

Management of obesity over five year's follow-up: the challenging of long-term weight reduction

Background

The prevalence of obesity continues increasingly alarming in Brazil and worldwide. The most widely recommended therapy for obesity is lifestyle modification. Restricting intake leading to weight loss is the most common strategy for the majority of obese individuals in short-term.¹ This is a case report of a woman in treatment over five years follow up at the Food and Nutritional Education Program from the Clinical Hospital of Ribeirão Preto Medical School, University of São Paulo, Ribeirão Preto, Brazil. This public hospital with expertise in obesity management offers assistance for obese population since 1979. The patients admitted to the program receive a treatment protocol of 4 to 8 weeks inpatient with restrictive caloric intake, followed by an outpatient follow-up conducted at Obesity and Dyslipidemia Ambulatory at the same hospital.

Case report

A 30-year-old woman diagnosed with obesity was admitted at the outpatient obesity clinic from Clinical Hospital of Ribeirão Preto Medical School, University of São Paulo for a treatment of obesity. She had been treated in other health centers with no success. The medical team investigated secondary causes of weight gain and endocrine disorders were ruled out. The patient was hospitalized and submitted to an 8-week nutritional education program. Her initial weight and body mass index were respectively: 166kg and 64kg/m². A body composition assessed by single frequency bioelectrical impedance analysis (50kHz) method using Biodynamics 450® (Biodynamics™ Corp., Shoreline, Washington, United States), showed 75kg of lean body mass and 92kg of fat mass. The daily energy intake was reduced weekly as follows: 1800kcal/day during the first and second weeks, 1500kcal/day during the third to sixth weeks and 1200kcal/day during the seventh and eighth weeks. The percentage of macro-nutrients was 50% carbohydrate, 30% lipid and 20% protein, during the whole period. At hospital discharge the patient's weight was 154kg, body mass index was 60kg/m², 71kg of lean body mass and 84kg of fat mass. After hospital discharge, the patient continued to be followed at the outpatient clinic by the same team and regained weight (Figure 1). She continued the follow-up for up to five years and then dropped out.

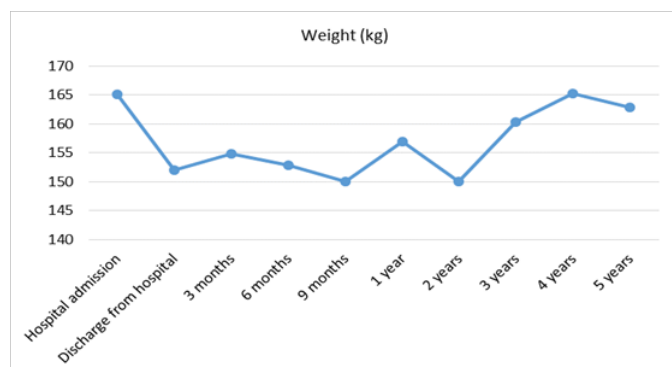


Figure 1 Weight loss evolution during five years of follow-up.

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During the inpatient period, the patient presented approximately 8% of weight loss. It's well known that a moderate weight loss of 5 to 10% in baseline weight, is considered beneficial, once it is related to clinically improvements in obesity-related with metabolic risk factors and coexisting disorders.² However, dieting has a reasonably poor success in a long-term weight reduction.^{1,3} After a period of weight loss from energy restriction, about 80% of people regain weight.⁴ Thus, implementing modifications to lead to weight loss is difficult and long-term maintenance of a reduced weight are even more challenging.⁵

Conclusion

This case report illustrates the unmet need in obesity treatment to prevent weight regain following weight loss. Innovative approaches and new strategies for weight loss management to support a successful long-term weight loss are urgently needed.

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Conflict of interest

The author declares no conflict of interest.

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