

Does Insulin-Like Growth Factor Influence the Prognosis Ten Months After Myocardial Infarction?

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INTRODUCTION

We investigated the levels of insulin-like growth factor-1 (IGF-1) in acute myocardial infarction (AMI) and sought to determine whether a decrease might influence the long-term prognosis.

MATERIAL and METHODS

Sixty-five patients who were admitted to our hospital with AMI were included in the study along with 26 other patients without coronary artery disease (CAD) who served as the control group. Fasting blood samples of all of the patients with AMI were obtained at the hospital and approximately 10 months later in order to evaluate their IGF-1 and IGF-binding protein-3 (IGFBP-3) levels.

RESULTS

In the patients with AMI, the IGF-1 levels were higher than in the control group ($p=0.002$). At the 10th month, the levels of IGFBP-3 were significantly higher, and the IGF-1 levels were higher but were not more significant than those in the control group ($p=0.006$ and $p=0.05$, respectively). When we compared the 10-month and baseline values, the levels of IGFBP-3 were significantly higher at 10 months. In addition, the IGF-1 levels were lower but did not achieve significance at 10 months ($p=0.04$) or at the time baseline measurements were taken ($p=0.06$). Furthermore, no significant differences were found between the patients with low or high IGF-1 and IGFBP-3 levels at the two different time periods when they were compared in terms of cardiac events.

DISCUSSION

At the 10-month follow-up after AMI, the serum total IGF-1 and IGFBP-3 levels were still high, and no correlations existed between the IGF-1 and IGFBP-3 levels and cardiac events.

