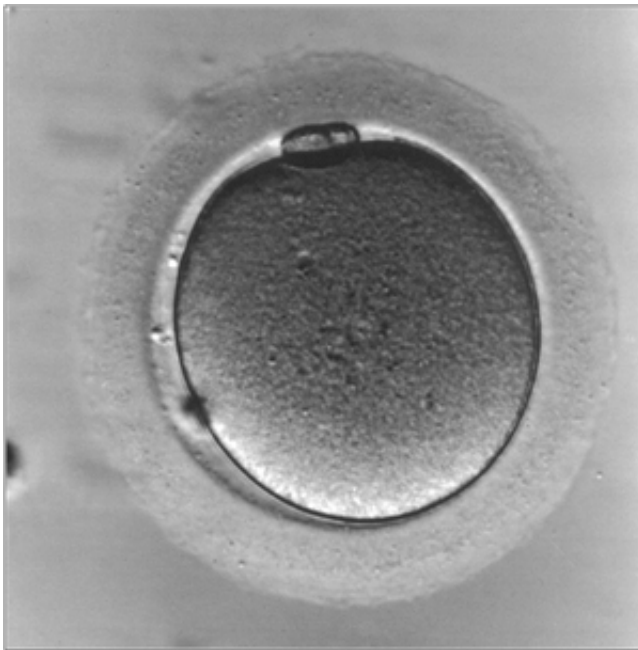


New method increases viability of frozen embryos, expands reproductive options

September 18 2012, by Diane Duke Williams



This is a human egg magnified 400 times. Eggs have been difficult to freeze, but a new way of storing and freezing eggs is offering women who want to preserve their fertility a different option.

(Medical Xpress)—For some women facing fertility issues, a faster way of freezing and storing eggs is expanding their reproductive options.

"Being able to deliver healthy babies from frozen eggs is an important development that is very exciting," says Sarah Keller, MD, assistant professor of obstetrics and gynecology and head of the egg donor

program at Washington University School of Medicine in St. Louis.

Until recently, the only method for freezing eggs caused ice crystals to form in the egg. These crystals sometimes destroyed the egg's structure, making it impossible to create an embryo.

With the new method, eggs are frozen so quickly that ice crystals don't have time to form. The result is a solid cell that resembles glass.

"It's always been easier to freeze and thaw embryos," says Susan Lanzendorf, PhD, associate professor of [obstetrics and gynecology](#). "But this new technology has improved frozen eggs' viability and increased [pregnancy rates](#) in women choosing this option."

The newer procedure can help women diagnosed with cancer who want to preserve their fertility before [chemotherapy](#) or radiation and women undergoing in vitro fertilization (IVF) who do not feel comfortable freezing embryos. Egg freezing also is an option for women in their late 20s and early 30s who want to delay having children because of personal or financial reasons.

"One of the biggest groups that can benefit from this technology is the reproductive-age women who are diagnosed with cancer each year in the United States," Keller says. "Chemotherapy and radiotherapy often are toxic for eggs, leaving very few viable. This technology offers women with cancer the chance to one day have a family."

[Cryopreservation](#), or the freezing of tissue for later use, has always played a key role in [assisted reproductive technology](#). The freezing of sperm and embryos to be used later in IVF has become routine.

Although the American Society for Reproductive Medicine still considers egg freezing experimental, Lanzendorf says it is a well-

established practice that a number of infertility centers in the United States are offering as part of ongoing clinical trials.

For one Illinois couple who is enjoying their 5-month-old son, freezing eggs was the best option. "We didn't feel comfortable freezing embryos," says the new mom, who was treated by physicians at the School of Medicine. "I don't know that there are words to describe how grateful we are," she says. "I hope others are able to take advantage of this new method."

Keller says that the use of frozen [eggs](#) in IVF is yet another valuable tool to help preserve fertility in women. "We want [women](#) to know that this technology is available and hope that it will make an important difference to many families," she says.

Provided by Washington University School of Medicine in St. Louis

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