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Cytomegalovirus DNAemia in kidney transplant recipients after cessation of standard antiviral prophylaxis; estimated rate on Thai cases and implication on efficacy of prophylaxis

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ABSTRACT

Implication for health policy/practice/research/medical education:

There is a need for evaluation of CMV DNAemia in the renal transplant recipients after cessation of standard antiviral prophylaxis.

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Introduction

The cytomegalovirus (CMV) infection is an important infection that is the main problem among immunocompromised host including to renal transplant recipient (1). In general, it is recommended that both donor and recipient should be free from evidence of occult CMV infection. However, it is sometimes difficult to highly select the donors. The donor CMV positive case is performed worldwide while there is a standard recommendation for using antiviral prophylaxis. An interesting issue is the observation on the CMV DNAemia after cessation of antiviral prophylaxis. The rate of DNAemia is very interesting. Here, the authors summarized the rate of CMV DNAemia among Thai kidney transplant recipients after cessation of standard antiviral prophylaxis. The summative analysis of previously available published data is done (2, 3).

According to the available data, there are cases of 70 renal transplant recipients with CMV positive donors. After cessation of antiviral prophylaxis, the CMV DNAemia is observed in 22 cases giving the rate equal to 31.43% (95% confidence interval; 22.24% to 44.42%). This observed rate can confirm that the standard prophylaxis partially

prevent CMV and the efficacy is still less than a half of all prophylaxis attempts. It should be noted that the possibility for CMV disease development among renal recipients with CMV DNAemia is about 11.4% (2). Hence, there is a need for evaluation of CMV DNAemia in the renal transplant recipients after cessation of standard antiviral prophylaxis. The antiviral treatment should be used in any case with further evidence of CMV disease (1).

Authors' contribution

Both authors wrote the manuscript equally.

Conflict of interests

The authors declared no competing interests.

Ethical considerations

Ethical issues (including plagiarism, data fabrication, double publication) have been completely observed by the authors.

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