## CLINICAL ETHICS

# Justifying surgery's last taboo: the ethics of face transplants

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#### THE RECIPIENT

Should face transplants be undertaken? This article examines the ethical problems involved from the perspective of the recipient, looking particularly at the question of identity, the donor and the donor's family, and the disfigured community and society more generally. Concern is expressed that full face transplants are going ahead.

**S** o it has happened. According to the *New Scientist*,<sup>i</sup> the case was made out by a team in Louisville, Kentucky, USA, in 2004,<sup>1</sup> and the first partial face transplant was performed in Lyon, France, in November 2005 on a woman whose face was mutilated by a dog.<sup>2</sup> <sup>ii</sup> Full face transplants are to go ahead at the Royal Free Hospital in Hampstead, North London, UK.<sup>3</sup> <sup>iii</sup> It has been called "the boldest cut",<sup>4</sup> and "a glorified sewing job".<sup>4</sup>

The Royal College of Surgeons in the UK<sup>5</sup> <sup>6</sup> and the Comité Consultatif National d' Ethique Pour les Sciences de la Vie et de la Santé in France<sup>7</sup> have cautioned against it. But even before the flurry of activity in late 2005, it was clear that this latest venture in transplantation technology would proceed: there were statements of intent—a prospectus almost—from clinicians and researchers, most notably from a University of Louisville team.<sup>1</sup>

It is sometimes suggested that face transplants are morally analogous to limb transplants.18 There have been hand transplants—some 20 transplants since the first was performed on Clint Hallam in 1998.9 10 Many of the problems are the same, but the ethical dilemmas that surround face transplants are, arguably, of a different dimension.<sup>11</sup> And caution is rightly being argued in the case of hand transplants too.<sup>12 13</sup> There must be concern that scientific advance is being urged before legal frameworks can be established, and before ethicists have debated the morality of the surgery.<sup>iv</sup> There may also be a danger that clinicians will seek to legitimate what they propose to do by finding justifications within ethicists on whom they can rely—even if no one else does.<sup>v</sup>

This paper considers the ethical issues of face transplants. Another paper will explore some of the legal questions. In considering the ethical issues, it is important to separate those which principally concern the recipient from those which affect the donor and the donor's family. But we must not ignore the interests of the disfigured community and those of society at large, and consideration will be given to those two interest groups as well.

Transplants of organs are now not uncommon. and although some questions remain contentious (eg, whether they can be sold<sup>14</sup>), on the whole their therapeutic use is uncontroversial. The same applies to skin grafts and reconstructive surgery.<sup>15</sup> Some parts of our body are more important than others. We cannot live without certain vital organs. such as the heart, but these are internal to us and are visible neither to ourselves nor to others. But even so, recipients of an organ may feel that their identity is being changed in some way. This was in part the reason why in 1999, a 15-year-old girl from Newcastle, UK, objected to having a heart transplant.<sup>vi</sup> And why many feel uncomfortable about xenotransplantation<sup>16</sup>: one person is quoted in a recent Swedish study as fearing he might start "grunting" if part of a pig was transplanted into him.17

These problems are, we believe, accentuated when a face is transplanted. As an expressive part of our body, it represents identity in a way no other part of the body does. It is the most intimate, the most individual characteristic of our body. It is what we recognise as ourselves and what others recognise as us. It is not surprising that we can talk of "losing face". The 2004 Royal College of Surgeons report holds that:

The face is central to our understanding of our identity. Faces help us understand who we are and where we come from. (Morris *et al*,<sup>6</sup> p 333)

<sup>i</sup>Cover story of the New Scientist, 29 May 2004.

<sup>ii</sup>See also The *Guardian*, 28 November 2005. The recipient gave an interview in the *Daily Mail*, 10 December 2005: 1, 20, 22. It had been reported that 12 people were queuing in Cleveland, Ohio, USA, to be chosen for the first transplants according to *The Times*, 19 September 2005: 13. See also The *Guardian*, 19 September 2005: 15.

<sup>iii</sup>Also reported in The *Guardian*, 16 December 2005:1.

<sup>iv</sup>A point made by Hedley J. In: *W and B v H* [2002] 1 FLR 1008, 1009. He refers to "an imbalance between our scientific and ethical capacities".

