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ePoster Viewing

Virology non-HIV/non-hepatitis

**BK viraemia in patients with chronic renal disease undergoing haemodialysis and peritoneal dialysis**

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**Objective:** BK virus (BKV) is a common human polyomavirus which infects up to 90% of the general population with little clinical significance and with various epidemiologic patterns of infection. Immune suppression is considered the main risk factor for BKV reactivation. Due to impaired immunity in both cellular and humoral immunity in patients undergoing hemodialysis (HD) or peritoneal dialysis (PD), they are at high-risk for infectious diseases such as BKV infection. This study aimed to determine the BK viremia in Iranian patients with chronic renal disease undergoing hemodialysis and peritoneal dialysis.

**Methods:** A total of 96 patients with chronic renal disease from main dialysis units in Tehran, Iran were enrolled in the study. Sixty-three and 33 of them were under hemodialysis and peritoneal dialysis respectively. BK viremia was determined by qualitative PCR in all subjects.

**Results:** Sixty-three cases under HD with mean age  $59.3 \pm 14.5$  years and 33 subjects on PD with mean age  $53.7 \pm 13$  years were enrolled in the study. The mean duration of hemodialysis was  $59.1 \pm 53.8$  months and dialysis interval was 3 times a week. In PD group, duration of dialysis was  $38.9 \pm 35.2$  months. The prevalence of BK viremia was 3.03% in PD and 0% in HD subjects.

**Conclusions:** This study showed low rate of BKV in our chronic renal disease patients. BKV replication was limited to one patient of the PD group, and HD group did not show BKV infection. However, the low/absent BKV replication detected in this paper could be in agreement with low incidence of BKV infection in the Iranian renal transplant recipient