

Health

5 Things to Know About Uterus Transplants

Here are the basic facts on this breakthrough procedure, from the risks entailed to the number of babies born so far to moms with donated wombs.

By **Anthea Levi** | October 11, 2016



Organ transplants have been saving lives for more than 60 years, and now, doctors are pushing the boundaries of transplantation medicine to help women who believed they'd never be able to have children. In a new, exclusive interview with the *Associated Press*, Emelie Eriksson, a 30-year-old Swedish woman who was born without a womb, revealed that she had received the organ from her mother—and in a world first, had given birth to a child nearly two years ago.

Eriksson is just one of five women in the world who have given birth from a transplanted uterus. All five procedures were performed in Sweden by pioneering surgeon Mats Brannstrom, MD, PhD. “It’s like science fiction,” Eriksson told the *Associated Press*. “This is something that you read about in the history books and now in the future when you read about this, it’s about me.”

Doctors are working to bring uterus transplants to more women worldwide. Just last week, surgeons at Baylor University Medical Center at Dallas announced a series of breakthrough uterus transplants in the United States: In September, four American

women received wombs from living donors. Three of the organs have been removed due to complications; but one woman still has her new womb, and hasn't shown any signs of rejection. Baylor plans to perform six more transplants before the end of the year.

These experimental surgeries could pave the way for thousands of women without a uterus to give birth one day. As the medical science continues to evolve, here are a few of the basic facts on this promising and life-changing procedure.

Who can a womb transplant help?

The procedure is meant to be an option for the 3% to 5% of women who have uterine factor infertility. These women may have suffered irreversible uterine damage or had their uterus removed; or, like Eriksson, they were born without the organ, a condition called Mayer-Rokitansky-Küster-Hauser syndrome, which affects about one in 4,500 newborn girls.

Why are uterus transplants so difficult?

"It is exceptionally hard to perform a uterine transplantation due to the abundance of blood vessels that bring blood from the pelvic region into the uterus," ob-gyn **Shahin Ghadir, MD**, a partner at the **Southern California Reproductive Center (SCRC)**, explained in an email to *Health*. "All of these blood vessels need to be reconnected in a satisfactory manner in order to provide the blood flow needed for the uterus to survive."

Dr. Ghadir's colleague **Mark Surrey, MD**, the medical director at SCRC, called the uterus's complex vascular supply a "technically limiting factor" for these transplants. The three Baylor cases in which the organ had been removed involved problems with blood supply.

What are the risks?

One of the primary concerns is rejection, which occurs when the recipient's immune system attacks the foreign tissue that's implanted. And like with any organ transplant surgery, there is potential for bleeding and infection, says Dr. Ghadir. The woman who received the very first uterus transplant in the U.S. (from a deceased donor), last February at the Cleveland Clinic, had to have the organ removed less than two weeks later due to a common infection.

Does a woman keep the donated uterus after she gives birth?

The transplant is not meant to be lifelong. Recipients are advised to undergo a hysterectomy to remove the donated uterus after having to one to two children, according to the Cleveland Clinic.

Does it matter how old the donor is?

No, says Dr. Surrey: "The age of the uterus, if it's not diseased, is not very relevant." The *Associated Press* reported that experts have been astonished by the fact that wombs transplanted from post-menopausal women are able to grow healthy babies. As Stefan Tullius, MD, chair of transplant surgery at Harvard Medical School, put it, "All of a sudden, you have this old organ doing things that you only expected a young uterus to do."

<http://www.health.com/pregnancy/uterus-transplant-facts>