<sup>v</sup>Note the Louisville team's reliance on Moore FD. We surely cannot be alone in having missed his 1988 and 1989 articles which feature prominently in reference 1.

<sup>vi</sup>Re M [1999] 2 FLR 1097, 1100.

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Received 30 March 2006 Accepted 23 June 2006 And Margaret Lock<sup>18</sup> has argued that

... donated organs very often represent much more than merely biological parts; the life with which they are animated is experienced by recipients as personified ...

And, she notes, some recipients of organ transplants report "they experience embodiment in a radically different way after a transplant".<sup>18</sup> Embodiment may well be a key to our understanding of what makes face transplants different for potential recipients.

It is vital that central to the doctor–patient relationship is patient self-determination or autonomy.<sup>19</sup> But just as the importance of this can be exaggerated, with other considerations being neglected,<sup>20</sup> so it is all too easy to concentrate on self-determination and to neglect other aspects of personhood. As Dworkin<sup>20</sup> has observed, not only do we "have bodies but ... we are bodies". The importance of this in the context of face transplants cannot be underestimated. There are implications for consent. It may even be an area where paternalism has a strong claim to our attention.<sup>21</sup>

Disfigured persons are, it may be assumed, a particularly vulnerable group. One of their main problems centres on social interaction. They are also subjected to unwanted intrusions, such as staring or unwelcome comments. Clarke quotes Macgregor that people who have experienced disfiguring burns

... in their attempts to go about their daily lives ... are subjected to visual and verbal assaults, and a level of familiarity from strangers [including] naked stares, startled reactions, "double takes", whispering, remarks, furtive looks, curiosity, personal questions, advice, manifestations of pity or aversion, laughter, ridicule and outright avoidance.<sup>22</sup>

Clarke<sup>22</sup> (p 128) is of the view that the disfigured may have "very low self-esteem and expectations about life chances". They may even be seen as "freaks" or curiosities as the so-called "elephant man" was in the late 19th century,<sup>23-25</sup> and as conjoined twins and transsexuals are still today.<sup>26</sup>

This is likely to lead in many cases to a desperate, compulsive desire to alleviate their suffering. Recently published research<sup>4</sup> <sup>27</sup> v<sup>ii</sup> suggests that people are

... willing to trade more years for a hand, should they need one, than a foot, and more years for a larynx than a hand. But the body part for which people are willing to trade most years of life is by some margin a transplanted face. For a face they would take on even more risk than for a kidney.

If this research is convincing—and we must express some scepticism as far too little information is vouchsafed<sup>viii</sup>—it suggests that the disfigured may well feel compelled to consent to a face transplant.

On any interpretation of informed consent (and this legal doctrine is not uniform across jurisdictions), a potential recipient would have to be alerted to substantial risks. Nor would there be any space for "therapeutic privilege" (particu-

<sup>vii</sup>This is based on a presentation at the Annual Meeting of the Association of Plastic Surgery in Seattle in 2002 by Banis *et al.* 

<sup>viii</sup>We do not know what the respondents were told, and there is sparse information regarding their social profile. larly if the procedure is characterised as therapeutic research rather than treatment).

That there are risks is accepted even by advocates of face transplants (Wiggins *et al*,<sup>1</sup> pp 3–5). There are risks of infections,<sup>28</sup> of malignancies<sup>29</sup> and of end-organ toxicity.<sup>30</sup> There is an increased chance of getting diabetes and kidney disease. And there are psychological risks as well:

... a desperation that creates unrealistic hopes, fears that [the] body will reject the transplant, guilt feelings about the death of the donor, difficulty conforming to the treatment regimen and its side–effects, and a sense of personal responsibility for the success of the procedure. (Wiggins *et al*,<sup>1</sup> pp 4–5)

In addition, there is the possible trauma in adjusting to a new identity. No doubt, recipients can be taught to manage failure, but is any work being directed to such coping strategies or are the resources and the skills being devoted to the technology?<sup>31</sup> Nor should it be forgotten that families may need psychological support as well.

