

## عنوان مقاله:

Assessment of Human Cytomegalovirus Viral Load in Kidney Transplant Recipients in Tehran, Iran

## محل انتشار:

فصلنامه عفونت، اپیدمیولوژی و پزشکی، دوره 9، شماره 4 (سال: 1402)

تعداد صفحات اصل مقاله: 0

## نویسندگان:

Marzieh Eslami Kojidi - *Department of Virology, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran*

Somayeh Shatizadeh Malekshahi - *Department of Virology, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran*

Mohammad Reza Jabbari - *Labbafinezhad hospital, Shahid Beheshti University of Medical Sciences*

## خلاصه مقاله:

**Aims:** The purpose of this study is to evaluate the viral load of active human cytomegalovirus (HCMV) infection in the plasma samples of people suspected of kidney transplant rejection and to investigate the host and risk factors related to the activation of HCMV in these patients. **Materials & Methods:** This cross-sectional study was conducted between December ۲۰۲۲ and June ۲۰۲۳. In this study, ۹۸ blood samples related to patients suspected of kidney transplant rejection referring to Labbafinezhad hospital in Tehran were collected. The samples were tested by the GeneProof Cytomegalovirus (CMV) PCR Kit to determine HCMV viral load. ROC curve analysis was used to determine the viral load cutoff point. **Findings:** HCMV viremia was detected in ۱۸ (۱۸.۳۶%) of ۹۸ transplant recipients. The median viral load in the HCMV viremia group was ۲۴۹۱۴.۰ IU/ml (۵۱۴۷.۰-۱۵۵۱۰۶.۵). The optimal cut-off value for HCMV was determined ۷۷۸ IU/ml using ROC analysis. Duration of time after transplantation in the viremia and no viremia groups was ۱۲۰.۵ and ۴۶ months, respectively with a statistically significant difference ( $P=۰.۰۱۴$ ). **Conclusion:** This study provides valuable insights into the prevalence of HCMV viremia and its associated risk factors in kidney transplant recipients suspected of rejection. The study also highlights the importance of post-transplant monitoring and preventive measures to address viral infections. Quick and timely diagnosis of viral activation in kidney transplant patients is effective and mandatory for patient management and the use of appropriate preventive and therapeutic strategies that lead to the reduction of nephropathy, transplant rejection and other diseases. Long-term studies with larger sample sizes are needed to evaluate the role of factors influencing the occurrence of viremia after transplantation.

## کلمات کلیدی:

Human cytomegalovirus, Kidney transplantation, Viral load

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1919118>



