INTISARI

PERAN *MEAN PLATELET VOLUME* (MPV) SEBAGAI PREDIKTOR KEBERHASILAN TROMBOLISIS PADA PASIEN *ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION* (STEMI) DI RSUP DR. SARDJITO

Latar Belakang: ST segment elevation myocardial infarction (STEMI) memiliki tingkat mortalitas sekitar 7-18% dalam 1 tahun. Trombolitik merupakan salah satu strategi reperfusi untuk tatalaksana STEMI. Peningkatan MPV dikaitkan dengan prognosis yang buruk setelah infark miokard. Pada penelitian ini diteliti mengenai peran MPV pada pasien STEMI yang dirawat di RSUP Dr. Sardjito.
Tujuan : Untuk mengetahui peran MPV sebagai prediktor keberhasilan trombolisis pada pasien dengan STEMI.
Metode : Desain penelitian menggunakan kohort retrospektif. Penelitian dilakukan di Instalasi Catatan Medik RSUP Dr. Sardjito Yogyakarta. Data pasien yang diambil adalah data pasien STEMI yang dilakukan trombolisis yang dirawat di UGD dan ruang ICCU RSUP Dr. Sardjito Yogyakarta, sejak 1 Januari 2016-31 November 2020. Variabel terikat penelitian ini adalah keberhasilan trombolisis. Variabel bebas pada penelitian ini adalah MPV saat admisi UGD. Untuk menentukan nilai batas nilai MPV terhadap keberhasilan trombolisis, dianalisis digunakan kurva *Receiver Operating Characteristic* untuk menentukan nilai batas nilai MPV, dilanjutkan dengan menghitung Relative Risk (RR) dengan chi-square.
Hasil : Analisis ROC MPV terhadap keberhasilan trombolisis diperoleh cut off 9,75 *fL* (MPV rendah <9,75 *fL*, MPV tinggi >9,75 *fL*). Pasien dengan MPV rendah (<9,75 *fL*) lebih banyak mengalami keberhasilan trombolisis yaitu 68 pasien (89,5%), hal tersebut lebih banyak dibandingkan MPV tinggi yaitu 64 pasien (74,4%) dengan perbedaan yang bermakna p=0,014 (p<0,05). Didapatkan nilai Relative Risk (RR) yaitu 1,2.
Kesimpulan: MPV dapat berperan sebagai prediktor keberhasilan trombolisis pada pasien STEMI di RSUP Dr. Sardjito, dimana semakin rendah nilai MPV semakin tinggi keberhasilannya dengan cut off nilai MPV 9,75*fl* dan Relative Risk sebesar 1,2.

Kata kunci: STEMI, keberhasilan trombolisis, MPV

ABSTRACT

THE ROLE OF *MEAN PLATELET VOLUME* (MPV) AS A PREDICTOR OF SUCCESSFUL THROMBOLYSIS IN ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION (STEMI) PATIENT AT THE DR. SARDJITO GENERAL HOSPITAL

Background: ST segment elevation myocardial infarction (STEMI) has a mortality rate of 7-18% in 1 year. Thrombolysis is a reperfusion strategy for the management of STEMI. Increased MPV is associated with a poor prognosis in myocardial infarction. This study investigated the role of MPV in STEMI patients who were treated at Dr. Sardjito.
Objective: To determine the role of MPV as a predictor of successful thrombolysis in patients with STEMI.
Methods: The study used a retrospective cohort design. The research was conducted at the Dr. Sardjito Hospital Yogyakarta. The data were taken from STEMI patients who underwent thrombolysis and were treated in the emergency room and ICCU room Dr. Sardjito Yogyakarta between January 1, 2016 and November 31, 2020. The dependent variable of this study is the success of thrombolysis. The independent variable in this study was the MPV during the emergency room admission. To determine the limit value of the MPV value to the success of thrombolysis, the Receiver Operating Characteristic (ROC) curve is used to determine the limit value of the MPV value, followed by calculating the Relative Risk (RR) with chi-square.
Results: Analysis of ROC MPV on successful thrombolysis obtained a cut off of 9.75 *fL* (low MPV <9.75 *fL*, high MPV> 9.75 *fL*). Patients with a low MPV (<9.75 *fL*) had higher thrombolysis success percentage (68/76 (89.5%)) compared to those with high MPV (64/86 (74.4%)) with a statistically significant difference $p = 0.014$ ($p < 0.05$). The Relative Risk (RR) value is 1.2.
Conclusion: MPV can be a useful predictor of thrombolysis success among STEMI patients at Dr. Sardjito hospital Yogyakarta, where the lower the MPV value the higher the success with a cut off MPV value of 9.75fL with relative risk of 1.2.

Key words: STEMI, successful thrombolysis, MPV