Is consent then possible? Cunningham *et al* (the Louisville team) are in no doubt "ultimately, the decision to accept risk to receive the benefits of a given treatment belongs to the patient".<sup>27</sup> In standard cases, this must of course be so. But is this "treatment" or is it experimental research?<sup>ix</sup> And how is risk to be perceived? The assumption of advocates of face transplants, as represented in the article by Cunningham *et al*, is that this can be proved objectively. But is it rather the product of values, such as experience, trust, a sense of control, regret and fear?<sup>32</sup>

Risks are acknowledged, but also, we suspect, underestimated. For example, insufficient attention has been given to the problem likely to be caused by a paucity of donors. Publicity about transplants may well stimulate demand, and this will exceed supply. What will be the effect of being on a waiting list? What is the relationship, if any, between coping strategies before and after a transplant? Given the significance of the face, the recipient will have a different life after a transplant. It may be a better one, it may be worse. Adjustment is bound to be difficult. There may initially be psychological shock of a dimension equal to or exceeding that caused by the disfigurement. There may be a sense of violation. Margareta Sanner<sup>33</sup> found that recipients of organ donations felt "their personality, behaviour or attitude have changed because they have received in their body an organ from another individual".

Adjustment is bound to be difficult. Most of our communications are facial.<sup>34</sup> Experiences after a transplant are bound to be different. The recipient may acquire different interests and even, it has been suggested, different eating habits.<sup>34</sup>

It is not clear whether potential recipients will be given any choice or any opportunity to view the prospective donor (alive or dead). Given the importance of the face, ought we to give the recipients a say, an opportunity to participate in the decisionmaking process? And should this extend further to their family? And why not to the donor's family as well?

There will be matching for blood and tissue, but what about age? And sex? Could a man choose a woman's face, in which case the prospect looms of face transplantation as part of a sex reassignment operation? And what about race? And skin colour? And if a market were to develop,<sup>35</sup> would value depend

<sup>&</sup>lt;sup>ix</sup>According to the Royal College of Surgeons, "any surgeon contemplating performing facial transplantation should regard the procedure as experimental and subject it to the evaluation of an independent committee" (Royal College of Surgeons in England,<sup>5</sup> p 17).

on attractiveness? Might it become possible to buy the face of a model or a football icon? Could face banks eventually emerge? To whom will face transplants be offered? Butler *et al*<sup>36</sup> (of the

Royal Free Hospital) admit:

Selecting appropriate recipients will be difficult and will take a considerable time. This process [will] involve identifying those patients who would have functional benefit and who also had realistic expectations of the procedure. The patient would have to be determined and resolute in adhering to the prolonged rehabilitation and the need for chronic immunosuppression. The patient must be robust enough to cope with these challenges and the psychological effects involved.

So, appearance by itself is not enough to warrant surgery. Butler *et al* admit that:

... it may be that people who have well-developed coping strategies and good social skills cope well with disfigurement, while those who find life generally more challenging, also cope poorly with disfigurement. The concern for us as clinicians ... is that this group may also cope poorly with face transplantation; thus, the very group who might benefit most are those who are least likely to cope ..., particularly if the results fall short of their expectations. (Butler *et al*,<sup>36</sup> p 17)

Does this mean that those for whom a transplant is clinically indicated are also those least able to give genuine consent? And, concomitantly, that those robust enough to consent can cope adequately without and so do not need this surgical intervention?

It is generally accepted that an autonomous decision is generated by an individual who acts intentionally, with comprehension and without "controlling influences".<sup>37</sup> The disfiguring condition experienced by those for whom a face transplant is to be offered may well constitute just that controlling influence. And what comprehension can the potential recipient have when the surgeons themselves know so little about the benefits and the harms? The Louisville team contents itself with an acknowledgment that "... we have gained as much knowledge as we can though scientific studies; and therefore additional knowledge can be attained only by actually performing the experimental procedure and following the outcome" (Wiggins *et al*,<sup>1</sup> p 8).

This is a candid admission that we are still in the realm of medical experimentation, which itself has implications for the question of consent.

Of course, voluntariness is a matter of degree. As Joel Feinberg<sup>38</sup> has observed:

At one end of a spectrum are the acts and choices [which are] *perfectly voluntary*. Only the actions of normal adult human beings in full control of their deliberative faculties can qualify for that description. Such persons assume a risk in a perfectly voluntary way if they shoulder it when fully informed of all relevant facts and contingencies ..., and in the absence of all coercive pressure. In the ideal case, there must be calmness and deliberateness ..., no distracting or unsettling emotions, no neurotic compulsion, no misunderstanding. To whatever extent there is compulsion, misinformation, clouded judgment ... or impaired reasoning ... to that extent the choice falls short of perfect voluntariness.

