

Two- Year Survival Analysis and Factors influencing Survival of Acute Myocardial Infarction

Yasmine F. Siregar*¹, Sutomo Kasiman¹, Zainal Safri¹,
Harris Hasan¹, Abdul H. Reynaldo¹, Faisal Habib¹

¹Department of Cardiology and Vascular Medicine, University of Sumatera Utara,
Adam Malik Hospital, Medan, Indonesia

Abstract: Background: Non-ST segment elevation myocardial infarction (NSTEMI) has less frequent complications, but has worse long-term prognosis than ST segment elevation myocardial infarction (STEMI). Mortality rates of NSTEMI were lower than STEMI but after 6 months both mortality were similar. The purpose of this study was to determine the 2-year survival in patients with acute myocardial infarction (AMI). **Method:** This cohort retrospective study included 264 AMI patients treated from January – December 2015 in H. Adam Malik Medan General Hospital. The study sample was divided based on the diagnosis of STEMI and NSTEMI. Data were obtained from medical records. All patients were contacted by phone to determine their condition 2 years after experiencing AMI. Multivariate analysis was performed to assess the factors that affect the survival. The 2-year survival of STEMI and NSTEMI was compared using the Kaplan Meier plot. **Result:** From 264 patients, there were 216 (81.8%) men with median age of 56 years. We found 147 STEMI patients and 117 NSTEMI patients. NSTEMI group tended to have history of coronary artery disease, higher blood pressure, less revascularization, longer hospitalization days and less number of post AMI complications. Survival and mortality rates in 2 years were 58% and 28%. Multivariate analysis showed higher blood pressure (OR 1.023, CI 95%, 1.003 – 1.044) dan PCI during hospitalization (OR 8.604, CI 95%, 2.264 – 32.702) showed better 2-year survival. There were no significant 2-year survival differences between the two groups (log rank 0.136). Better 2-year survival was found in patients with single vessel disease (log rank 0.001), patients who received revascularization (log rank 0.001) and patients who did not experience heart failure or cardiogenic shock during hospitalization (log rank 0.001). **Conclusion:** There was no difference in 2-year survival between STEMI and NSTEMI patients who were admitted to H. Adam Malik Medan General Hospital in 2015. The 2-year survival appeared better in patients with single vessel disease, received revascularization and did not experience heart failure or cardiogenic shock during hospitalization. **Keyword:** survival, mortality, STEMI, NSTEMI.