

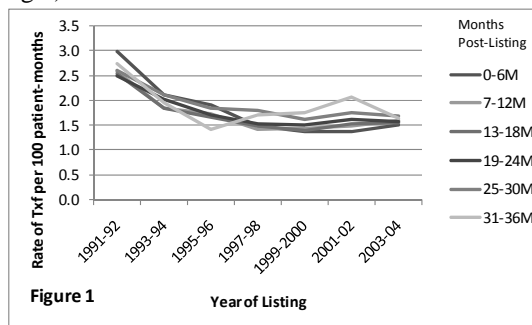
USE OF BLOOD TRANSFUSIONS ON THE KIDNEY TRANSPLANT WAITING LIST, 1991-2005

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High percentages of panel reactive antibodies (PRA) are associated with a longer time from listing to transplant and also higher likelihood of acute rejection. Exposure to blood products has been associated with greater PRA levels. We studied the trends in the use of blood transfusions (Txf) while on the waiting list for Medicare patients first added to the waiting list 1991-2005 (N=93,026).

The one-year cumulative incidence of a post-listing Txf was 16% and 11% in patients listed 1991-93 and 2003-05, respectively. The rate of Txf has decreased over time, and rate of Txf did not vary greatly by months post-listing (Fig 1).

Txf events were more likely in women (RR 1.39, 95% CI 1.34-1.44), African Americans (1.27, 1.22-1.31, ref: white), diabetics (1.34, 1.28-1.41, ref: GN), patients with blood type B



or O compared with type A or AB, and patients with increased pre-listing dialysis time. In both men and women, pre-transplant Txf were associated with increased odds of PRA > 10% at the time of transplantation (men OR: 1.63 (1.52-1.74), women OR: 1.62 (1.58-1.73)). PRA > 10% at the time of transplant was associated with an increased risk of graft failure through 6-years post-transplant in patients transplanted 1999- 2004 (RR 1.18 (1.12-1.25)). These analyses demonstrate 1) a reduction in the use of Txf during the past 15 years; 2) pre-transplant Txf are associated with increased sensitization at the time of transplant; and 3) increased sensitization is associated with increased adjusted risk of graft loss.