Looked at in this way, it may be said that a face transplant falls so far short of the "ideal" as to raise doubts not just as to whether a potential recipient can consent, but also whether the offer is one that can ethically be made.

One answer to this may be to draw an analogy with the desperately ill, for example, those with AIDS, prepared to throw caution to the wind, willing to try anything, in the hope that they—or for the more altruistic those who come after them—may be cured.<sup>39</sup> Should we refuse to sanction risk-taking behaviour?<sup>40</sup> Or should we rather be prepared to accept that individuals can consent to a procedure that may harm them but may also redound (ultimately) to the collective good? Our concern is that we are here focusing on a particularly vulnerable group of people. Nor is there any evidence, as there is, at least anecdotally, with those with AIDS that participation may be motivated by a desire to promote a more healthy population.

We know quite a lot about the physical risks involved.<sup>17</sup> We know rather less about the psychological effects a face transplant may have. The recipients may be seeking normality, but may feel less normal than they did when possessed with their disfigured face. The recipients will look neither like themselves nor like the donor: instead they will have a composite identity.<sup>41</sup> The effects of this on different people will be different.<sup>42 43</sup> Indeed, the effects on men and women may be different, although no evidence exists that the gender question has been investigated.

The emphasis has been on whether face transplants can be accomplished, on the science and the technology. It is therefore not surprising that the body is seen here, as elsewhere, as a machine "operating according to material principles".<sup>44</sup> According to Leder,<sup>44</sup> "We stretch toward the Cartesian dream of remaking the body at will" (p 239). Christian Byk<sup>45</sup> has asked:

Hidden by the law under the concept of a person, but empirically revealed by our biomedical techniques, will the human body come to have the status of a thing to be utilized, to be dismembered for the benefit of the individual or the community, each claiming rights in it? Will the law ... dig the grave of the living human body? Will it become a thing?

Commodification of the human body is not new, but facial transplantation may be the most striking example of the results of this reductionist view of the human body. It seeks to resolve the problems of disfigurement by disposing of the damaged face and replacing it with the face of another. But does it resolve anything? Our bodies and our persons are inextricably interconnected. Thus, "disease is not simply something that effects a biological body in the abstract".<sup>x</sup> Rather, "illness is uniquely experienced by the particular person whose body it happens to be".<sup>x</sup> Our relationship with our bodies is not like our relationship with things or even with other persons. As Sartre<sup>46</sup> explained, "… the lived body is an embodied consciousness which engages and is engaged in the surrounding world … The parts of the body … form an *intentional* unity in the worldly engagement of the experiencing subject."

The body is not an unconscious machine. Rather, "the self is an integrated whole whose subjectivity is embodied, and whose body is 'mentalized' through and through" (Leder,<sup>44</sup> p 254).

Organ transplantation generally should force us to confront questions about the nature of the self and about identity. Where, as a result of a transplant, a change in physical appearance is the result, as with limb and face transplantation, these questions are all the more urgent and compelling. Kay Toombs has argued that medical treatments that alter the body's appearance "represent a threat to one's sense of personal

<sup>x</sup>A point made by Toombs K. What does it mean to be somebody? Phenomenological reflections and ethical guandaries. In Leder,<sup>44</sup> p 73. identity [... because] changes in physical appearance cause one to experience the body as unfamiliar and unrecognisable—as no longer one's own" (Leder,<sup>44</sup> p 89). It is to replace one disfigurement by another. We do not know how people will react to a conflation of self and "other", to a kind of "third identity". Does it not pose a threat to human dignity?<sup>41</sup>

Nor do we know how others will react to the recipient of a face transplant. The recipients' family, friends and acquaintances may not recognise in them the person they knew and loved before the transplant took place. Will they react and interact in the same way? And how will others react? Initiallyindeed for a long time-it may be predicted that people, spurred on by the media, will be curious. And protecting the privacy of recipients will not be easy.47 48 They may be subjected to intrusions (staring, comments, etc) not altogether different from what occurred before the transplant. Some recipients may come to regret having had the transplant, as Clint Hallam, the recipient of the first hand transplant, did (Dickenson and Widdershoven,<sup>9</sup> p 116). A transplanted hand can be amputated, as Hallam's was. But a face? It may be anticipated that those who are less than happy with their transplants will experience psychological disorders. There may even be suicides. Certainly, there will be some who will recognise in the drug regimen a medicine's attempt to impose on them a new persona, and who may thus cease to take them with all the consequences this will have.

