INTISARI

Isnoer, M. 2023. Hubungan Nilai Laju Endap Darah Dengan Agregasi Trombosit Pada Pasien Hipertensi. Program Studi D4 Analis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.

Hipertensi merupakan salah satu penyakit tidak menular yang menjadi ancaman secara global dengan prevalensi yang terus meningkat setiap tahun, serta menyebabkan timbulnya penyakit penyerta seperti penyakit kardiovaskular, stroke, retinopati, dan penyakit ginjal. *World Health Organization* (WHO) tahun 2019, diperkirakan sebanyak 1.13 miliar orang menderita hipertensi diseluruh dunia dengan sebagian besar penderita tinggal di negara dengan penghasilan rendah hingga menengah. Pada kondisi hipertensi dapat berisiko meningkatkan kadar fibrinogen secara signifikan, peningkatan fibrinogen akan menyebabkan viskositas darah, agregasi trombosit dan adhesi lekosit meningkat. Fibrinogen berperan sebagai jembatan molekul antara trombosit yang berdekatan dan terkativasi, sehinga pada pasien hipertensi yang mengalami peningkatan agregasi trombosit akan menimbulkan eritrosit menyebar dan sulit mengendap sehingga LED akan menurun.

Jenis penelitian yang digunakan dalam penelitian ini *analitik observasional* dengan pendekatan *cross sectional.* Penelitian ini menggunakan 30 responden pasien hipertensi yang melakukan pemeriksaan di Laboratorium Klinik Budi Sehat Surakarta. Uji hipotesis pada penelitian ini dilakukan menggunakan uji *Chi Square* untuk mengetahui adanya hubungan agregasi trombosit dan laju endap darah pada pasien hipertensi.

Hasil penelitian menunjukkan pasien hipertensi sebanyak 14 responden (47 %) responden mengalami hiperagregasi, 9 responden (30%) mengalami cenderung hiperagregasi dan 7 responden (23%) mengalami normoagregasi. Hasil uji statistik mengunakan *Chi square* nilai p = 0.034 dan dapat disimpulan bahwa terdapat hubungan hyang bermakna laju endap darah dan agregasi trombosit pada pasien hipertensi.

Kata Kunci: Hipertensi, Laju Endap Darah, Agregasi Trombosit,

ABSTRAK

Isnoer, M. 2023. The Correlation between Erythrocyte Sedimentation Rate and Platelet Aggregation in Hypertensive Patients. D4 Health Analyst Study Program, Faculty of Health Sciences, Setia Budi University.

Hypertension is a non-communicable disease which becomes a global threat with increasing prevalence every year, and it leads to comorbidities such as coronary heart disease, cardiovascular, stroke, retinopathy, and kidney disease. Hypertension conditions can provoke an increasing platelet aggregation, thereby raising a blood viscosity which affects an erythrocyte sedimentation rate. World Health Organization (WHO) in 2019, it is estimated that as many as 1.13 billion people suffer from hypertension worldwide with most sufferers living in countries with low to middle income. Hypertension conditions can risk significantly increasing levels of fibrinogen, a fibrinogen rise would cause blood viscosity, platelet count and lecocyst adhesion. Fibrinogen ACTS as a molecular bridge between a close and weaponized platelet count, so that hypertensive patients who experience increased platelet count will spread erythrocyte and precipitate precipitation and precipite-reducing the LED.

The type of research used in this study is analytic observational with a sectional cross approach. This study used 30 hypertensive patient respondents who examined at the Budi Sehat Clinical Laboratory in Surakarta. A test of hypotheses in the study was performed using chi square to determine the relationship between platelet aggregation and erythrocyte sedimentation rate in hypertensive patients.

The results showed that 14 respondents (47%) of hypertensive patients were hyper-aggregation, 9 respondents (30%) were be inclined hyper-aggregation and 7 respondents (23%) were normo-aggregation. The statistical test result using chi square got value p = 0,034 and concluded that there is a relationship between erythrocyte sedimentation rate and platelet aggregation in hypertensive patients.

Keywords: Hypertension, Erythrocyte Sedimentation Rate, Platelet Aggregation