

Incidence and outcome of cytomegalovirus in kidney transplant recipients: A single-center experience

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ABSTRACT

Introduction: Cytomegalovirus (CMV) infection is an important cause of allograft failure and death among kidney transplant recipients (KTR). We describe the incidence and outcome of CMV infection among KTR in Hospital Selayang. **Materials and Methods:** This is a retrospective study of adult KTR who underwent transplantation from 1st January 2019 till 31st December 2021. CMV infection defined by evidence of viral replication in body fluids or tissues, and CMV disease when they have symptoms. Results were analyzed with SPSS version 25. **Results:** A total of 85 recipients underwent kidney transplantation during the study period. Mean recipients' age was 37.2±8.9 years, predominated by females 55.3% (n=47), and chronic glomerulonephritis (36.5%) as primary renal disease. The majority were CMV-seropositive recipients (R+) from seropositive donors (D+) (84.7%). The induction immunosuppression (IS) was with intravenous (IV) Anti-Thymocyte-Globulin (ATG) (48.2%) or Basiliximab (51.8%), and 92.9% started on mycophenolate sodium, tacrolimus, and prednisolone as maintenance IS. CMV prophylaxis was adopted for 47.1% of recipients given moderate risk (D+R+ or received IV ATG). Six recipients had CMV infection (7%), with 66.6% (n=4) diagnosed between 6-12 months post-transplantation. Graft dysfunction (GD) was the main presentation in 66.6% patients, followed by diarrhea (50%), and fever (33.3%). All patients were treated successfully with IV Ganciclovir or oral Valganciclovir equally with mean duration of 43.1±27 days, and 83.3% (n=5) had changes in maintenance IS to everolimus, tacrolimus, and prednisolone. Biopsy proven acute rejection developed in 33.3% (n=2) patients. **Conclusion:** The incidence of CMV infection in our center was 7% with no fatality reported.

Keywords: CMV infection, kidney transplant recipients

Correlation between SARS-CoV-2 rapid test kit antigen from saliva with SARS-CoV-2 reverse transcription polymerase chain reaction from October 2021 till April 2022 in Hospital Sungai Buloh

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ABSTRACT

Introduction: Large scale testing, rapid diagnosis and immediate isolation of cases with vigorous contact tracing for positive contacts are important measures to reduce the infection rate of the SARS-CoV-2. Reverse transcription polymerase chain reaction (RT-PCR) testing requires designated lab and trained personnel, this may cause longer turn around time to get the result. Antigen test kit from nasopharyngeal swab specimens already implemented for use in Malaysia since May 2020 however this test still requires trained personnel for swabbing. This study shows correlation between SARS-CoV-2 rapid test kit (RTK) antigen from saliva with gold standard SARS-CoV-2 RT-PCR from nasopharyngeal swab. **Materials and Methods:** Retrospective analysis of 152 samples sent for SARS-CoV-2 RT-PCR with written history of home SARS-CoV-2 RTK saliva self-test done within 72 hours from October 2021 to April 2022 included in the study. **Results:** 74.3% of SARS-CoV-2 RTK Antigen from saliva correlates with SARS-CoV-2 RT PCR. **Conclusion:** SARS-CoV-2 RTK antigen from saliva proves to be one of the reliable method for a rapid diagnosis and easily accessible for SARS-CoV-2 home screening test.

Keywords: SARS-CoV-2, RTK antigen, RT-PCR, home screening test