First Face Transplant Has Encouraging Outcomes

BY MARY ANN MOON
Contributing Writer

After 18 months, the functional and aesthetic outcomes of the first human face transplantation are satisfactory and "encouraging," according to the physicians who performed the surgery.

It appears that face transplantation "can offer hope" to selected patients who have severe facial disfigurement, they reported in the New England Journal of Medicine.

Dr. Jean-Michel Dubernard of the University of Lyons, France, and his associates previously published the initial results of the partial face transplantation, which they performed in a 38-year-old woman in November 2005. They now report longer-term outcomes.

The woman had been mauled by a dog in May of that year, with her distal nose, upper and lower lips, her entire chin, and the adjacent areas of both cheeks amputated. She received a graft of the lower face from a 46-year-old donor who had the same blood type and all but one of the same HLA antigens.

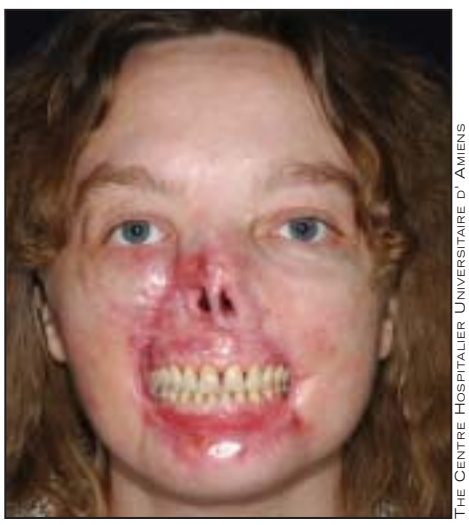
The recipient's sensory discrimination recovered quickly in the entire skin surface and the oral mucosa, although it remains subnormal. Heat and cold sensation was nearly normal at 4 months and normal at 6 months over the entire graft.

Motor recovery was slower. The patient was unable to close her mouth completely until 6 months post transplant, when that milestone greatly improved pronunciation and mastication. The smile was asymmetrical until 10 months, but became normal by 18 months.

The patient experienced two episodes of acute graft rejection, one 18 days after transplantation and the other 7 months later.

Initial treatment with a standard regimen of oral prednisone, tacrolimus, and mycophenolate mofetil were ineffective, but intravenous boluses of methylprednisolone reversed both of the episodes of rejection.

Extracorporeal photochemotherapy was started to reduce the risk of further graft rejection, and the treatment has been well tolerated.



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Isabelle Dinoire, 39, is pictured above in September 2005, prior to the transplant.

At left, the patient is seen in February 2006, a few months after the transplant. At right, the patient in November 2006.

The woman also developed two infectious complications: type 1 herpes simplex virus of the lips responded to oral valacyclovir and topical acyclovir, and molluscum contagiosum on the cheeks—affecting both the patient's own skin and the allograft skin—was treated by curettage.

The patient's initial immunosuppressive regimen impaired her renal function. This dysfunction was attributed to tacrolimus, which was replaced by sirolimus. Renal function has improved since the switch.

Although the patient has not undergone formal psychological testing, she has gradually resumed a normal social life.

"The progressive return of [facial] expressiveness correlated well with psychological acceptance of the foreign graft," Dr. Dubernard and his associates said (N. Engl. J. Med. 2007;357:2451-60).

"She is not afraid of walking in the street or meeting people at a party, and she is very satisfied with the aesthetic and functional results," they noted. ■

Study Highlights Dire Lack of Emergency On-Call Specialists

BY KATE JOHNSON
Montreal Bureau

Emergency on-call coverage from specialist physicians is "unraveling" at hospitals across the country, resulting in delayed treatment, patient transfers, permanent injuries, and even death, according to a study from the Center for Studying Health System Change, a nonpartisan policy research group in Washington.

While the problem is predominantly an issue for hospital emergency departments, it also is becoming increasingly problematic for inpatients who need urgent specialty care, according to the report. The findings are based on 2007 data from 12 nationally representative communities: Boston; Cleveland; Greenville, S.C.; Indianapolis; Lansing, Mich.; Little Rock, Ark.; Miami; Northern New Jersey; Orange County, Calif; Phoenix; Seattle; and Syracuse, N.Y.

