

## **The Effect of Omega 3 Polyunsaturated Fatty Acids (PUFAs) In Serum CK-MB And Troponin I As Markers Of Myocardial Injury After PCI**

### **Abstract**

#### **Background and objectives:**

Myocardial infarction is one of the most common diseases in all countries. The mortality rate of patients with this disease is approximately 30%. Re-opening of blocked coronary artery is important because of decreasing mortality and improve quality of life in patients with acute myocardial infarction. Now there are various methods for opening coronary artery, including the use of thrombolytic drugs and PCI. Due to the fact that PCI is a critical treatment for cardiovascular patients yet it has dangerous complications during and after it too. Some of these complications include vascular dissection, and thrombosis and ischemic sudden blockage. By reducing the side effects of this treatment, it can be safe and reliable construction.

To determine the effect of Omega 3 in the prevention of myocardial injury induced by coronary interventional procedures by reducing levels of CK-MB and Troponin I is our objective.

#### **Methods:**

among those who were randomly going for elective PCI, we selected 100 patients and divided into 2 groups of 50 persons.. In Group A, 12 hours before PCI, approximately 3 grams of omega-3, with routine medications before PCI include Aspirin and Plavix were given. In Group B, 12 hours before PCI placebo in combination with routine medication before were given and PCI was performed, then the CK-MB and Troponin I in the 2 groups was measured and compared to each other and against the values before performing PCI were measured.

#### **Results:**

The results that were obtained, show that levels of CK-MB and Troponin I rise after PCI in Group A lower than Group B .

#### **Conclusions:**

Our results confirmed the effect of omega 3 in the prevention of myocardial damage caused by PCI , so we can use omega 3 for reducing PCI complications .

**Keywords:** CK-MB ,Troponin I ,PCI ,Omega3