a woman's ability to ovulate regularly. After four rounds of artificial insemination didn't take, the couple tried in vitro fertilization in March, a complex series of procedures where mature eggs and sperm are fertilized in a lab, then implanted into a woman's uterus. Her doctor, Dr. George Attia, director of the **UHealth-University of** Miami Reproductive and Fertility Center, had recommended the treatment, which can cost upwards of \$12,000, according to the American Society of Reproductive Medicine.

Nearly a month later, she got the phone call.

Hernandez is one of millions benefiting from new or improved procedures for treating women's infertility. Egg hatching. Genetic screening. Preserving eggs for future use. Robotic procedures to repair fallopian tubes or remove uterine fibroids, while keeping the uterus intact. According to the U.S. Centers for Disease Control and Prevention, the number of women in the U.S., ages 15 to 44, with an impaired ability to get pregnant or carry a

baby to term is 6.7 million.

Attia says the most common causes of female infertility are obstructions of the fallopian tubes and hormonal imbalances associated with age or other medical conditions. "It's very important to understand hormonal levels so you have a realistic expectation of what a person's chance is to get pregnant," he says.

One of the newest technologies involves assisted egg hatching, a procedure performed on embryos before they're implanted into the uterus. Done in the lab, egg hatching creates an opening in the shell surrounding the embryo, allowing the embryo to break out and attach itself to the uterine lining, thus increasing the chance of a pregnancy.

Another relatively new treatment is pre-implantation genetic screening. In this case, a biopsy is performed to test one or several cells of an embryo to determine whether there are chromosomal abnormalities prior to implantation. "One of the most common reasons for failure of IVF is implanting an embryo that's not chromosomally correct," Attia said. "Screening the embryos allows us to pick the

best ones to implant."
In addition to facing blockages or hormonal issues, many patients are cancer survivors looking to preserve their eggs or sperm after chemo. Others are career-oriented professionals who want to preserve their eggs for when they're ready to start a family, Attia noted.

But not everyone may be aware of the egg preservation strategy. Dr. Haneen Abdella, a pediatric hematologist-oncologist in charge of the fertility preservation program at Nicklaus Children's Hospital, acknowledges that fertility information for young women who've beat cancer is lacking.

"It's important that women ask about their individual risks," says Abdella.

"Sometimes oncologists are so focused on the cure that the subject is not discussed as much, or as in as much detail as we'd like."

Abdella says more options for teens and women who wish to preserve their fertility are available after puberty. Proven techniques, she says, include freezing eggs or embryos, where hormones stimulate maturation of multiple eggs over a two- to threeweek period. The eggs are collected through an out-

either be frozen or used with IVF.

Donor eggs and embryos, surrogacy or adoption are other options.

Some hospitals, meanwhile, are trying to remove uterine fibroids but save a woman's uterus. At South Miami Hospital, Dr. Rafael Perez, a gynecological surgeon and medical director for the hospital's Fibroid Center, performs minimally invasive procedures to remove the fibroids without damaging the uterus can prevent an embryo from implanting properly.

"If you have fibroids and are looking to preserve fertility," he says, "get a second opinion because a lot of times you might be offered a very radical procedure like a hysterectomy. If you want a minimally invasive procedure, you should seek the opinion of doctors that do a lot of



Few moments matter more than the birth of your baby. And few hospitals match the maternity care you'll receive from Baptist Health South Florida. We believe in making your special moment as wonderful as possible. Our homelike birthing suites put families at ease, while ensuring the safest setting for you and your newborn. At Baptist Health, you achieve a beautiful balance — family-centered care backed by an expert medical team, advanced technology and caring support. With four hospitals ready to assist you before, during and after childbirth, you're never far from excellent maternity care.

Baptist Hospital • Homestead Hospital • South Miami Hospital • West Kendall Baptist Hospital

For more information, visit **BaptistHealth.net/Babies** 

**Baptist Health South Florida** 

Healthcare that Cares

A not-for-profit organization supported by philanthropy and committed to our faith-based charitable mission of medical excellence