Effect of Weight Reduction on Liver Enzyme in Obese Post-menopausal Women with Chronic Hepatitis

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Background: The prevalence of obesity and overweight has risen at an alarming rate over the past 20 years. In addition to increasing the risk of the development of type 2 diabetes, hypertension, excess body weight also has a risk factor for progression of fibrosis in chronic liver diseases such as chronic hepatitis and non-alcoholic fatty liver disease. The menopause transition results in a reduction in resting metabolic rate, physical activity, energy expenditure, and leads to an increase in fat mass and abdominal adipose tissue accumulation. These changes increase the risk of bad prognosis of already existed liver disease. Purpose of the study: to investigate the effect of 3 months aerobic exercise training with weight loss on alanine aminotransferase (ALT) in patients with chronic hepatitis C, Methodology: 20 obese postmenopausal women with body mass index (BMI) > 30 kg/m² suffered from hepatitis C participated in the study followed a regimen of restricted diet of 1000-1200 Kcal/day, in addition to a program of aerobic exercise training on a treadmill 3 times/week for 25 minutes, for 3 months, ALT, BMI and waist hip ratio (WHR) were measured before starting the study then after (J and 12 weeks of training. Results: showed that serum ALT levels fell progressively with weight loss (P < 0.0001), in parallel to highly significant decrease in BMI and WIIR (P < 0.001) after 12 weeks of intervention through diet control and aerobic exercises. Conclusions: Weight loss in patients with chronic hepatitis C associated with a reduction in abnormal liver enzyme, weight reduction may provide an important adjunct treatment strategy for patients with chronic hepatitis C.