Whatever the aesthetic result, we cannot escape the conclusion that the recipient will have neither a "normal" appearance nor a unique identity. We are far from grasping the implications of a face transplant.

But, defenders of the face transplant will respond that those with disfigured faces are entitled to exercise autonomy. We do not deny that it may theoretically be possible, even in the circumstances, to make an autonomous decision to receive a face transplant. The extent of the patient's vulnerability or ability to act without excessive compulsion is something that must be judged on an individual case-by-case basis. In addition, although there is an alarming lack of information about both the risks and benefits (even aesthetic or medical) of face transplants, we recognise the danger of subjecting individual decisions to external standards of rationality. It is arguable that as long as there exists "accurate knowledge, at a higher level, of the scope and limits [of this] first-level knowledge" (Feinberg,<sup>38</sup> p 160) it may be said that the patient's decision "was made in ignorance, as Aristotle would say, but 'not by reason of ignorance" (Feinberg,<sup>38</sup> pp 150–61). However, the obligations of those who wish to transplant faces go beyond paying lip service to patient autonomy. Autonomy is emphasised because we believe in human dignity and respect for persons.<sup>49</sup> But we cannot respect persons and their dignity merely by recognising that they have autonomy. Joffe et al<sup>50</sup> argue that we should add "respect for the body, respect for the family, respect for community, respect for culture, respect for the moral value (dignity) of the individual, and respect for the personal narrative".

And Rendtorff,<sup>51</sup> writing of the basic ethical principles in European bioethics, has noted that they<sup>xi</sup> find their "conceptual and empirical foundation in anthropology of the bodily-incarnated human being". There is, he continues, "an ongoing personalisation of the body".<sup>50</sup> The gap between this bioethical discourse and face transplant advocacy could not be greater. Face transplants may be regarded as the latest, perhaps even the final step, in medicine's depersonalisation of human beings.

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<sup>xi</sup>See BIOMED II project "Basic Ethical Principles in European Bioethics and Biolaw" 1995–1998.

#### THE DONORS AND THEIR FAMILY

Much less attention has focused on the donor. Neither the Royal College of Surgeons in the UK<sup>5</sup> <sup>6</sup> nor the French Comité Consultatif<sup>7</sup> considers the issue of the face transplants from the perspective of the donor.

To say that the donor will be dead—it is envisaged that it is from cadavers that faces will be removed—is far from an answer for two reasons. These reasons are related. First, there is the decision to donate. But this is not like the decision to donate other organs after death. And this is because, secondly, the donor will die and in a disembodied form live on. What was the stuff of drama to earlier generations (Hamlet's father's ghost reappearing or the Commendatore returning in Mozart's *Don Giovanni*) is set for contemporary realisation.

Should we therefore question a donor's motivation? Should it matter what this is? Should offers to donate be ruled out if the motivation is less altruistic than, literally, face saving? A form of "life after death", a "second coming", self-aggrandisement? Perhaps even a desire to haunt family, friends and colleagues? We do not suggest that non-altruistic donations will be common; they probably will be most uncommon. Nevertheless, it would be foolhardy not to alert ourselves to the contingency.

Does this mean that donations should be anonymous? The Louisville prospectus is clear that they should: "All reasonable efforts should be made to protect the donor's anonymity".1 They acknowledge, however, that "the research team cannot prevent someone (e.g. a member or friend of the donor's family) who knows about the case from publicizing information on his or her own".<sup>5</sup> <sup>6</sup> It is predictable that recipients will be curious as to the identity of the donor. This may be so in the case of other transplants too, but, given the significance of a face transplant for identity, it may be supposed that it will be greater and more common here. What has been conceptualised in another context (adoption) as "bewilderment", 52 and has led there to a search for origins, may have similar results here too. Anonymity may be best for donor's family, and it may encourage, or at least not discourage, donations. But it will deny the recipients their psychological need to know. Whether the interest in knowledge about facial origins is sufficiently strong to warrant designating it a "right to know" is debatable. A compromise solution would be to let the recipient know basic information (age, occupation, religion) without divulging identifying information. Some donors might see it as a way of living on after death. But it is in the interests of their families that identifying information is withheld, as it is in the interest of the recipient to have some basic information.

