

Face transplantation provides a treatment option beyond conventional reconstructive surgery



UCLA Health System has become the first center in the western United States to offer facial transplantation to qualified patients who cannot be adequately treated using conventional reconstructive techniques. The UCLA Face Transplantation Program is one of only a handful in the nation to offer this innovative treatment.

Facial transplantation is a complex procedure best suited to the capabilities of highly specialized centers. UCLA's leadership in transplantation science and facial reconstructive surgery, and its vast resources as an academic medical center, make it ideally suited to offer this treatment option. The UCLA program has assembled an outstanding team of world-class experts, including those in head and neck surgery, microvascular surgery, plastic and reconstructive surgery, oculoplastic surgery, neurosurgery, oral surgery, transplantation medicine and psychiatry.

Healing military personnel and others with traumatic facial deformities

Severe facial deformities can impair normal breathing, speech and eating and can also lead to social isolation. While conventional reconstructive techniques can help many, for some the benefit of facial transplantation can outweigh the need for lifelong immunosuppression. UCLA's new Face Transplantation Program is currently seeking qualified candidates for a five-year clinical trial.

Program Director Kodi Azari, M.D., F.A.C.S., explains, "The program grew from a desire to do more for our wounded soldiers. Their lives are shattered in so many ways, and we need to be able to provide something more than what is currently available." The Face Transplantation Program works closely with UCLA's Operation Mend to help heal U.S. military personnel wounded and disfigured in Iraq and Afghanistan.

Face transplantation surgical candidates

To be considered for facial transplantation, the patient's disfigurement cannot be the result of a birth defect and cannot be repairable with conventional reconstruction. Some parts of the face, including the mouth and lips, will not function properly when reconstructed using tissue from elsewhere on the body. Face transplant surgery allows physicians to use matching donor tissue to replace these and other structures. The donor tissue must match that of the recipient in terms of blood group, sex, age, skin color and size.

Patients should otherwise be in good health, should be between the ages of 18 and 60 years and must commit to an extensive program of postoperative rehabilitation and a lifelong regimen of anti-rejection medications.

Patients are screened for psychological issues, including depression and PTSD, that would interfere with their ability to accept and recover from the transplant. The program also provides psychiatric care around the time of the procedure as well as long-term follow-up with psychiatric therapy.

Potential donor families are approached with sensitivity to the emotional and ethical issues of donation. UCLA's Face Transplantation Program goes beyond expectations by working with an expert in maxillofacial prosthetics to provide the donor family a facial reconstructive mask to recreate the donors visage and allow for an open-casket funeral if that is desired.

The transplant operation

Once an appropriate donor is identified, two teams of UCLA physicians begin work in concert. One team travels to the donor hospital and procures the tissue to be transplanted. Based on meticulous pre-surgical planning, the team takes only the tissue that the recipient will need. A second team prepares the patient, removing damaged tissue and scar tissue down to the healthy, underlying structures.

The reconstruction begins by anchoring bone in place and attaching muscle to the facial skeleton. Blood vessels, nerves, ducts and glands — such as the parotid (salivary) gland — are attached to corresponding structures. Finally, the skin is closed.

Patients begin speech and occupational therapy soon after surgery and continue for a year to 18 months. Patients remain in the hospital for the first month following surgery and at nearby UCLA housing for another two months. They are seen monthly for the next year, and then with decreasing frequency.

Participating Physicians

Ronald Busuttli, M.D., Ph.D.

Executive Chair, Department of Surgery
Dumont Chair in Transplantation Surgery

Kodi Azari, M.D., FACS

Chief, Section of Reconstructive
Transplantation

Keith Blackwell, M.D.

Associate Professor, Head & Neck
Surgery / Otolaryngology

J. Brian Boyd, M.D.

Professor of Clinical Surgery
Plastic and Reconstructive Surgery

James Bradley, M.D.

Co-Surgical Director
Face Transplantation

Christopher Crisera, M.D.

Associate Clinical Professor
Plastic and Reconstructive Surgery

Alan Felsenfeld, D.D.S.

Professor of Clinical Dentistry
Oral and Maxillofacial Surgery

Jaco Festekjian, M.D.

Associate Professor, Plastic and
Reconstructive Surgery

Robert A. Goldberg, M.D.

Chief, Orbital and Ophthalmic
Plastic Surgery

Reza Jarrahy, M.D.

Co-Surgical Director
Face Transplantation Program

James Kelly, D.D.S., M.S.

Maxillofacial Prosthetics

Gerald S. Lipshutz, M.D., M.S.

Medical Director
Face Transplantation Program

Sue McDiarmid, M.D.

Professor, Transplantation Services

Vishad Nabili, M.D.

Assistant Professor, Head & Neck
Surgery / Otolaryngology

Nader Pouratian, M.D., Ph.D.

Assistant Professor of Neurosurgery

Charles Tseng, M.D.

Assistant Clinical Professor
Plastic and Reconstructive Surgery

Contact Information

(310) 794-2558 for initial
evaluation

<http://transplants.ucla.edu>