LONG-TERM OUTCOME OF HIGHLY SENSITIZED AFRICAN AMERICAN PATIENTS TRANSPLANTED WITH DECEASED DONOR KIDNEYS


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** Purpose:** This study was conducted to evaluate the outcomes of highly sensitized recipients of kidney transplant based on race. Sensitization is assessed using panel reactive antibody screen (PRA) and is considered to be a risk factor for rejection. African American (AA) race is considered to be a risk factor for lower graft survival after transplant. The purpose of this study was to analyze outcomes among the highly sensitized patients who received grafts from deceased donors (DD) by virtual cross match, and determine if African Americans were at an increased risk for poor outcomes.

** Methods:** This was a retrospective review, summarizing data gathered from a 10 year time period. It included patients from the Tulane Abdominal Transplant Unit. Highly sensitized patients were identified as those with PRA >80%. All patients had negative cross match before transplant by using donor lymph nodes as a source of T and B lymphocytes. All recipients received antibody induction with 2 doses of basiliximab and maintenance immunosuppression consisting of tacrolimus, mycophenolic acid and steroids. Rejections were diagnosed on kidney biopsies which were routinely done whenever graft dysfunction could not be explained by obvious cause.

** Results:** Among 835 consecutive transplants from 1998 to 2007, 142 were highly sensitized patients including 89 AA and 53 Non-African American (NAA) patients. The AA group had similar 5-year incidence of acute rejection as NAA groups (21.4% vs. 26.4%, p=0.25). Kaplan-Meier estimated graft survival at 1, 3 and 5-years were 91%, 85% and 82% in AA group, and 94%, 79% and 71% in NAA group (p=0.08). The death-censored graft survival at 1, 3, and 5-years were 93%, 86% and 84% in AA group, and 96%, 83% and 78% in NAA group (p=0.11). The 1, 3, and 5-years patient survivals were 93%, 88% and 85% in AA group, and 96%, 96%, 94% in NAA group (p=0.17)

** Conclusion:** Highly sensitized AA patients and NAA patients have comparable results in terms of outcomes including graft and patient survival. Virtual cross match could be considered a reliable method for transplanting highly sensitized patients. These conclusions are vital as the proportion of highly sensitized patients on the wait list increases.