The picture is particularly grim because overall ED utilization rates have risen by 7% in the past decade, from 36.9 to 39.6 visits per 100 people, according to the report. While insured people account for the vast majority of ED visits, "the proportion of visits by uninsured people is rising at a relatively higher rate," the researchers wrote.

Citing a 2006 paper from the American College of Emergency Physicians, the study reported that 73% of emergency departments in the United States report inadequate on-call coverage by specialist physicians. In particularly short supply are neurologists, neurosurgeons, orthopedic surgeons, plastic surgeons, trauma surgeons, hand surgeons, obstetrician-gynecologists, ophthalmologists, and dermatologists. While an actual shortage of such physicians may sometimes be to blame, "physician unwillingness to take call appears to be a more pressing issue for many hospitals," the authors said.

Although unwillingness to accept on-call duty is largely influenced by quality of life issues, the requirement to provide on-call coverage has traditionally been mandated by hospitals under the Emergency Medical Treatment and Labor Act. However, many specialists are now shifting their practices away from the hospital, and are no longer obligated by medical staff privileges, noted the report's authors.

Many physicians also believe payment for on-call care is inadequate, especially when caring for the uninsured. Specialists also worry that providing emergency care may increase their exposure to medical liability and drive up the cost of their malpractice premiums, the report stated.

One study found 21% of patient deaths or permanent injuries related to ED treatment delays are attributed to lack of specialists' availability. Complete lack of access to specialty care in some EDs is forcing either travel or transfer of patients. And for the physicians who continue to provide on-call coverage, increasing workload and decreasing morale may put patients further at risk.

Crisis May Drive Physicians Away

"It's not a surprise that we're having this problem—it's a surprise to me that we have any on-call specialists at all," Dr. Todd Taylor, previously an emergency physician and speaker for the ACEP Council, said in an interview. Dr. Taylor left clinical medicine last summer to work in the computer industry because of the risks of liability.

"The liability issue has become the overriding barrier to physicians being willing to put themselves at risk," he said. "Unless you solve the liability crisis in emergency care and health care in general, nothing else you do matters."

More troubling than the lack of emergency on-call specialists, he added, is the lack of emergency physicians in general—a newer phenomenon reported earlier this year in the 2007 Daniel Stern & Associates Emergency Medicine Compensation and Benefits Survey.

"This has applied to on-call specialists for years, but the phenomenon is now spreading to core emergency physicians, who are increasingly seeking alternative careers," Dr. Taylor said, noting 30% of study respondents were considering leaving medicine because of the malpractice climate.

Most on-call specialists have a private practice outside of the emergency department—they don't need the ED—so it's not suprising that they were first to leave, he explained. "But now that core emergency physicians, who were trained to practice only emergency medicine, are making the same choices, that should be a wake-up call," Dr. Taylor said. "That's what's different now compared to 2 or 3 years ago."

On-Call Shortage Cripples Trauma Care

Lack of optimal on-call coverage is what will ultimately "cripple" trauma and emergency care, agreed Dr. L.D. Britt, professor of surgery at the Eastern Virginia Medical School in Norfolk. "Some of the specialists are asking for unbelievably exorbitant fees to provide coverage, and hospitals are being held hostage. That's unsustainable for many hospitals—it's a major crisis," he said in an interview.

While Dr. Britt sympathizes with physicians' struggles with payment and liability issues, he believes the true bottom line is simply that obligations are being overlooked.

"It cannot be everyone saying, 'I can't do this.' Something has to give," Dr. Britt said. "I consider it my obligation to provide emergency coverage if I am on call. I know that's my responsibility—and I'm a chairman of a department. Some people can find ways out of it, but I'm saying we cannot have all those options out there."

In addition, high fees charged by specialists and paid by hospitals for on-call coverage are not justified based on the premise that on-call coverage increases a physician's liability exposure, he said. "Being on call doesn't give you more litigation than being in general surgery—that's well documented," he said.

Dr. Taylor disagreed. "The literature is very clear that emergency care is one of the highest liability environments in health care," he said. "You only have to look at what's happened to emergency physician malpractice premiums relative to others not involved in emergency care. Mine almost doubled the last 3 years I worked."

Dr. Britt pointed out that no other country "is spending what we're spending on health care, and yet we're not getting what we should." But he doubted more spending could solve the problem. "We have an obligation to provide care for the injured and the ill—and if the specialists, rightly or wrongly, say they can't provide that, then we need to come up with a different idea." ■