



P15. MENOPAUSE AND THE METABOLIC SYNDROME: CLINICAL EFFICIENCY OF THE HORMONE REPLACEMENT THERAPY.

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CONTEXT: Cross-sectional studies suggest that prevalence of the metabolic syndrome (MetS) increases from premenopause to postmenopause in women, independent of age. The incidence of the MetS increases with progression through menopause and that this increase is explained by the estrogen deficiency of the hormonal milieu. Abdominal obesity is associated with insulin resistance and a cluster of cardiovascular risk factors that characterize the metabolic syndrome. We suggested that hormonal replacement therapy in abdominally obese women reduces visceral adipose tissue and has beneficial effects on the metabolic profile.

OBJECTIVE: The aim of the present study was to evaluate the effect on insulin resistance of hormone replacement therapy (HRT).

METHODS: Measurements of glucose disposal rate (GDR) using a euglycemic, hyperinsulinemic glucose clamp; abdominal fat, , and thigh muscle area using computer tomography; and total body fat and fat-free mass derived from measurements were performed at baseline and at 6 and 12 months.

Forty

postmenopausal women with abdominal obesity participated in a 12-month trial.

RESULTS: Hormone replacement therapy reduced visceral fat mass, increased thigh muscle area, and reduced total and low-density lipoprotein cholesterol compared with placebo. Insulin sensitivity was increased at 12 months compared with baseline values in the HRT-treated group. In the HRT -treated group only, a low baseline GDR was correlated with a more marked improvement in insulin sensitivity ($P < 0.001$). A positive correlation was found between changes in GDR and liver attenuation as a measure of hepatic fat content between baseline and 12 months ($P < 0.001$) in the HRT-treated group.

CONCLUSION: In menopausal women with abdominal obesity, 1 year of HRT treatment improved insulin sensitivity and reduced abdominal visceral fat and total and low-density lipoprotein cholesterol concentrations. The improvement in insulin sensitivity was associated with reduced hepatic fat content.

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