

Clinical Question: Does a Three-month Supervised Exercise Training Improve Lipid Profiles and Reduce Body Fat in Obese Postmenopausal Women?

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Background and Purpose: To seek for evidence whether a three-month supervised exercise training can improve lipid profiles and reduce body fat in our obese postmenopausal female client. **Methods:** MEDLINE, PubMed and CINAHL database were used to retrieve relevance articles to the topic using the keywords “lipids AND postmenopause AND obesity AND exercise”. Options of “LIMITS” were applied that included English, published in the last five years (2001 to 2006), Meta-Analysis, and Randomized Controlled Trial (RCT), Reviews, and Humans. **Results:** A total of three articles, all with RCT design, were reviewed. The available evidence showed that a three-month supervised exercise program could modify certain metabolic risk factors (insulin and leptin), reduce body weight, and hip and waist circumferences. However total and percent body fat and serum lipoproteins remained unchanged. A 12-month training period was needed for reducing percent body fat especially intra-abdominal fat. **Conclusions:** Based on the available evidence, we would encourage our client to take a three-month supervised exercise training and the importance to keep physically active to maintain cardiorespiratory fitness and to reduce obese-related cardiovascular risks. (FJPT 2007;32(1):33-38)

Key Words: Exercise training, Postmenopausal, Lipid profile, Body fat

A 58 year old obese postmenopausal woman with mild hypertension and high low-density lipoprotein/high-density lipoprotein (LDL/HDL) ratio was advised to participate in an aerobic exercise program to reduce cardiovascular disease (CAD) risks (e.g., altered lipid profile) and other obesity-associated complications, to lose weight, and to improve physical fitness. Her physician had also advised her to make lifestyle modifications and managed her weight to achieve and maintain a

lower blood pressure. The patient was referred to PT department for an exercise training program to achieve these goals.

Examination and evaluation: From the history taking, we learned that the patient had a family history of CAD (her mother died of myocardial infarction at the age of 60 y/o). The patient's anthropometry, blood pressure, and body composition (measured by Bioelectrical Impedance Analysis method; BIA) data were as follows:

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Received: September 21, 2006 Accepted: December 10, 2006