

FACE TRANSPLANTS

Physicians are moving toward taking facial tissue from a cadaver and transplanting it to another person. But just because this may be possible, should it be done?

By Tammie Smith
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Terry Healy was a teenager when cancer messed up his face.

Doctors had to remove and reconstruct much of the right side, including the eye socket, cheek, upper lip, teeth, hard palate and jaw. Healey, a California marketing consultant and author, underwent 30 reconstructive surgeries in all. His face is not perfect. Photographers always try to take the “good side,” he said.

Still, even as physicians in the United States and Britain move closer to performing the first face transplant. Healey, now in his 40s, is not sold on the idea that face transplants are a good idea for people disfigured by disease, or by burns or trauma.

“I don’t think I would be comfortable with the concept,” said Healey, whose book, “At Face Value,” and Web site, www.at-face-value.com, chronicles his experience.

“It’s like you are changing your identity,” said Healey. “Someone who has facial burns, they are disfigured in a different way, would probably think differently.”

Face transplants are almost certain to happen. It’s just a matter of when and where.

Experts at The Cleveland Clinic in Ohio and the University of Louisville in Kentucky have separately announced they are prepared to take facial tissue from a cadaver and transplant it to another person.

Separately, physicians in Great Britain also have said they have the capability to do such surgery.

Whoever does the first face transplant will do the world’s first.

However, ethicists and others are asking if just because it can be done, should it be?

The debate touches on issues of sacrifice, self-image and medical advances.

“Our face is what we present to the world,” said Jonathan D. Moreno, a professor and director of the Center for Biomedical Ethics at the University of Virginia. “People who have serious trauma to the face – accidents, burns, diseases like cancer – they suffer

horribly in a very unique way. Their lives are, in many ways, they feel, virtually over. You don't see these people because they don't come outside."

Face transplants could free them from self-imposed isolation and improve the quality of their lives.

But is that enough of a reason to justify the risks?

"The rejection of facial tissues may be just harrowing and leave some in worse position. There are a lot of risks we don't want people to take," Moreno said.

"Should we expose someone to an experiment that has such enormous implications? The chances are very good that early efforts will fail.... Those who go first, you need to appreciate that they are probably going to be benefiting someone else," said Moreno.

The success of face transplants will depend largely on two things: Surgeons skilled in microsurgery and the use of anti-rejection drugs that keep the body from rejecting foreign tissue. In microsurgery, operating physicians look through microscopes to see the tiny vessels and nerves that need to be connected for transplanted tissues to live.

"Microsurgery in its current state of the art is quite advanced in many areas, in that we are able to take tissue from one part of the body and successfully transplant it to another for reconstructive reasons," said Dr. Isaac Wornom III, a reconstructive and plastic surgeon in private practice in the Richmond area.

"When I was at [the Medical College of Virginia] I used to do a lot of this kind of surgery. I did probably 150 to 200 of these kinds of operations.... It is very, very successful, for example, in patients who had malignancies in their mouths where they have to have their lower jaw removed. It's possible to take out the fibula, one of the bones in the leg that is non-essential. You can take it out and the patient can still walk. You take out this little artery and vein that runs next to the fibula. We can take this bone and cut it and shape it and do microsurgery to make it all live."

Dr. Austin Mehrhof, a plastic surgeon and medical director of the burn center at VCU Medical Center, said the complexity of the surgery will vary.

"When they talk about face transplants, are they talking about just skin, or skin and muscle, or skin and muscle and bone?" said Mehrhof. "The complexity goes up significantly with each of those."

From a medical standpoint, Wornom and Mehrhof said, the bigger issue is rejection.

"Skin is very antigenic," said Wornom, "Our bodies all have an immune system that recognizes our tissues as our own," he said. Once the body's immune system realized the transplanted tissue was not its own, it would start trying to get rid of it.

“You can take skin from a person and put it on a person who is burned very badly,” said Wornom. “It will take and stick like your own skin. But about two weeks later, it turns black and falls off. That is the body rejecting it, the immune system attacking it.”

To keep that from happening, patients who get life-saving heart, kidney, liver and other organ transplants are prescribed anti-rejection drugs, which they typically have to take for the rest of their lives. Those drugs carry risks. Sometimes they don’t work, and the transplants fail.

“They are really strong drugs. The drugs carry risk of malignancies and infection forever,” said Wornom. “For a patient that has a failing heart, and they are going to die without a heart transplant, it is easy to justify giving them the drugs because it’s going to save their lives. When you get into giving those drugs to make them look better or improve their quality of life because they are disfigured, that is another whole ethical thing that comes into play.”

Some people who live with facial disfigurement say it is too big a risk.

Dave Borowski’s face still bears scars from a fire that burned his body when he was 6 weeks old. A family pet chewed through an electrical cord. Fire ignited a sheer cover over the wicker bassinet he slept in. He was burned before his mother could get to him.

“I am quite comfortable with how I look,” said Borowski. “I am a little rough around the edges.”

He has had, he said 60 to 70 surgeries. He lives in Northern Virginia with his wife, Kerry Cadden, and works at Freddie Mac, where he is director of new products in investing and accounting. Yes, he gets stares. He was picked on as a kid.

“The people who clearly cannot get past your looks, their scars are on the inside,” said Borowski. He and his wife wrote his biography; together, they started and run the Flicker of Hope Foundation, which offers support and scholarships for people who have suffered burns.

Borowski said he understands why someone burned or disfigured later in life might want to go back to what they were like before. And doctors point out that because of different bone structure, a person getting a face transplant would not look like the donor.

“Yes, there could be a patient severely burned enough that this option should be contemplated,” said Borowski. “If they have the stability and stamina. You have to have someone who is pretty solid both psychologically and physically and able to understand the risks and possible outcomes.... For burn survivors burned severely enough, I would never prevent that option from being available.”

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