AN ASSOCIATION DEMONSTRATED BETWEEN HOMOCYSTEINE, CRP AND TROPONIN LEVELS IN PTCA PATIENTS.

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Homocysteine (Hcy), an amino acid intermediate of methionine metabolism, is considered as a factor responsible for the development of atherosclerotic plaque formation and premature coronary artery disease. Plasma Hcy was measured before the intervention in 83 patients who were admitted to percutaneous transluminal coronary angioplasty (PTCA) and to coronary artery bypass surgery (CABG). Analysis of variance (ANOVA) was performed to compare Hcy levels between the two groups. Plasma levels of high sensitivity C-reactive protein (hs-CRP) and troponin T (TnT) and TnI were measured before and after PTCA. The study population was divided into 3 groups: Group A, 19 patients who underwent PTCA alone; Group B, 34 patients who underwent CABG alone; Group C, 30 patients who underwent PTCA followed by CABG. The Hcy levels were significantly higher in Group C compared to Group A and Group B. The hs-CRP and TnT levels were significantly higher in Group B compared to Group A and Group C. The TnI levels were significantly higher in Group A compared to Group B and Group C. In conclusion, the patients with Hcy (levels) and hs-CRP levels showed the most important inflammatory response and cardiac troponin release during PTCA.