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## Living Donors: Con

T.E. Starzl

I HAVE NEVER YET won a debate with Felix Rapaport, partly because of my own ineptitude and perhaps partly because I would not want to win at the expense of such an old and good friend. Thus, I will summarize Felix's case for him although he has already eloquently done so. In brief, living donors are convenient, they provide a better biologic match on the average than can be achieved with cadaveric donors, and this fact alone meant in the precyclosporine days that the quality of life would be substantially better than with a cadaveric kidney. Matching truly counts with intrafamilial transplantation, thereby fulfilling the expectations about typing that many of us hoped for 20 years ago. The possibility that the kidney supply can be increased by living donation may be illusory as I will discuss.

Finally, the prospect of manipulation of the recipient immune system using donor blood or tissues may be important, as exemplified by the preoperative donor-specific blood transfusion practices pioneered by Salvatierra and his associates working with Terasaki and now affirmed by Belzer at the University of Wisconsin.

Since it is really not my task to glorify the opposition, I now am forced to turn, however briefly, to the countervailing arguments against the use of living donors. The most compelling argument against living donation is that it is not completely safe for the donor. A number of deaths have occurred, at least 20 to my certain knowledge. It would do no good and much harm for me to show a slide of

horror stories given to me in confidence. Suffice it to say that some deaths have occurred quite recently and that all have been in centers of genuine excellence. The deaths have been caused by anesthetic complications, postoperative pulmonary emboli, postoperative hepatic dysfunction, and technical surgical complications in about that order of frequency. When deaths have occurred, they have had a devastating effect on everyone even remotely associated with the case. The heartbroken surgeons to whom I have talked, including one whose patient died 23 years ago, have told me that the donor deaths presided over by them represented the most terrible moment in their lifetime, and I suppose it might be fair to say that this kind of suffering pales beside that of the family members themselves.

I have heard it said, and seriously, that one death every 2,000 patients, or whatever the figure actually is, is a statistical nonevent. It is hard to really believe this since the death of a single well-motivated and completely healthy living donor almost stops the clock worldwide.

I would like those younger surgeons here today to realize, if they do not already know it, how frequently I myself did living donor operations until 1972. In my opinion, the modern era of renal transplantation could never have developed as it did without living related donor transplantation. The results with nonrelated donors, for the most part cadaveric, were so poor from 1962 to 1972 that the great effort in using these biologically nonrelated kidneys often was hardly worth the effort. The option was the living related donor.

However, during that decade, I saw examples of donor abuse within families, often detected by the health care team but sometimes not. If a prospective donor is deficient in some way, usually intellectually, the family power structure may focus on him or her on the basis of their presumed expendability. I

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have seen refusal of donation lead to ostracism within families, or far more commonly donation has become a reluctant sacrifice offered to someone for whom there is little or no affection.

The question of coercion is a particularly important one with volunteer donors who may not possess full civil rights. The article from the ethics committee of this society that appeared as an editorial in *Lancet* in September, 1985 alluded to examples in underdeveloped countries of potential economic coercion of employees whose work positions could only be described as servitude. There are so many potential examples that I think that it might be most prudent merely to say that the question of free choice is not an easy one to answer if one is approached about living donation either by a family member or by somebody outside of this circle.

I am prepared to believe that, having avoided death the living donor minus a kidney, can look forward to a completely normal lifetime. When I was an activist for the use of living donors, I helped sell a number of life insurance companies on the idea, and I actually induced some of them to say that the actuarial prospects of a normal life survival were not reduced at all. There is nothing definitive to overthrow this point of view at the present time, but there are a lot of hints that the concept may not be true. I was struck by the report from Vanderbilt University in the *Annals of Surgery* this past spring in which an extraordinary incidence of hypertension, about 35%, was recorded in donors followed for 7 or more years. Since these donors were young and had been selected for the absence of all premonitory signs of hypertension, the high figure was more than merely an eye catcher.

I now turn to the question of the influence of living donor programs on cadaveric organ procurement. The whole ambience of a surgical life is more efficient as well as more pleasant if cases are done at preordained times and under highly controlled circumstances.

This is an argument for living donation, but the very convenience of the process could be almost too easy to leave much enthusiasm left over for the irregularity and hurly burly of cadaveric procurement and transplantation. In other words, a heavy commitment to living donation could almost be a negative incentive to cadaveric organ procurement and, thus, defeat the objective of finding more organs that could be used to defend Dr Rapaport's position.

I now will show a newspaper photo and article that make the central points defended by both the opponents and proponents of living donation. The love and affection that the young man in the picture has for his little sister could really not be pretended, and what she has given back to him in return for his wonderful gift is equally obvious. I wish that we could look at the picture alone and not read the subscript about the "hard luck donor with the damaged kidney."

No one deserves to win more than that living donor. I hope and pray that he emerged victorious from his bout of acute tubular necrosis, and I have heard from Toronto friends that this was in fact the happy end of the story. I also hope that more complex donor operations such as partial pancreas removal or removal of portions of the liver for transplantation will not be extensively carried out in living donors since here the risk to the donor will be even greater.

Mr Chairman, may I close by saying that the arguments today are not *ad hominem*. No one would ever operate on a living donor without being convinced in his deepest conscience that he or she was doing the right thing. What we do when we agree to engage in public discussions like this is to expose the deepest crevices of our consciences for criticism and sometimes ridicule. Thus, I want to conclude by honoring Felix Rapaport for coming here as he has done today to give his views about a decision that must be between the surgeon and the living donor, and between them alone.