

EFFICACY OF SODIUM METAPERIODATE (SMP)-ELISA FOR THE SERODIAGNOSIS OF SCHISTOSOMIASIS MEKONGI

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Abstract. Schistosomiasis mekongi is an important public health issue in endemic countries. In this study, we evaluated an indirect immunodiagnostic ELISA method using *Schistosoma mekongi* soluble egg antigen. Sodium metaperiodate (SMP)-ELISA was utilized in order to remove the glycosylated epitopes responsible for false positive reactions and the results using this method were compared with those using conventional ELISA (conv-ELISA). Forty-two serum samples from schistosomiasis mekongi egg-positive patients and 100 serum samples from schistosomiasis-negative Cambodian subjects were tested using both ELISA methods. The ranges of ELISA values for positive and negative sera were distinct on SMP-ELISA, but the ranges of the two groups of sera overlapped on conv-ELISA. Therefore, diagnostic criteria may be established based on the highest ELISA value on negative sera and the lowest ELISA value on positive sera. In the present study, both the sensitivity and specificity of SMP-ELISA reached 100% using the criteria in which an ELISA value ≥ 0.2 was positive.

Keywords: SMP-ELISA, *Schistosoma mekongi*, diagnosis

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