Journal of Medical and Surgical Practice (JMSP)
ISSN: 2664-1704
Vol. 10, No. 01, January-March, 2024

Original article

Predictive value of neutrophil/lymphocyte ratio in ST-segment elevation acute myocardial infarction

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ABSTRACT

Acute myocardial infarction (AMI) is a public health problem due to its impact on more than 30% of deaths worldwide; In Mexico and in the IMSS, ischemic heart diseases represent the first cause of death, hence the importance of having tools that assist in its prognosis. To determine the predictive value of severity of the neutrophil/lymphocyte ratio and the leukocyte count of patients treated in the emergency room for acute myocardial infarction with ST segment elevation. We conducted an observational, cross-sectional, retrospective design, clinical records of patients treated in the emergency room for AMI with ST segment elevation were evaluated. To determine the predictive value of severity, the neutrophil/lymphocyte index was applied with a cut-off of 9 and the leukocyte count at a cut-off of 10,000. ; compared with the gold standard: ICU admission or death. Other variables were: laboratory results, comorbidity, electrocardiography report; A total of 160 records of patients with STEMI were selected, mean age of 69.3 ± 11.3 years, female gender of 94 (59%). Within their comorbidity, arterial hypertension was observed in 25 (15.6%), days of hospital stay with none 80 (50%), in 1 with 31 (19.4%); The location of the AMI was anterior in 69 (43.1%), of the neutrophil/lymphocyte index, sensitivity of 3% (95% CI 1.2-7.5), positive predictive value in 57.1% (95% CI 25-84.2). In the leukocyte count, the sensitivity was 75.2% (95% CI 67.2-81.8), and the positive predictive value was 82.6% (95% CI 74.9-88.4). In conclusion, the predictive value of severity presented a better proportion in leukocyte count of patients with STEMI.

Keywords: *Acute myocardial infarction , STEMI, Severity, Neutrophil/lymphocyte ratio, Prediction*

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