Effect of diving in different depths on the level of C-reactive protein and lipid profiles of diver men

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Abstract

Background and Objective: New markers of cardiovascular disease have more sensitivity and accuracy in predicting cardiovascular events. Considering the effective role of physical activity in preventing and reducing cardiovascular disease, which will be of great help in improving the health of people in the community. This study was done to determine the effect of diving in different depths on the level of C-reactive protein (CRP) and lipid profiles of diver men.

Methods: This quasi-experimental study was carried out on 6 male diver members of the rescue and rescue team of the Red Crescent Society of Kohkiluyeh and Boyer Ahmad province in Iran. Subjects diverted on the first day at a depth of 1 meter, the second day at a depth of 10 meter, and the third day at a depth of 20 meter for 40 minutes. The subjects were at a depth of 10 and 20 meters at a height of 3 meters to the surface of the water for five-minute steepness. Blood samples were taken before and after diving, and CRP and lipid profiles including triglyceride, total cholesterol, low density lipoprotein and high density lipoprotein were measured.

Results: The increase of environmental stress caused by diving in three depths of 1, 10 and 20 meters of the sea significantly increased CRP level (P<0.05). No significant changes were observed in the levels of triglyceride, total cholesterol, and low density lipoprotein, but high density lipoprotein level was significantly increased (P<0.05).

Conclusion: Scuba diving, due to the transport of respiratory equipment during activity increases C-reactive protein and lipid profiles.

Keywords: Diving, Reactive protein-C, Lipid profiles

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