

ISSUES RELATED TO RACE IN TRANSPLANTATION

(Comments)

John C. McDonald, M.D.

Louisiana State University Medical Center - Shreveport  
Department of Surgery  
P. O. Box 33932  
Shreveport, Louisiana 71130

It is certainly unusual for a Louisiana surgeon to be invited to Michigan to comment upon issues related to race. I was so surprised by this invitation that I accepted without adequate reflection.

This subject is of necessity more philosophic than scientific. When such subjects are discussed the audience needs to be fully aware of the <sup>of</sup> ~~pro~~spective of the speaker. Thus, I should inform you that my entire professional career, from medical student to professor, has been spent in universities associated with large public hospitals. Twenty-five of those 38 years have been spent in Louisiana. The population of Louisiana is about 4.5 million. Thirty-one percent of Louisianians consider themselves black. The median income of a Louisiana family of four is as low as \$16,000.00 per year. The high school dropout rate is 40 percent and in 1980, 43 percent of the citizens older than 16 years had less than a high school education. The Louisiana State University Hospital's patient population is 60 percent black and 90 percent poor. This is the milieu in which I work. Further, I am a seventh generation Mississippian who learned as a teenager that to look at any human problem or endeavor in terms of race was nonproductive, generally led to erroneous conclusions, and commonly was a subterfuge for secondary agendas. Thus, I approach this subject with the point of view that: there are no issues in transplantation related to race. There are only issues that relate to human beings.

There are a few dozen publications relative to transplantation which attempt to distinguish differences between black and white patients. None of them have any substantive merit.

The best that can be said for studies which consider all blacks and/or all whites as homogenous groups, is that they are scientifically invalid. Let us examine some of the proposed differences.

I. Blacks are seldom organ donors:

Is this a characteristic of blacks? Perez, et al reported that citizens of Puerto Rican, Mexican, and Cuban ancestry also donated organs less often than whites. The same study shows that blacks and latins and whites from Miami donated organs more frequently than the same groups from New York City.<sup>(1)</sup> There are no substantive data on black donors which consider educational level or economic resources. Similarly, few such studies exist for other populations, but it is well known that certain subsets of whites donate organs less commonly than others. For example, in some states, organ donations reach greater than 40 per million population per year, while in Louisiana, we have never reached 20 per million per year. Certainly consent for organ donation is obtained with a much higher frequency in private hospitals than in public hospitals in Louisiana, and I believe this is a common experience. Thus, while it may be that some blacks donate organs less commonly than some other people, it is not because they are blacks.

II. Kidney transplants are less successful in blacks:

Reported results vary on this subject. Opelz, et al<sup>(2)</sup> first made this suggestion which was confirmed by others.<sup>(3)</sup> Diethelm, et al found no difference in allograft survival between black and white recipients prior to cyclosporine, but found that black

patients were not benefited by cyclosporine therapy while white patients were.<sup>(4)</sup> However, Ward, et al reported just the opposite.<sup>(5)</sup>

We reported the results of 3,811 prospectively studied cadaver donor grafts from the Southeastern Organ Procurement Program (SEOPF) and found that when recipients were stratified for compatibility, blood transfusions, and antithymocyte serum therapy, there was no difference in survival of grafts in black or white recipients.<sup>(6)</sup> The data specifying this particular point were not presented in that paper since it did not seem important, but the analysis was quite clear.

Results published from the University of Michigan did not show that black patients had poorer results than whites.<sup>(7)</sup> Most studies on this subject are from centers which pay little attention to compatibility. In those in which an analysis is possible, black patients virtually always receive kidneys which are less well matched than whites. This is much more likely to explain any difference in graft survival between black and white patients than any problem intrinsic to blacks.

### III. Blacks lose more kidneys because of non-compliance:

Again, this problem is not intrinsic to black patients. In my own clinic 60 percent of 256 grafts analyzed over a year ago were into black patients. We have always given priority to matching and there is no difference in our clinic between races as to the degree of match or mismatch. Neither is there difference in graft survival. Excessive late graft loss is a characteristic of our clinic (Figure 1). When our graft survival curve is compared

to that from the Southeastern Organ Procurement Foundation generated from some 40 transplant centers, it can be seen that the early graft loss in our clinic is less than average, but late graft loss is excessive. This curve is comprised of 60 percent black and 40 percent white patients. What it represents is loss from being poor and uneducated. It represents the inability to obtain medication or transportation, the inability to interpret instruction or to obtain information, and probably many other sociologic problems. It is not, however, a condition of blacks, but a condition of human beings.

IV. Blacks do not donate their fair share of organs:

According to 1988 data from the United Network of Organ Sharing, 641 of 6,393 or 9.1 percent of all organ donors in the United States were black. Governmental data from 1986 reports that 12.2 percent of the U.S. population is black. While there is a substantial discrepancy, it is not that blacks will not be organ donors.

V. Kidneys from blacks function less well than kidneys from whites:

This was reported by Opelz, Mickey, and Terasaki<sup>(2)</sup>, but has not been confirmed by any other published study including later analysis from the same group. It can be considered a myth.

SUMMARY

It would be possible to refute any comment or finding which suggests a transplantation problem intrinsic to race with any data available today.

Reliable studies that consider education, income, access to

competent care, ability to understand and interpret instructions, are badly needed.

If I may be allowed a personal statement: Those of us who have cared for large numbers of the poor commonly acquire a great respect for the almost noble way many face severe or chronic illnesses. Many times these people approach self-sacrifice in order to protect or provide for their families or dependents. We need to place less effort in considering whether or not a person is black, Scot, Mexican, Arabic, etc., and more effort providing good education and access to economic independence to the underprivileged in our society. Thus, I end as I started. There are no transplantation issues related to race. There are only transplantation issues related to human beings.

## BIBLIOGRAPHY

1. Perez LM, Schulman B, Davis F, Olson L, et al: Transplantation 46:553-557, 1988
2. Opelz G, Mickey MR, Terasaki PI: Transplant Proc 9:137-142, 1977
3. Stuart FP, Reckard CR, Hill, JL, et al: Arch Surg 114:416-420, 1979
4. Diethelm AG, Blackstone EH, Naftel DC, et al: Ann Surg 207:538-547, 1988
5. Ward HJ, Koyle MA, Terasaki PI, et al: Transplant Proc 19:1546-1548, 1987
6. McDonald JC, Vaughn W, Filo RS, et al: Ann Surg 200:535-541, 1984
7. Weller JM, Wu S, Ferguson CW, et al: Am J of Kid Dis 9:191-199, 1987