

In a Aug. 24, 2005 file photo, Reconstructive surgeon Dr. Maria Siemionow heads into a micro-surgical procedure at the Cleveland Clinic.



CLEVELAND — A woman so horribly disfigured she was willing to risk her life to do something about it has undergone the nation's first near-total face transplant at the Cleveland Clinic.

"The **surgery** took 22 hours. The preparation to the surgery took over 20 years," said the lead surgeon, Dr. Maria Siemionow at a news conference Wednesday.

Related: Surgeon Risked Career, Reputation to Do Face Transplant

"This patient exhausted all conventional means of reconstruction, and is the right patient," she said at a news conference.

So many disfigured patients are stuck "in their houses who are hiding from society," afraid to go out, she said.

"Our patient was called names and was humiliated," she said. "You need a face to face the world."

Siemionow and a team of other specialists replaced 80 percent of the woman's face in a bold and controversial operation certain to stoke the debate over the ethics of such surgery.

Only the woman's upper eyelids, forehead, lower lip and chin were left.

The face was donated by a family that asked specifically to approve the gift and was not done under general organ donation consent rules, said officials of LifeBanc, the organ procurement group that arranged the transplant.

The patient's name and age were not released.

The transplant was the fourth worldwide; two have been done in France, and one was performed in China.

## PHOTOS: Face transplants from around the world.

Surgeons not connected to the Cleveland case reacted cautiously since little is known about the circumstances, but generally praised the operation.

"There are patients who can benefit tremendously from this. It's great that it happened," said Dr. Bohdan Pomahac, a surgeon at Harvard-affiliated Brigham and Women's Hospital in Boston who plans to offer face transplants, too.

Dr. Laurent Lantieri, a plastic surgeon at Henri Mondor-Albert Chenevier Hospital, near Paris, who did a face transplant on a man disfigured by a rare genetic disease, said: "This is very good news for all of us that doctors in the U.S. have done this."

Unlike operations involving vital organs like hearts and livers, transplants of faces or hands are done to improve quality of life — not extend it. Recipients run the risk of deadly complications and must take immune-suppressing drugs for the rest of their lives to prevent organ rejection, raising their odds of cancer and many other problems.

"This procedure represents a potentially valuable reconstructive option in highly-selected patients," Dr. Donn R. Chatham, president of the American Academy of Facial Plastic and Reconstructive Surgery told FOXNews.com in an email.

"Face transplantation should be reserved for replacing missing facial tissue for most severe of cases, whether from cancer, serious injury, or congenital deformity. It is the opinion of the AAFPRS that such a transplant should only be performed when no other medically viable options offer a reasonable chance of success."

Arthur Caplan, a leading bioethicist who has expressed grave concerns in the past about such surgery, withheld judgment on the Cleveland case but said the woman's doctors should give her the option of assisted suicide if they wind up making her life worse.

"The biggest ethical problem is dealing with failure — if your face rejects. It would be a living hell," said Caplan, bioethics chief at the University of Pennsylvania. "If your face is falling off and you can't eat and you can't breathe and you're suffering in a terrible manner that can't be reversed, you need to put on the table assistance in dying."

Siemionow's long and careful preparation should help prevent such a horrific outcome, those familiar with her said. Siemionow, 58, a noted hand microsurgeon, has been testing the surgical approach and ways to temper the immune system's response in experiments for more than a decade.

"We know that the surgical team in Cleveland who performed this latest surgery did so after years of careful study and training and presented the reality of the enormity of this procedure to the patient and family," said Chatham.

Siemionow has considered dozens of potential candidates over the past four years, ever since the clinic's internal review board gave permission for her to attempt the operation, and has said she would choose someone severely disfigured as her first case.

The world's first partial face transplant was performed in France in 2005 on a 38-year-old woman who had been mauled by her dog. Isabelle Dinoire received a new nose, chin and lips from a brain-dead donor. She has done so astoundingly well that surgeons have become more comfortable with a radical operation considered unthinkable a decade ago.

Two others have received partial face transplants since then — a Chinese farmer attacked by a bear and a European man disfigured by a genetic condition. Both are believed to be doing well, though details, especially of the Chinese case, have been scant.

In the Cleveland case, "it is very important what kind of recipient they selected," and how great the need was, Pomahac said. "Hopefully it will open the door both to the public and to other centers" wanting to do these operations.

In an interview at the Cleveland Clinic in 2005, Siemionow spoke of the terrible need she saw in people horribly disfigured, and how badly it scarred their social and emotional lives, not just their bodies.

"There are no really good alternative therapies for the severely burned or patients with a facial injury or damage," she said.

Her task now is to prevent organ rejection while managing the risk of infection from taking strong immunesuppressing drugs.

Rejection is a possibility whenever someone receives an organ or cells from someone else because the body regards this as foreign tissue. Two types of problems can result.

The first is graft-versus-host disease, which could happen if the new facial tissue were to attack the recipient's body. The second is if the patient's body were to attack the transplanted face, causing inflammation and other problems at the site of the new tissue.

Either of these can be life-threatening. They can come on suddenly, within days or weeks of the operation, or set in slowly.

"Certainly we wish and pray for success for this patient and for others to follow, and are hopeful that more patients who carry the burden of the most severe facial deformities will ultimately benefit from what is learned from these pioneer cases," Chatham concluded.

The Associated Press contributed to this report.