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ABSTRACT

Salmonella enterica serovar typhi (S. typhi) is a Gram-negative enteric bacteria

(Enterobacteriaceae), it is a facultative intracellular pathogen that causes typhoid fever.

Rapid detection of anti S. typhi antibodies remain challenge in the laboratory diagnosis of

typhoid fever. Among a laboratory test of that can be used to detect IgM anti S. typhi in

the serum is TUBEX TF (IDL Bioteh, 2008) dan ELISA (MyBioSource, 2010).

Research's objective was to analyze the correlation and to compare the results of two

mentioned above, also to know the level between the results of the TUBEX TF and

ELISA to the examination of IgM anti S. typhi. Serum samples from 44 patients first

examinated with TUBEX TF. Then, the same serum undergone examination again with

ELISA. The results from 44 samples showed that the TUBEX TF 24 samples were 54,5%

positive and 20 samples were 45,5% negative. Otherwise, the ELISA from 44 samples

showed 6 samples were 13,6% positive and 38 samples were 86,4% negative. Statistical

analysis showed that the test result of both devices were significantly different, and

agreement between the results of TUBEX TF and the results of ELISA was low.

Comparison analysis of TUBEX TF and ELISA showed that both have significantly

correlation.

Keywords: Salmonella typhi, typhoid fever, TUBEX TF, ELISA

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