Facial transplantation: A new gold standard in facial reconstruction?

The world’s first partial facial transplant has been performed in France. The public and the general medical community have reacted favourably to the transplant. It is only a matter of time before many other facial transplants are performed as ethical approval has been granted for patient selection to teams in Cleveland Clinic, USA and the Royal Free Hospital, London and teams in China compete with each other to perform facial transplants.

Inevitably the procedure has divided the plastic surgery community. Many plastic surgeons have concerns about the indications for and the risk of the procedure. The Royal College of Surgeons Report in 2003 crystallised many of the concerns of plastic surgeons about facial transplantation, recommending further research into key areas. These were technical challenge, graft failure, short and long term risk of immunosuppression, psychological factors including identity, and ethical factors concerning risk benefit analysis and informed consent. In our unit, we have used this report to drive a strategic research programme, which addresses all these areas and others, including donor family and transplant co-ordinator concerns. In doing so we have proposed that an ethical argument in a scientific context must be formulated in a way that allows it to be tested. This operational definition means that ethical concerns become a framework for investigation of key questions such as facial identity, rather than a stand-alone issue and effectively therefore a barrier to progress.

In studying each of the key areas, engagement with clinicians in that field has led us to formulate the challenges of facial transplant in terms of management solutions rather than clinical problems. Illustrating this with a psychological management plan, we have suggested that psychological change can be anticipated, the patient prepared appropriately and management strategies developed. The same principle applies to technical approaches and the management of immunosuppression. Key to this approach is the inclusion in each facial transplant team of a clinician with specialist expertise in each area, taking key responsibility in selection, consent or management. No one in the team is an expert on all aspects of the procedure.

Patients often distance themselves from risk when making difficult health decisions. So do health professionals. One interesting aspect of the media reports, which followed the announcement of the first facial transplant, has been the tendency for each ‘specialist’ to locate the main risk for the patient outside their own area of expertise. What has become clear is that in a team of different backgrounds, each assumes that the others’ challenges are the most problematic. Psychologists worry about the technical aspects of a facial transplant but judge the psychological change that patients may undergo a selection and management issue. Plastic surgeons are concerned about the risk of immunosuppression. Transplant physicians focus on the issues about identity but judge immunosuppression a clinical management issue. This gives the impression that facial transplant is beset with difficulty, but in fact simply illustrates the point above: when an expert clinician addresses their own subject, they do so in terms of what they know, i.e.: past experience, planning and management, rather than unknown risk.
Facial transplantation remains a challenge, as would any innovative procedure. But with the right members in a responsibly led team, the problems outlined can increasingly be focussed in terms of clinical management and overcome.

So are plastic surgeons out of step? We are naturally cautious and analytical. However, we must be careful that caution does not stifle innovation, a hallmark of our specialty. We should remember that it was a plastic surgical problem that stimulated the modern era of transplant immunology and that it was a plastic surgeon who performed the world’s first renal transplant. Whether the current partial facial transplant comes to be viewed as brave or foolhardy will depend on the outcome. If it is a success, then the team who performed it will be seen as brave pioneers. If it is a failure, they will be viewed as mavericks. In order for this reconstructive technique to gain its place, if any, on the reconstructive ladder we must obtain a body of clinical experience. The only way to achieve that is to have the courage to try.

References


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