The deceased's family is likely to think of him or her in terms of his or her face. This may be especially so where the deceased is a child or a young person. In such cases there may even be a desire for a continuing a quasi-relationship by means of contact. Has the effect of this continuing quasi-relationship on the grieving process been thought through? Is it something that potential donors will grasp? It is most unlikely, indeed, undesirable, that any right to contact will develop. But denial could lead to frustration, anger and trauma, in extreme cases perhaps even to a macabre form of stalking. It is also possible that donation may deepen the family's sense of loss.

This leads on to a discussion of the consent process. It would be unthinkable to use the faces of dead persons without consent. It would also be in breach of the English law. We do not know how many people will leave their faces. Donor registration forms, which identify parts such as kidneys, heart, liver, cornea, lungs and pancreas, do not direct a potential donor's attention to face or limbs. Nor is it the least bit surprising, given both the novelty and ethical complexity of such transplants. Should we assume that those who request that "any part" of their body may be used would include within this their face? Caution at this stage, if nothing else, suggests that this would be an inappropriate interpretation. Nor is it likely that donors will specifically exclude faces or limbs from the remit of their donation: few will contemplate the possibility.

The Human Tissue Act 2004 unsurprisingly does not consider this issue.<sup>53</sup> It states that the use of a body or the removal of organs of a deceased person for transplantation is lawful if done with "appropriate consent" (Section 1 (1) (b) and (c)). In the case of adults, this is their consent (this does not have to be in writing: Section 3 (6) (a)). If there is consent, in law, that is the end of the matter. But looked at ethically, concerns persist. Individuals who consent to their kidneys being used after their death can readily appreciate that their donation will save lives: its implications are only therapeutic. Can we be sure that those who consent to the use postmortem examination of their face are aware of the implications of what they are doing? The transplant is therapeutic, of course, but it is much else as well. It will have an effect on others, including the donor's family, in ways in which the donation of an internal organ is unlikely to have.

The Human Tissue Act 2004 also permits adults to nominate a person or persons to act in their interests after death (Section 4). This appointment can be made orally (if made before two witnesses together (Section 4 (4)). Consent may then be given or withheld by the person so nominated. We may assume that the likeliest nominee is a close family member, but it does not have to be and may well be someone else. If no one is nominated, authority is vested in a person who stood in a "qualifying relationship" to the deceased: these are statutorily ranked (see the ranking in Section 27 (4)). Consent by family or a nominated friend raises critical problems. We witnessed a similar quandary when, in a notorious case,<sup>xii</sup> sperm was removed from a dying man so that his partner could give birth to his posthumous child (she in fact had two sons as a result).

The case caused a furore, and comparisons were made, if overdramatically, with rape.<sup>54</sup> There is some evidence that Stephen Blood would have wanted his widow to bear his child. But can a similar exercise of "substituted judgement" be made where a deceased person has expressed no opinion on what should happen to his face? The decision would have to be in the deceased's interests, but what these are will often be contentious. There is surely a distinction between living on through a son, as Stephen Blood might have been said to be doing, and living on because a stranger now has your face.

Too little attention has been given to these consent issues. Without a clear framework of rules it is difficult to see how transplants can be justified. The Louisville team does, we note, espouse the idea of a "subject advocate".<sup>14</sup> This may assist prospective recipients in making informed decisions, but donors and their families need support as well.

