Pre and Post Transplant Cytomegalovirus (CMV) Infection and Successful Graft Survival

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ABSTRACT Allograft rejection continues to be a major problem and is the leading cause of graft loss in renal transplant recipients. Histocompatibility testing plays an important role in selection of donors for transplantation. A correct assignment of HLA antigens is considered important given that inadequate HLA matching of patient-donor pairs is associated with rejection in kidney transplantation. The present study was to assess a long and successful graft survival in end stage renal failure patients. 50 live related renal transplant patient-donor pairs were selected at random (n=100). Serological HLA A, B and DR typing results were compared to typing results obtained using sequence-specific primers in the polymerase chain reaction. Evidence of CMV infection was also monitored by CMV-PCR and CMV antigenemia pp65 assay on all patients and compared with the occurrence of acute rejection in the post transplant period. 4 patients developed CMV disease with graft dysfunction, during the first 12 weeks post-transplantation, which responded to specific anti-viral therapy and reduction in immunosuppression. Our results reveal that Frequent monitoring of CMV-PCR or CMV pp65 antigenemia and prompt start of treatment in such patients is required. Early diagnosis of CMV antigenemia improves graft and patient survival.