ABSTRACT

Background: Acute Coronary Syndrome is a state of emergency in cardiovascular disease which the incidence is always increased by years and globally becoming the cause of death. ACS has three categories such as NSTEMI, STEMI and Unstable angina. One of the risk factors of ACS is a change in the lipid fractions like the level of total cholesterol, LDL, HDL, and triglycerides which will cause an atherosclerosis plaque in the wall of blood vessels.

Objective: To determine the relationship of hypercholesterolemia with Acute Coronary Syndrome.

Methods: This research is performed by using analytic approach with with retrospective study design. This research population in this study is all ACS patients who were registered in medical records of inpatients at RSUP Haji Adam Malik Medan period January 1, 2014 – December 31, 2014, all ACS patients who did the examination cholesterol and lipid levels. The sample were choosen by a method called total sampling and resulted in 80 people. Data acquisition is acquired by recording the medical records. Furthermore, the data is analyzed by SPSS 21.

Results: Based on the analysis of the study within 80 ACS inpatients at RSUP Haji Adam Malik Medan it is known that the majority of ACS patients, were found to have total cholesterol levels of normal category (56.3%), LDL cholesterol levels of normal category (68.9%), HDL cholesterol levels of decreased category (91.3%), and the triglycerides levels of normal category (67.5%). The output of analysis was found that there is no significance in association between hypercholesterolemia of LDL with the incidence of ACS. p = 0.162 (p < 0.05).

Conclusion: It is found that hypercholesterolemia were not associated with incidence of ACS.

Keywords: acute coronary syndrome, cholesterol, LDL, HDL, triglycerides.