

# **HUBUNGAN ANTARA KADAR CREATINE KINASE - MYOCARDIAL BAND (CK-MB) DENGAN ANGKA KEMATIAN PENDERITA INFARK MIOKARD AKUT TANPA ELEVASI ST SELAMA PERAWATAN DI RSPAD GATOT SOEBROTO PERIODE 2013-2016**

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## **Abstrak**

Penyakit jantung koroner (PJK) merupakan penyebab kematian utama di dunia pada tahun 2011 dan sebanyak 14% disebabkan oleh infark miokard akut (IMA). Diagnosis IMA ditegakkan melalui anamnesis, gejala klinis, perubahan pola elektrokardiogram (EKG) dan peningkatan enzim jantung. Pemeriksaan enzim jantung yang sering dilakukan adalah *creatine kinase - myocardial band* (CK-MB) dan troponin T/I. Pada IMA tanpa elevasi ST pengawasan CK-MB/troponin serta EKG terus dilakukan. Pemeriksaan CK-MB selain digunakan untuk tes diagnostik juga dapat dipakai untuk memprediksi mortalitas pada penyakit IMA hal ini memberikan gambaran bahwa peningkatan kadar CK-MB menunjukkan luas dan beratnya infark pada miokardium. Penelitian ini bertujuan untuk mengetahui hubungan antara kadar CK-MB dengan angka kematian pada pasien IMA tanpa elevasi ST selama perawatan di RSPAD Gatot Soebroto periode 2013-2016. Desain penelitian ini menggunakan retrospektif dengan 110 sampel dan pengumpulan data dilakukan dengan melihat catatan rekam medis pasien. Teknik pengambilan sampel menggunakan *consecutive sampling*. Analisis bivariat pada penelitian ini menggunakan uji statistik *Chi-square*. Kadar CK-MB yang diperoleh dibagi empat kuartil yaitu kadar CK-MB normal 18,2%, peningkatan ringan 31,8%, peningkatan sedang 36,4% dan peningkatan berat 13,6%. Angka kematian pasien diperoleh sebanyak 18 orang atau 16,4% sedangkan pasien yang *survive* sebanyak 92 orang atau 83,6%. Hasil analisis dengan uji statistik *Chi-square* didapatkan  $p=0,034$  yang menunjukkan bahwa terdapat hubungan antara kadar CK-MB dengan angka kematian penderita IMA tanpa elevasi ST selama perawatan di RSPAD Gatot Soebroto Jakarta.

**Kata Kunci :** CK-MB, IMA tanpa elevasi ST, Angka Kematian

**THE RELATION OF CREATINE KINASE-MYOCARDIAL  
BAND (CK-MB) LEVEL TO THE DEATH RATE OF ACUTE  
MYOCARDIAL INFRACTION PATIENT WITHOUT ST  
ELEVATION DURING TREATMENT IN GATOT SOEBROTO  
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**Abstract**

Coronary heart disease (CHD) was the world's most common cause of death in 2011 and as much as 14% was caused by acute myocardial infarction (AMI). AMI's diagnosis was performed through anamnesis, clinical symptoms, electrocardiogram (ECG) patterns, and increased heart's enzyme. The heart enzyme examinations that were frequently conducted were creatine kinase – myocardial band (CK-MB) and troponin T/I. On AMI without ST elevation, the monitoring of CK-MB/troponin and ECG were always conducted. Aside of for diagnostic test, CK-MB examination could also be used to predict the mortality of AMI. This described that the increase of CK-MB level showed the severe of myocardium infarction. This research aimed to discover the relation of CK-MB level to the mortality rate on AMI without ST elevation patients during the treatment in Gatot Soebroto Army Hospital period 2013-2016. The design of this research was retrospective with 110 samples from medical records. The sampling method conducted was consecutive sampling. The bivariate analysis of this research was Chi-square statistical test. The CK-MB level was divided into four quartiles, which were normal CK-MB level 18,2%, slightly increase 31,8%, moderate increase 36,4%, and severe increase 13,6%. The patient's death rate was 18 patients (16,4%) while the survivors were 92 patients (83,6%). The result of the analysis with Chi-square statistical test  $p=0,034$  which showed that there was relation between the CK-MB level to the death rate of the AMI without ST elevation patients during their treatment in Gatot Soebroto Army Hospital Jakarta.

**Keywords:** CK-MB, AMI without ST elevation, Death Rate