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Estimated graft reject rate in renal transplant recipient with BK virus infection; a summary from an Indochina country

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Dear Editor,

BK virus is a new problematic emerging infectious disease. This viral infection can induce kidney problem. The important clinical problem is on the renal transplant recipient. The BK virus-associated nephropathy (BKVAN) is a totally unwanted outcome of the infection. Graft rejection is reported as a possible complication in BKVAN (1, 2). In BKVAN, the immunopathological process can result in tubulointerstitial inflammatory response and can progress to graft rejection (3).

Here, the authors summarize the available data on the graft reject rate in renal transplant recipients with BK virus infection in Thailand, a tropical country in Indochina. The data from available publications (4, 5) on 92 Thai renal transplant recipients with evidence of BK virus infections were analyzed. The graft rejection rate with estimated range (95% confidence interval) is calculated. Of those 92 renal transplant recipients who received BK virus screening by BK PCR test, 4 patients (4.35 %) developed graft rejection. According to the statistical analysis, the estimated prevalence (95% confidence interval) is among 1.38% to 10.49 %. This estimated rate is extremely high compared to the rates in the previous reports from other countries, which are usually less than 1 % (1, 2). The high rate of graft rejection among the patients in our setting might imply the importance of the infection among renal recipient in this area. There might be other concurrent conditions, which are common in Indochina, resulting in the rather high graft rejection rate when there is BK virus infection.

Authors' contribution

BJ is the single author of the manuscript.

Conflict of interests

None declared.

Ethical considerations

Ethical issues (including plagiarism, misconduct, data fabrication, falsification, double publication or submission, redundancy) have been completely observed by the author.

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