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Weighing the Techniques

BY CHARLOTTE HUFF

The fertility preservation technique that a patient selects—particularly if the patient is female—will likely depend not only on the legal issues involved, but also the time window before chemotherapy must begin. Cost may also be a factor. If in vitro fertilization (IVF) is involved, the cost can run \$10,000 to \$15,000 per cycle, says Clarisa Gracia, MD, a fertility preservation specialist at the University of Pennsylvania Health System. Many couples don't have insurance coverage for IVF, and a cancer-related need doesn't seem to make a difference, she says. In February, a review article published in *The New England Journal of Medicine* outlined the various techniques and related issues.

Standard

Sperm: Practice has shown that sperm remains usable for more than two decades, says Teresa Woodruff, PhD, an author of the *NEJM* article. Men who are able can quickly bank vials prior to treatment. “There really isn't a downside to sperm banking,” Woodruff says.

Embryos: For women, banking embryos before treatment provides the best odds of a future pregnancy. Success rates vary depending upon the clinic used. Nationally the odds of a transfer of once-frozen embryos resulting in a live birth, when women used their own eggs, reach 34 percent in women under the age of 35 and nearly 21 percent for women in their early 40s, according to data from the Society for Reproductive Technology.

Experimental

Eggs: More than 100 births have resulted from frozen eggs, the *NEJM* authors wrote. One drawback: the eggs contain significant water, making them vulnerable to damage during the freezing process, Woodruff says. Researchers are developing better freezing techniques, Gracia says. “It's a very reasonable option for patients to consider,” she says, adding, however, that “at this point, you cannot say that [freezing eggs] is as effective as embryo freezing.”

Ovarian tissue: Ovarian tissue can be frozen, in the hope of later producing eggs in the laboratory or by transplanting the tissue back into the woman's body. (The *NEJM* article cites several births to date involving transplanted tissue that followed cancer treatment.) The technique, if tissue is transplanted, may carry a risk of reintroducing cancer cells. But it also presents an option for minors, women who can't delay chemotherapy, or women concerned about the potential

cancer-stimulating risks of hormone stimulation to produce eggs.

Resources

American Society of Clinical Oncology's patient site Cancer.net

888-651-3038; www.cancer.net

In 2006, ASCO published guidelines about fertility preservation in cancer patients. To access them, type the phrase "fertility preservation" into the search box.

Fertile Hope

888-994-HOPE; www.fertilehope.org

The New York City nonprofit, founded by cancer survivor Lindsay Nohr Beck, assists cancer patients at risk for infertility. It also works with companies and fertility clinics in an effort to obtain discounts for related medical treatments.

Oncofertility Consortium

866-708-3378 www.myoncofertility.org; oncofertility.northwestern.edu

This national consortium, supported by a National Institutes of Health grant for interdisciplinary research, is focused on medical, financial, and other aspects of reproductive options for cancer patients and survivors as well as parents of young patients.