Stem Cell Therapy and Dengue Infection: A Story from Endemic Tropical Country

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Introduction

In Southeast Asia, the congenital hemoglobin disorder, thalassemia is highly prevalent. The management of this condition is an actual challenge for the local hematologist. After the implementation of the new therapeutic technique, stem cell therapy, the success in curative treatment of thalassemia can be expected. It is proved to be a cost effective approach for management of thalassemia[1,2]. However, there are several concerns on the management of the case by stem cell therapy. The complications of process including to the superimposed infection is a great consideration.

In tropical world, there are several tropical infections to be mentioned. Of several diseases, dengue is a very common tropical disease in tropical Southeast Asia. Hence, it is interesting to mention for the dengue problem in stem cell therapy for thalassemic patients. Nevertheless, it should be noted that there are several reports on dengue in thalassemia patients from Southeast Asia[3–5]. Aggravation of anemia and severe bleeding can be seen in such cases[5]. In fact, a report from Pakistan noted that dengue was an important problem for the patient receiving stem cell therapy[6]. However, in Southeast Asia, there is still no report on the problem. This might be a case of underreporting or there is actual no case due to the good infection control in the endemic area. Finally, it should be noted that it is verified that dengue can also infect precursor cell that might be further used for stem cell therapy[7].

In the tropical world, dengue is an actual important problem to be aware for hemotherapy by stem cell treatment for thalassemia.

References

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