

## ABSTRACT

### DETECTION OF DENGUE VIRUS ON MONOCYTES AS A SUPPORTING TOOL FOR THE DIAGNOSIS OF DENGUE HAEMORRHAGIC FEVER

It has been known that dengue virus infection is the main cause of morbidity and mortality in the tropical and sub-tropical countries of the world. Therefore, this study was performed in order to develop a method to detect dengue virus antigen on the monocytes using immunocytochemistry technique.

Thirty two sera from patients suspected with DHF( they have already been confirmed with the clinical WHO criteria for DHF), were used for serological study to detect the level of IgM and IgG. Monocytes were obtained from the same sera above and were used for immunocytochemistry using streptavidin – biotin.

The result of immunocytochemistry study demonstrated that 32 sera from patient suspected with DHF 78,1% were positive DHF and 21,9% were negative DHF. This result are consistent with the result from WHO criteria as a standard. The *Chi-Square* analysis showed that the percentage of sensitivity and specificity of immunocytochemistry method were 88% and 87,7% , respectively.

In conclusions, immunocytochemistry using streptavidin – biotin complex could be used as a method to detect antigen dengue virus on monocytes in the serum patient suspected with DHF. This technique has high sensitivity and spesificity and consistent with the clinical WHO criteria for DHF.

**Key words:**Dengue Haemorrhagic Fever, Immunocytochemistry, Streptavidin-biotin.