ADIPOKINES RESPONSE TO CONTINUOUS VERSUS INTERVAL AEROBIC TRAINING IN ISCHAEMIC HEART DISEASE PATIENTS

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ABSTRACT

Background: Coronary artery disease (CAD) is the single most common cause of death in the developed world, responsible for about 1 in every 5 deaths and it is expected that its rate will accelerate in the next decade.

Purpose: To find out adipokines response to continuous versus interval aerobic training in ischaemic heart disease Patients.

Subjects and Method: Forty men patients with an ischemic heart disease with age ranged from 50-60 years old participated in this study. They were recruited from the heart outpatient clinic of Kasr El Ainy hospital. They were assigned into two groups equal in number: Group A included 20 patients received high intensity interval aerobic training on treadmill 3 times per week for 12 week. Group B included 20 patients received moderate intensity continuous aerobic training on treadmill 3 times per week for 12 week. Serum adiponectin, serum leptin, 6 minute walk distance and patient's specific quality of life were measured before and after training program for both groups.

Results: Statistical analysis revealed that high intensity interval aerobic training has more significant effect on serum adiponectin (28.25%), serum leptin (9.19%), 6 minute walk distance (16.55%) and patient's specific quality of life median (88.8) (75) (80) than moderate intensity continuous aerobic training (14.33%), (4.67%), (10.37%) and (66.6), (66.6), (67.5) respectively.

Conclusion: Interval appears to be more effective than continuous aerobic training for improvement of adipokines, functional capacity and quality of life in patients with ischemic heart disease.

Key words: Adipokines/ High intensity interval aerobic training / Moderate intensity continuous aerobic training/ Ischemic heart disease.