


Perspectives on face transplantation

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This comprehensive review¹ of the ethical issues associated with face transplantation explores themes foreshadowed and, recently, directly anticipated in literature. W. W. Jacobs' short story, *The Monkey's Paw*, describes the disparity between magical thinking associated with grievous loss and unforeseen consequences of wish fulfilment. In *Flowers for Algernon*, Daniel Keyes captures the excruciating experience of the arc of initial success and ultimate failure of an experimental treatment. Most recently, John Irving, in *The Fourth Hand*, explores the nature of personal identity through the context of a hand transplantation.^{2–4}

Such works testify to the universality of the issues raised in the face transplantation essay. How does exploration of such issues contribute to the ongoing development of face transplantation?

First of all, the ethical context begs for definitive clarification of the indications for face transplantation. When this procedure is considered as solely addressing appearance, then the undertaking risks trivialisation relative to the magnitude of the procedure and the complications of subsequent management. Many face transplantation candidates, however, suffer crippling and life-threatening circumstances that are much more severe than problems associated with hand transplant recipients. Extensive facial defects can be associated with impending loss of vision, chronic midface infections threatening extension into the skull base, chronic airway complications and feeding disabilities. Clusters of these problems can be disabling and lethal beyond any considerations of appearance.

Reports of face transplantations, therefore, should clearly describe the complications of the original injury sites and should further document the status of such problems following transplantations. Such descriptions should shift the ethical discussion of face transplantation more clearly into the domains of medical necessity, outcome

analysis and risk–benefit ratios. Published reports of facial transplantation do not consistently detail the dimensions of recipient morbidities. This failure is only one of the inadequacies of the literature on this procedure. Published case reports often lack critical information about disabilities and functional outcomes; many cases have been superficially described in non-media.^{5,6}

This review importantly emphasises the problems associated with inadequate documentation of facial transplant cases. Institutions responsible for supporting face transplantations should insist on thorough, published case reports as a condition of continued support.

This review also identifies perioperative management as an ethical mandate. Many case reports and other reviews have documented significant problems with preoperative evaluations and long-term post-transplantation management.⁷ Such problems require ongoing scrutiny and rigorous analyses for their correction, without which face transplantation cannot be defended.

Additionally, the requirements of post-transplantation management include the ability to provide secondary procedures for optimising outcomes.⁵ The complex techniques of recipient preparation, donor harvest and transplant inset almost necessarily mandate the spectrum of skills within the full scope of plastic surgery.⁸ Within the remarkable dimensions created by microsurgery, plastic surgery distinguished itself as the ideal specialty to perform primary procedures and secondary reconstruction on flaps and replants.^{9,10} Transplantation will also make its

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best clinical progress within the practice of comprehensive plastic surgery. As with microsurgery, transplantation procedures will create a new sphere for classic reconstruction strategies.¹¹

This review achieves a comprehensive outline of the current contexts of face transplantation procedures. I look forward to a subsequent review at an interval of five years or so. Face transplantation should evolve into a major milestone in patient care.

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