

ABSTRAK

Kadar LDL dan Trigliserida merupakan faktor risiko tersering pada pasien hipertensi dan gagal jantung kronik yang menyebabkan peningkatan kadar N-Terminal-Pro Brain Natriuretic Peptide (NT-Pro BNP). Tujuan penelitian ini adalah untuk mengetahui hubungan kadar low density lipoprotein (LDL) dan trigliserida dengan kadar NT-pro BNP pada pasien hipertensi dan gagal jantung kronik.

Penelitian observasional ini menggunakan rancangan cross sectional study. Sampel penelitian terdiri dari 108 orang terbagi dalam 3 kelompok yaitu Kadar LDL tinggi dan Trigliserida tinggi, Kadar LDL tinggi dan Trigliserida normal, Kadar LDL normal dan Trigliserida tinggi. Data penelitian diperoleh dari data rekam medis. Untuk mengetahui perbedaan hubungan antara kadar LDL dan trigliserida dengan kadar NT-pro BNP pada pasien hipertensi dan gagal jantung kronik menggunakan analisis statistic *Kruskal-Wallis*

Hasil penelitian ini didapatkan Rerata kadar NT-Pro BNP pada kelompok 1 sebesar $193,60 \pm 34,94$ pg/ml, sedangkan pada kelompok 2 sebesar $3094,11 \pm 3220,66$ pg/ml, dan pada kelompok 3 sebesar $1858,97 \pm 2641,48$ pg/ml. Hasil analisis homogenitas varian dengan uji Levene diperoleh nilai $p > 0,05$ artinya varian data kadar NT-pro BNP antar ketiga kelompok adalah homogen. Perbedaan kadar NT-Pro BNP antar ketiga kelompok dianalisis secara non parametrik dengan uji Kruskal Wallis, dan diperoleh nilai p sebesar 0,099 ($p > 0,05$) menunjukkan bahwa tidak terdapat perbedaan rerata kadar NT-Pro BNP diantara ketiga kelompok variasi kadar LDL dan trigliserida.

Kesimpulan dari penelitian ini yaitu: Tidak terdapat hubungan kadar *Low Density Lipoprotein* (LDL) dan kadar trigliserida yang tinggi dengan kadar NT-pro BNP pada pasien hipertensi dan gagal jantung kronik, tidak terdapat hubungan kadar LDL tinggi dan kadar trigliserida normal dengan kadar NT-pro BNP pada pasien hipertensi dan gagal jantung kronik, tidak terdapat hubungan kadar LDL normal dan kadar trigliserida tinggi dengan kadar NT-pro BNP pada pasien hipertensi dan gagal jantung kronik.

Kata kunci : Hipertensi, NT-proBNP, gagal jantung kronik.

ABSTRACT

LDL and triglyceride levels are the most common risk factors in patients with hypertension and chronic heart failure that cause elevated levels of N-Terminal-Pro Brain Natriuretic Peptide (NT-Pro BNP). The purpose of this study is to determine the relationship of low density lipoprotein (LDL) and triglyceride levels with NT-pro BNP levels in patients with hypertension and chronic heart failure.

This observational study uses a cross sectional study design. The research sample consisted of 108 people is divided into 3 groups: high LDL levels and high triglycerides, high LDL levels and normal triglycerides, normal LDL levels and high triglycerides level. Research data is obtained from medical record data. To determine the difference in the relationship between LDL and triglyceride levels with NT-pro BNP levels in patients with hypertension and chronic heart failure using Kruskal-Wallis statistical analysis.

The results of this study shoes that the average level of NT-Pro BNP in group 1 of 193.60 ± 34.94 pg / ml, while in group 2 it was 3094.11 ± 3220.66 pg / ml, and in group 3 it was 1858.97 ± 2641.48 pg / ml. The results of homogeneity analysis of variance with the Levene test resulted as p value > 0.05 meaning that the variance of NT-pro BNP level data between the three groups is homogeneous. Differences in NT-Pro BNP levels between the three groups are analyzed in a non-parametric way using the Kruskal Wallis test, and p value of 0.099 ($p > 0.05$) trigliseride shows that there is no difference in the mean NT-Pro BNP levels between the three groups of LDL levels, and a p value of 0.099 ($p > 0.05$) indicates that there was no difference in the average NT-Pro BNP levels between the three groups of LDL and triglyceride levels.

The conclusions of this study are: 1. there is no relationship between Low Density Lipoprotein (LDL) levels and high triglyceride levels with NT-pro BNP levels in patients with hypertension and chronic heart failure, 2. there is no relationship between high LDL levels and normal triglyceride levels with NT-pro levels BNP in patients with hypertension and chronic heart failure, 3. there is no relationship between normal LDL levels and high triglyceride levels with NT-pro BNP levels in patients with hypertension and chronic heart failure.

Keywords: Hypertension, NT-proBNP, chronic heart failure.