

## **Brain Natriuretic Peptide as a Predictor of Major Adverse Cardiac Events after Successful Percutaneous Coronary Intervention**

B-type natriuretic peptide (BNP) has diagnostic and prognostic value in a wide variety of cardiac disorders including heart failure and coronary artery disease; however, its value in Percutaneous Coronary Intervention (PCI) is not well established. The aim of the work is to assess whether serum BNP level just before PCI has a predictor value of Major Adverse Cardiac Events (MACE) during hospitalization (as recurrent chest pain, new or worsening heart failure, significant arrhythmia and in-hospital mortality) and after 3 months follow up (as echocardiography assessing left ventricular dysfunction, rest chest pain, hospitalization for Acute Coronary Syndrome (ACS) or heart failure, revascularization and cardiac mortality).

In 82 consecutive patients with Coronary Artery Disease (CAD), plasma BNP levels were measured immediately before successful PCI. Patients were followed for 3 months for the occurrences of MACE. The patients were divided into 2 groups according to occurrence of composite end points of MACE at follow-up; MACE (-) Group: 45 patients who did not have MACE and MACE (+) Group: 37 patients who had MACE. A statistically significant positive correlation between higher BNP levels and occurrence of MACE (P-value < 0.001)

**Conclusion:** High levels of BNP before successful Percutaneous Coronary Intervention in patients with Coronary Artery Disease is an independent predictor of MACE during hospitalization and three months follow up period.

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