

Some women storing eggs now for pregnancies later

April 19 2010, By Julie Deardorff

Rachel Lehmann-Haupt was 37 when she froze her eggs, a process technically known as oocyte cryopreservation. She knew it wouldn't guarantee her fertility. But the San Francisco-based writer had just ended a relationship and knew she wanted kids.

"I wanted to buy biological time," said Lehmann-Haupt, now 40 and still childless. "The older I get, the more I think, 'God, maybe the eggs I froze will be my route to motherhood.'"

As women increasingly delay childbearing until their 30s or 40s, many are discovering the [biological clock](#) waits for no one.

Women lose much of their natural fertility between 35 and 40, according to Dr. Nicole Noyes, co-director of the Oocyte Cryopreservation program at the New York University fertility center and Lehmann-Haupt's doctor. As women age, the quality of their eggs also decreases, which increases the chance of miscarrying, Noyes said.

Though women can't make their eggs healthier, they can keep them from getting older through egg freezing. The process, which takes between two to six weeks, involves taking fertility medication to mature multiple eggs in the [ovaries](#). Once ready, the eggs are extracted from the woman, gently dehydrated and stored in liquid nitrogen. When a woman is ready to become pregnant, her eggs can be thawed, fertilized and transferred to the uterus as [embryos](#).

For women whose medical treatments present a risk of infertility, particularly cancer patients, egg freezing is a promising way to protect the possibility of a pregnancy. More controversially, the procedure is also marketed as an option for healthy women who aren't ready to have children but hope to in the future.

Critics emphasize that the best chance of having a baby is doing it naturally when a woman is younger than 35. They worry that egg preservation will give a woman false confidence, that she may make plans based on preserved eggs that fail in the future.

But Noyes says this isn't what's happening. "They're 36, 37 years old, and they're panicking," she said. New York City's Lucia Vazquez, who froze her eggs at age 32, explains it like this: "I'm not waiting to have kids because I have frozen eggs. I'm waiting to have kids so I froze my eggs."

One concern is that egg freezing is still in the early stages and the oocytes can be damaged during the freezing and thawing process. The American Society for Reproductive Medicine calls it "experimental" and warns that until there's more "proven scientific information," healthy women shouldn't use it as a way to defer reproductive aging.

"The dilemma is that the potential to put off the biologic clock is intoxicatingly empowering for many women struggling with the profession vs. biology conundrum," said Kentucky fertility expert and ob-gyn Dr. Rebecca Booth.

About half of fertility clinics offer egg freezing, said Glenn Schattman, associate professor of reproductive medicine at Cornell University's Weil Medical College in New York, and a co-author of the ASRM guidelines. There is no national registry tracking the number of pregnancies derived from previously frozen oocytes or eggs, but a 2009

study showed 936 babies had been born from frozen eggs worldwide, with no increase in birth defects.

In theory, the eggs may be stored indefinitely, but shelf life is difficult to determine. And no one knows how freezing the egg affects the long-term health of the baby.

It's also expensive. Though prices vary by clinic, it costs about \$9,500 to freeze eggs. A private company may have an additional charge of \$1,000 to \$3,000, said Noyes. The thaw cycle -- when the eggs are taken out of liquid nitrogen and fertilized -- is around \$3,500 to \$5,000. "Some clinics are greedy and charge \$12,000 for the freeze," Noyes said. "Buyer beware: Higher prices do not equate to a better clinic."

Still, egg freezing can take the pressure off for some women.

Lehmann-Haupt, who wrote "In Her Own Sweet Time: Unexpected Adventures in Finding Love, Commitment and Motherhood" about her experience, remains hopeful.

But if her own eggs fail? "I think I'm slightly in denial," she admitted. "I'd be pretty devastated if I can't have a child or adopt."

HOW EGG STORAGE WORKS

Rachel Lehmann-Haupt's first step was attending an egg-freezing class at New York University, where a nurse explained how she would inject herself with a hormone called gonadotropin that stimulates the ovaries to produce multiple mature eggs.

The shots are administered once a day after a woman's period starts for seven to nine days. During that week, Lehmann-Haupt had blood tests to check her higher-than-normal estrogen levels and an ultrasound to see

how the egg-producing follicles were growing.

When the eggs were big enough, she received a "trigger shot" to induce ovulation.

A day and a half later, the egg retrieval was performed using an ultrasound needle that's guided into the vagina. Women are generally sedated during the procedure, which takes less than five minutes, said Nicole Noyes, co-director of the Oocyte Cryopreservation program at the NYU fertility center and Lehmann-Haupt's doctor.

Physically, the process of fertility stimulation may leave a woman feeling bloated for about a week after the egg retrieval.

After the eggs are collected, they're usually cultured for two hours in an incubator and then frozen using one of two methods: Slow cooling or vitrification. In both processes, agents called cryoprotectants are used to dehydrate the eggs. This is critical because if there's too much water and the egg freezes, it could crack, ruining the contents. The eggs are put into a machine that gradually takes the temperature down. After 2 { hours (in the slow-cooling method), they're plunged into liquid nitrogen. Vitrification uses a higher concentration of the cryoprotectants so dehydration happens more quickly. After seven minutes, the eggs can be frozen in [liquid nitrogen](#).

No large randomized trial has shown one method is better than the other, said Noyes. Her office divides the eggs into two groups and uses one method on each, just to be safe.

Should the eggs be needed, they're thawed in about 30 minutes and fertilized using a procedure called intracytoplasmic sperm injection (ICSI, pronounced "icksy,") an in vitro fertilization procedure in which a single sperm is injected directly into an egg.

From this point on, the procedure is exactly like IVF, said Noyes. "Most women think egg freezing is like IVF and requires six weeks of shots," Noyes said. "When they actually do it, they always say, 'It was so easy!'"

INFERTILITY INCREASES AS A WOMAN AGES

Risk of not being able to conceive after a year (by age group):

20-24: 6 percent

25-29: 9 percent

30-34: 15 percent

35-39: 30 percent

40-44: 64 percent

(Source: American Society for Reproductive Medicine)

(c) 2010, Chicago Tribune.

Distributed by McClatchy-Tribune Information Services.

Citation: Some women storing eggs now for pregnancies later (2010, April 19) retrieved 26 April 2024 from <https://medicalxpress.com/news/2010-04-women-eggs-pregnancies.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.