

**ABSTRACT****MECHANISM OF LDL (LOW DENSITY LIPOPROTEIN)  
CHOLESTEROL REDUCING BY THE WET CUPPING THERAPY IN  
HYPERCHOLESTEROLEMIA SUFFERERS****Wahyudi Widada**

**Introduction.** The wet cupping therapy is a technique of excreting cholesterol metabolism waste through wounding the skin surface. The study aimed at investigating the mechanism of lowering LDL (Low Density Lipoprotein) after performing the cupping therapy to those who suffer from hypercholesterolemia.

**Method.** The research design was quasy experimental with consecutive sampling. Response of inflammation cell was measured from IL-6. The systemic effect observed in blood was measured from monocyte. Meanwhile, the expression of activated monocyte was measured from MCP-1. Finally, the effect of the therapy on the lipid profile was measured from HDL, LDL and Apo B. The subjects of the present study involved male sufferers of hypercholesterolemia. These subjects were divided into three groups of subject, namely (A) the cupping group, (B) the medication group and (C) the cupping and medication group. The serum from venous blood was excreted and observed using ELISA. This blood sampling was underdone twice, pre-cupping period and after 7 days off from the cupping day. The particular therapy was performed by placing nine needles of number 21G in the nine (9) spots on the back of the subjects. Furthermore, the data were tested using Mann Whitney, Wilcoxon, Krusskal Wallis, and path analysis.

**Result.** The result that the wet cupping therapy can reduce IL-6 ( $p=0,309$ ), increase monocytes ( $p=0,016$ ), increase MCP-1 ( $p=0,309$ ), increase HDL ( $p=0,000$ ), increase Apo-B ( $p=0,000$ ) and reduce LDL ( $p=0,000$ ). The present study resulted a new finding, that is the wet cupping therapy given to hypercholesterolemia sufferers is successful in reducing the LDL cholesterol level through increase monocytes, increase HDL, increase MCP-1 and increase Apo-B.

**Conclusion.** The conclusion of this study is the mechanism of reducing LDL cholesterol through the pathway of increasing monocytes, increasing MCP-1, increasing HDL and increasing Apo-B. The effect of wet cupping therapy on reducing LDL cholesterol through the Apo-B pathway is significant but not through other variable pathways. Suggestions for further researchers to find out the relationship with IL-6 and Apo-B with other variables.

**Keywords:** cupping, cholesterol, IL-6, monocyte, MCP-1, HDL, Apo-B, LDL