Abstract

Objectives: Obesity during adolescence is an increasing health problem in industrial countries. The co-morbidities associated with obesity include important metabolic diseases. Methods: To analyze the effect of a weight-loss program, we recruited 12 obese, male adolescents before entering this program. We determined body weight measures at baseline, 6-week and 36-month follow-up. Also, the long-term changes of blood pressure, HbA1c, and CRP were evaluated. Twenty healthy age-matched adolescents served as controls. Results: Within the intervention group ((body mass index [BMI, kg/m$^2$] > 95 th percentile for age and sex, age 13-17 years) the BMI and BMI-standard deviation score [SDS] were significantly reduced in the 6-week follow-up after completing the weight loss program. However, the significant weight-reduction effect was not persistent until the 36-month follow-up. Conclusion: The 6-week weight-loss program had beneficial short-term effects on body weight, BMI, and BMI-SDS in obese adolescents, but these effects could not be maintained until the 36-month follow-up.

Keywords

Adolescent, Long-term effects, Obesity, Weight loss, Weight reduction programs.