

P189

## P189 -Preemptive Therapy versus Universal Prophylaxis with Valganciclovir in minimizing the Risk of Cytomegalovirus Disease in Kidney Transplant Recipients

Dr MUHAMMAD TASSADUQ KHAN<sup>1</sup>

<sup>1</sup>*Dow University Hospital, Karachi, Pakistan*

**Objectives:** The aim of this study is to compare the preemptive therapy versus universal prophylaxis with valganciclovir in minimizing the risk of cytomegalovirus (CMV) disease in kidney transplant recipients.

**Methods:** This cohort study was conducted at Renal Transplant Unit, Dow University of Health Sciences, Karachi, Pakistan. A total of 94 kidney transplant recipients were enrolled in the study. Of them, 40 (42.6%) patients (high risk kidney transplant recipients) were treated with universal prophylaxis with valganciclovir for the early months of transplant with the daily and alternate dosage and remaining 54 (57.4%) patients (low risk kidney transplant recipients) were given preemptive therapy by regularly monitoring the CMV viremia which is defined as positive antigenemia (DNA PCR or phosphoprotein 65 [pp65]) for CMV disease without symptoms.

**Results:** The mean age of recipients was  $38 \pm 1.23$ . The variables that could affect the CMV disease development were introduced into the regression model: gender, age, immunosuppressive therapy, lymphocyte depleting antibodies at transplantation and underlying disease. Significant differences were found in the use of universal prophylaxis with valganciclovir versus preemptive therapy ( $P > 0.05$ ). The occurrence of CMV disease was found to be 7.40% (4 of 54) in the low risk group with preemptive therapy and no incidence of CMV disease; 0% (0 of 40) in the high risk group with universal prophylaxis of valganciclovir within one year of kidney transplant was observed.

**Conclusion:** In conclusion, universal prophylaxis with valganciclovir in high risk group is the effective treatment modality to reduce the burden of post-transplant CMV disease compared to preemptive therapy in low risk group. Therefore, it is highly recommended to initiate universal prophylaxis with valganciclovir in the low risk group as well, apart from high risk group, due to the occurrence of CMV disease and to prevent rejection of transplanted organ