

Health

Sperm: How Old Is Too Old?

By Randy Dotinga
HealthDay Reporter

THURSDAY, May 27 (HealthDayNews) – When the news broke this week about a newborn baby conceived from sperm sent into cold storage more than two decades ago, fertility doctors felt a twinge of pride but not much surprise.

While many people may not know it, frozen sperm appears to last for a very long time, perhaps even for generations.

The prospect of ageless sperm raises an interesting question: Could children be conceived by the sperm of men who are long dead? "It's an odd concept, [but] I think it will happen," said Alan Thornhill, director of the Mayo Clinic's In Vitro Fertilization Clinic in Rochester, Minn.

For now, however, the spotlight is focused on a toddler with a live father. The news this week came out of Great Britain, where researchers belatedly reported an apparent world record – the longest period of sperm preservation before a live birth.

Two years ago, a healthy baby boy was born to a woman whose husband had provided sperm to a laboratory after being diagnosed with testicular cancer at the age of 17. The cancer treatment left him sterile, but the sperm remained in cold storage waiting for him to get ready to have a child.

Scientists impregnated the woman using in vitro fertilization, which occurs outside the womb, according to the report, which appeared in the journal *Human Reproduction*.

The successful fertilization after such a long period isn't really a surprise, said Dr. Richard Paulson, director of the University of Southern California's Fertility Program. "I find it amazing that most people think when something is in the freezer, so to speak, it must deteriorate the same way your chicken deteriorates in the freezer," he said. "And, of course, it doesn't."

No one knows for sure, but experts say it could last indefinitely, perhaps even hundreds of years.

There's a problem, however. When the sperm is brought out of suspended animation, the germs inside it come back to life, too. That's why U.S. fertility doctors can't fertilize women with stored sperm until they wait six months to see if the donor has developed a disease such as HIV or hepatitis.

The six-month quarantine hasn't stopped members of the American military from donating sperm before heading off to duty in Iraq. Other men store their sperm when they're worried they won't be fertile in the future, perhaps because of impending medical treatments. The Mayo Clinic hopes to encourage more men to store their sperm as they face such treatments, Thornhill said.

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Some men even provide sperm for freezing before they undergo vasectomies in case they change their minds later.

And what of those looking at the long term, perhaps preparing to spread their genes to children 50 or 100 years from now? They can try, but there might be a caveat: As doctors cure more diseases in years to come, they may be unlikely to want to take a risk by fertilizing women with age-old – and potentially contaminated – sperm, experts say.

For now, however, the focus seems likely to remain on men who are looking at the short term because of potential problems such as illness.

"I would imagine that with increased public awareness there will be more and more utilization of this," said Dr. Benito Villanueva, a gynecologist and reproductive endocrinologist in San Diego. "The techniques and the technology are absolutely there."

More information

The American Society of Reproductive Medicine has more about in vitro fertilization.