

Hearts in the Balance

FROM the tenor of public discussion about the recent heart transplant at Guy's Hospital, it would be hard to guess that Dr Philip Blaiberg is still alive 18 months after his operation and has even written a book entitled *Looking At My Heart*. Surgeons' hopes that they may be able to do as much for other patients, even against the present odds, seem to have been given less weight than they merit. But if the current status of the operation is being generally misunderstood—a possibility for which the doctors must share the blame with those who disseminate news of their doings—that is a small price to pay for the vigorous public interest and discussion which is one of the healthiest features of the heart transplant operation. Surgeons may not relish the hot breath of the spectators behind them, particularly at the tricky stage the operation has now reached, but it is the spectators, after all, who will eventually decide the rules of the game and their decision will be the better arrived at as it is the more informed. In the long run there would be much more to complain of if the public did not want to know about heart transplants and the dilemmas they pose.

This is why it is short sighted to hope that organ transplants can proceed under the ancient cloak of professional secrecy until the medical profession itself has decided on their various merits. It is true that kidney transplants were pioneered through the experimental stage without the public demanding to have its hand on the scalpel. But the very different problems of the heart operation demand a public relations exercise of corresponding subtlety.

The chief problem at present seems to be the confusion over the scientific status of heart transplants, compounded by reluctance on the part of heart surgeons to say what they hope to achieve in the present circumstances. A reluctance to admit that a particular patient is the subject of experimentation is entirely understandable, but equally acceptable is the argument that more experiments must be done before enough is known to assess their value. But how many hearts must be transplanted before this stage is reached? More than a hundred operations have been performed throughout the world since Dr C. A. Barnard undertook the first a year and a half ago. Is not a hundred enough? Can no verdict yet be reached on the therapeutic value of the operation and the conditions under which it should or should not be attempted? What is the summary of the experience that has been gained so far and in what way do the surgeons of the present and subsequent heart transplants hope to add to it?

Questions like these would meet even more happily with an answer now that Dr Denton Cooley and his colleagues have summarized the results of the sixteen operations performed at the Texas Heart Institute (*New England Journal of Medicine*, **280**, 1079; 1969, and *Lancet*, i, 954; 1969; see also *Nature*, **222**, 721;

1969). The burden of this experience seems to be that it is not worth transplanting a heart unless the tissue match between donor and recipient is reasonably close, which is closer, perhaps, than is likely to be obtained in present circumstances. More precisely, they warn that the tissue matches in the operations already performed should be carefully analysed "before it is assumed that heart transplants may continue to be performed with impunity in patients having poor histocompatibility matches". Their own data suggest a direct correlation between length of survival and closeness of histocompatibility match. Under the fortuitous circumstances in which donors become available they were able to obtain only one tissue match better than a certain grade and it is this patient whose performance has been the most satisfactory.

In these circumstances it seems there would be much to be gained by relating the hopes for future heart transplants to what Dr Cooley's team or others have already discovered. Alternatively the need to confirm Cooley's findings in other centres could be stressed. There is also the problem of understanding why the different tissues of the body should differ in their antigenicity, and why the skin and the heart, for example, should be less tolerant of mismatches than the kidney. These or other reasons may be an excellent justification for continuing with heart transplants over and above the hope of prolonging the patient's life. But, in view of Dr Cooley's conclusion that the life of the average patient is not significantly prolonged (although its quality is improved), it is all the more necessary to make clear the scientific basis of further operations.

As things now stand, it seems that the heart surgeons have perhaps made an error of judgment in not spelling out the scientific justification of what they hope to achieve. This is a matter that could profitably be considered by the advisory group on transplantation problems which is expected within the next month to report to the Secretary of State for Social Services. The group has Sir Hector MacLennan as chairman and its other members, who were announced this week, include Professor Sir Michael Woodruff and Professor Roy Calne, who has recently suggested that organs should be considered available for transplantation after death unless the donor has specifically declared to the contrary. Other members of the group are Miss Katherine Whitehorn of *The Observer*, the Reverend Professor G. R. Dunstan, Baroness Wootton of Abinger, Mr J. Garfield, Professor W. S. Peart, Dame Muriel Powell, Dr G. L. Thurston and Mr D. Currie. Once again, it seems, Mr Richard Crossman, the minister ultimately responsible for social services, has mustered all the talents. It is important that they should act swiftly; the last thing that is needed is another device for justifying reticence.