#### THE DISFIGURED COMMUNITY AND SOCIETY

The effect that face transplants could have on the disfigured community cannot be ignored. The Louisville team acknowledges this problem:

... A successful facial transplant might be interpreted as conveying the message that a good quality of life cannot be achieved by people with disfiguring conditions.<sup>14</sup>

But they do not appear to be unduly concerned by this. Even if we accept the premise that disfigured persons are unable to enjoy the good life, it is not their disfigurement that constitutes the barrier. Rather it is the reactions of others, of the society around them, which make them feel at least uncomfortable and

 $^{\rm xii}{\rm R}$  v Human Fertilisation and Embryology Authority ex p. Blood [1999] Fam 151.

often marginalised and stigmatised. The source of their pain on this interpretation is not their disfigured face, but societal intolerance. Of course, this problem is not unique to face transplants but generally applies to issues of disability.

If successful face transplants were to become routine, this is likely to increase. Those with disfigurement will be seen as even more deviant than before. Those who refuse a face transplant and those for whom one is not possible—perhaps, those who cannot bear the cost, a real consideration where there is no socialised medicine—may suffer more than they do now. They must come to terms with their face as those with other "deficits" must. It is more difficult to accept identity in a hostile environment. If society were more inviting, more tolerant, more accommodating, there might be less demand for face transplants. As was pointed out by Strauss<sup>55</sup>: "when something is correctable, our willingness to accept it as untouched is reduced".

Disfigurement is, of course, a social construct. As such it is shaped by cultural forces.<sup>14 41 56</sup> The disfigured are only such in relation to those whose face comes closer to the norm. A face transplant "industry" could shift the benchmark, bringing more within the purview of disfigurements and increasing a potential clientele. We can learn lessons from the cosmetic surgery industry that promotes an ideal of beauty,<sup>57</sup> and manufactures demand its services. Of particular relevance is the way cosmetic surgery has been used to "normalise" the faces of people with Down's syndrome.<sup>58 59</sup> We have no doubt that this is intended to alleviate suffering, and may well do so. But has the effect been calculated on those with Down's syndrome who do not undergo the surgery, for whatever reason? Does the exercise of choice increase the options of others or foreclose them?

As far as society generally is concerned, there are other considerations that may be briefly addressed. What will be the effect on other organ and tissue donations? If face transplants attract adverse publicity in the media, there may be a knock-on effect: a fall in the number of those willing to donate, a drop in those carrying donor cards and greater reluctance on the part of families to facilitate donations after death. The maintenance of altruism is heavily dependent on the preservation of a relationship of trust between the community dealing with transplants and the general public. We can afford nothing that will undermine this.

We cannot ignore the question of resource allocation, although there is a tendency to do so. It is not just the surgery that must be accounted for, or the counselling, but lifelong immunosuppressive drugs. It is not a factor that features in the Louisville manifesto: the assumption is that face transplants will be privately financed or paid for by medical insurance. Dickenson and Widdershoven,<sup>9</sup> in discussing limb transplants, do consider this issue. It is at least of equal concern here. In the UK, the National Institute of Health and Clinical Excellence has had, inter alia, to resolve the question of  $\beta$ -interferons for patients with multiple sclerosis,60 and infertility treatment for the infertile.61 62 The National Institute of Health and Clinical Excellence report was published in February 2004. Its decisions on both these issues were far from uncontroversial. Could it recommend face transplants on the National Health Service without courting major controversy? Or should face transplants only be available for those who can afford to meet the costs themselves, remembering of course that on any definition of cost, they would be meeting only a fraction of these?

And disfigurement is, we have already noted, a social construct. The need for a face transplant cannot be medically determined, as the need for a heart transplant or kidney transplant can. The desire for a face transplant is only in part a factor of disfigurement. The level of tolerance may vary with the degree of vanity and of course affluence. Could face transplants become the latest symbol of affluence, the "fashion label" of the early 21st century? Could we arrive at a time when only the poor need to be "ugly"?

#### CONCLUSION

We believe the case for face transplants has not yet been made. Others, writing before the first transplant was performed, have urged caution.<sup>5-7 41 63</sup> It is our view that no further face transplants take place until a long-term assessment—perhaps in 3 years—of this first such attempt is made. Our arguments against face transplants do not rely, as many would, on the "yuk" factor, although we would not discount its importance.<sup>64</sup> The case against is pitched on three levels that examine the perspectives of the recipient, the donor and the donor's family, and the disfigured community and society more generally. The problems, particularly the psychological problems, for the recipient have been recognised, even by advocates of face transplants. Problems that may beset the donor and the donor's family and the disfigured community have, we believe, been underestimated.

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