Doctors say more ovary transplants possible

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(AP) -- Two new techniques to preserve and transplant ovaries might give women a better chance to fight their biological clocks and have children when they are older, doctors announced Monday.

In the past, scientists have performed ovarian transplants in women with cancer, since chemotherapy often causes infertility. Doctors typically take out patients' ovaries before the toxic treatment begins and then reimplant them later.

Because of the cost and uncertainties involved - only a handful have been done successfully - this was thought only worthwhile for women with serious diseases who had few options.

Now, recent advances to preserve ovaries and surgically implant them could make the procedure more widely available, helping women avoid fertility problems as they age. Many women are now delaying having a family until their 30s or 40s, when fertility problems become more common.

Women in their 20s or 30s could theoretically have an ovary removed and frozen, and then have it reimplanted years later when they are ready to have children.

"We are in the middle of an infertility epidemic," said Dr. Sherman Silber, director of the St. Louis Infertility Center in Missouri, one of the experts behind the research. "With these new techniques, we could dramatically expand our reproductive lifespan."

The research was reported at a meeting of the European Society of Human Reproduction and Embryology in Amsterdam.

Silber and colleagues studied how many eggs were lost or preserved in fresh and frozen ovarian tissue of 15 young women before they had cancer treatment. The doctors found no difference in the number of eggs in fresh tissue and in ovaries frozen using a new ultra-fast technique.

Using the traditional, slow-freezing methods of preserving ovaries, about half of a woman's eggs were lost.

In related research, Dr. Pascal Piver of Limoges University Hospital in France reported on a new surgical technique to transplant ovaries.

Doctors have often found it difficult to restore an ovary's function after transplantation, largely because it takes time for the blood and hormone supply to be re-established.

Piver and colleagues attempted to solve this problem by dividing the transplant into two procedures: an initial graft of small pieces of ovarian tissue to encourage blood vessels to grow put in place three days before the real transplant.

The technique was used in a French woman who had been unable to have children because of treatment for sickle cell anemia. In June, she gave birth to a baby girl.

"All of this research is a step in the right direction," said Pasquale Patrizio, of Yale University, who performs ovary transplants but was not connected to either study. "If we really have these techniques under control, maybe we can spread this technology to many more women."

But Patrizio said doctors need to know how an ovary taken from a

woman years ago will perform once it is put back in.

"If I take an ovary from a woman who's 30 and then reimplant it 15 years later, will it function as if it's a 30-year-old's ovarian tissue, or will it reset to become 45?" he asked.

Experts said the possibility of healthy women being offered ovary transplants would likely spark controversy.

"This is not an experimental procedure for cancer patients anymore," Silber said. "The question is whether more women should be able to have this option."

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