

Physician - Coronary Artery Diseases and Surgery

[MSB-70]

Prognostic Value of the Hemoglobin, Albumin, Lymphocyte, Platelet Score in Predicting One-Year Mortality and Complications in Patients Undergoing Isolated Coronary Artery Bypass Grafting

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Objective: This study aimed to investigate the relationship between the hemoglobin, albumin, lymphocyte, platelet (HALP) score, a novel scoring system that reflects systemic inflammation, and one-year mortality and complications in patients undergoing coronary artery bypass grafting (CABG).

Method: The retrospective study included 359 consecutive patients (287 males, 72 females; mean age: 60.9 years) diagnosed with coronary artery disease who underwent CABG between January 2020 and February 2023. Patients with concomitant mitral valve replacement, aortic surgery, carotid endarterectomy, aortofemoral bypass, intracardiac tumor excision, mediastinal tumor excision, or those who underwent emergency or urgent procedures were excluded from the study. The patients were divided into two groups based on a HALP score cutoff value of 34.1. Group 1 included patients with a HALP score lower than the cutoff value, while Group 2 included those with a HALP score higher than the cutoff value.

Results: The one-year mortality rate was significantly higher in Group 1 compared to Group 2 (16% vs. 5%). Additionally, rates of major adverse cardiovascular and cerebrovascular events, atrial fibrillation, high-dose inotropic support, pneumonia, pleural effusion, prolonged intubation, acute kidney injury, cerebrovascular events, and length of stay in both the intensive care unit and hospital were significantly higher in Group 1 than in Group 2.

Conclusion: The findings of our study indicate that the HALP score can be used to assess one-year mortality and complication risks in patients undergoing isolated CABG. However, to establish it as an independent factor, further analyses with a larger patient population are warranted.

Keywords: Albumin, coronary artery bypass grafting, hemoglobin, leukocytes, mortality, platelet.