

***CORRELATION OF NEUTROPHIL COUNT IN TYPHOID
FEVER BASED ON Salmonella IgM RESULTS AT
EMANUEL HOSPITAL BANJARNEGARA***

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ABSTRACT

Typhoid fever is caused by the bacteria Salmonella typhi. The incidence of typhoid fever continues to increase every year and is often found in children. When an infection occurs, the immune system will activate immune cells marked by an increase in neutrophils and the formation of antibodies. Neutrophils are the first type of leukocyte cells to appear in defense against bacteria. The immune system will produce immunoglobulins as a defense against bacterial & viral infections and neutralize the toxins formed. The purpose of this study was to determine the relationship between the number of neutrophils in typhoid fever based on Salmonella IgM results. This type of study is cross-sectional using secondary data from ERM and LIS. The results showed that patients with normal and high neutrophil counts were 18 (47.4%) while low neutrophil counts were 2 (5.3%). Negative Salmonella IgM results were 5 (13.2%) while positive Salmonella IgM results were 33 (86.8%). The Spearman statistical test obtained a p-value = 0.002 ($p < 0.05$) with a correlation figure of 0.480, which means that there is a relationship between the number of neutrophils and the results of Salmonella IgM at Emanuel Hospital, Banjarnegara. The relationship between the number of neutrophils and the results of Salmonella IgM has a moderate relationship.

Keywords: typhoid fever, Salmonella typhii, neutrophils, IgM