

ABSTRACT**CORRELATION BETWEEN HDL CHOLESTEROL AND FUNCTIONAL SCALE MEASURED BY NIHSS IN ACUTE THROMBOTIC STROKE PATIENTS AT RSUD DR. SOETOMO SURABAYA**

Stroke is the third highest cause of death in developed countries, as well as the leading cause of disability. One of the risk factor of stroke is dyslipidemia, which is defined as unbalance serum cholesterol levels in the blood. Low level of *High Density Lipoprotein* (HDL) cholesterol are well recognized to be closely associated with increased risk of ischaemic stroke. The relationship between serum lipid levels and the incidence of infarction stroke still remains controversial. Lipid serum are thought to interact with the pathogenesis of stroke through an atherosclerosis mechanism. Lower HDL cholesterol level has significant effects on the outcome of thrombotic stroke patients. The goal of this study is to proof a correlation between HDL cholesterol and functional scale measured by NIHSS in acute thrombotic stroke patients.

Forty patients with acute thrombotic atroke that complete inclusion and exclusion criteria were admitted in neurology ward Dr. Soetomo Hospital Surabaya in period August 2016 until October 2016. Those patients have been examined for functional scale by NIHSS and keeping of the laboratory result trough medical record of the patients.

The mean of age was $58,13 \pm 10,41$ years old. Twenty-one subjects were men and Nine-teen were women with eleven people are smoker and twenty—nine are non smoker. Mean of HDL cholesterol level was $38,02 \pm 7,69$ mg/dl. Mean of NIHSS was $5,92 \pm 4,88$. There is negative correlation between HDL cholesterol level and functional scale measured by NIHSS in acute thrombotic stroke patients. This result is statistically significant ($r = 0,391$ dan $p = 0,013$).

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Keywords : *Acute thrombotic stroke, High Density Lipoprotein, Outcome, NIHSS.*