

ABSTRACT

Vascular Cell Adhesion Molecule-1 (VCAM-1) Expression and Histopathology Change on Aorta of Cirrhosis Male Rat (*Ratus norvegicus*) induced by *E coli* O₅₅:B₄

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The objective of this study is to know Vascular Cell Adhesion Molecule-1 (VCAM-1) expression and histopathology change on aorta of cirrhosis male rat (*Ratus norvegicus*) induced by endotoxin *E coli* O₅₅:B₄.

This study was a laboratory experimental study using Complete Randomized Design with five treatments and five repetitions. The treatment was divided into control using induction by saline solution and induction by endotoxin in observation interval of 6, 12, 18, and 24 hours. Data were analyzed using Analysis of Variance (ANOVA) and followed by Least Significant Difference (LSD) test as needed. The other data were analyzed using Kruskal-Wallis and followed by Z test.

The result showed that VCAM-1 expression and the quantity of endothelial cell had significant difference ($P < 0.05$) on control, observation interval of 6 and 12 hours compare with observation interval of 18 and 24 hours. The thickness of expression VCAM-1 on endothelial cell had significant difference ($P < 0.05$) on observation interval of 6 and 12 hours compare with control, but they all had significant difference compare with observation interval of 18 and 24 hours. Discontinuity and thickness of Elastic Lamina Internal (ELI) had significant difference ($P < 0.05$) on control, observation interval of 6 and 12 hours compare with interval observation 18 and 24 hours. The highest discontinuity and the thinnest elastic lamina internal were obtained within observation interval of 24 hours.

Keywords: VCAM-1 Expression, Endothelial Cell, Discontinuity, Elastic Lamina Internal.