Cardiac Rehabilitation After Myocardial Infarction: A Comparison Between the Standard and Home-Based Cardiac Rehabilitation Programs

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Abstract:

Background: Cardiovascular disease (CVD) has emerged as the leading cause of death worldwide. Multiple meta-analyses have demonstrated that cardiac rehabilitation (CR) reduces mortality in patients with coronary artery disease. Despite guidelines recommending the use of CR programs for patients with ST segment elevation myocardial infarction (STEMI) participation in these programs continues to be low which had led to the development of alternative models of CR.

Objective: To evaluate the efficacy of home-based cardiac rehabilitation (HBCR) program in patients presenting with STEMI in a comparison with the standard in-hospital CR program.

Methods: The study included 70 Patients referred for cardiac rehabilitation unit at Ain shams university hospitals after STEMI successfully treated by primary PCI.

Patients were subdivided into two (2) groups according to patients' preference to different modalities of cardiac rehabilitation:

a. Group (A): 35 patients who underwent regular in-hospital cardiac rehabilitation
b. Group (B): 35 patients who couldn't undergo regular in-hospital cardiac rehabilitation and preferred to undergo home-based cardiac rehabilitation

Outcome measures were assessed at baseline and after completion of the CR program in the form of:

a. 12 hr fasting lipid profile (TC, HDL, LDL and TGs).