LONG-TERM MAINTENANCE OF WEIGHT LOSS FOLLOWING REMOVAL OF INTRAGASTRIC BALLOON (IGB)

Sylvia Pytraczyk, MD¹, Lawrence B. Cohen, MD¹,²

¹. Gastroenterology, Sunnybrook Health Sciences Centre, Toronto, ON, Canada.
². University of Toronto, Toronto, ON, Canada.

INTRODUCTION

Obesity and its associated morbidity and mortality, is a global epidemic with increasing prevalence. Endoscopic bariatrics, primarily consisting of intragastric balloon (IGB) placement for variable periods of time, has become an accepted form of non-surgical treatment for obese patients in search of weight loss interventions. The long-term outcome of the procedure is still evolving and maintenance of lost weight once the balloon is removed remains controversial.

OBJECTIVE

The aim of this study is to determine if a mean of 6.5 months of IGB treatment provides long-term weight loss maintenance after IGB removal in the absence of continuous outpatient support.

METHODS

Twelve of 24 obese patients with the mean age of 40 years were successfully contacted. Anthropometric measurements were recorded at baseline, removal, and telephone follow-up. Successful long-term IGB therapy is defined as maintenance of total body weight loss of over 10% from baseline.

RESULTS

At the time of balloon removal (mean of 6.5 months±2.6) the measurements were observed at body mass index (BMI) 30kg/m² (±2.9), mean percent of excess weight loss (EWL) 53% (±35.9), and percentage total body weight loss (%TBWL) 14% (±6.1). Telephone follow-up occurred after a mean of 4±2.3 years after removal of the IGB. Partial or complete regain has been observed for BMI 34 kg/m² (±5.9), %EWL 28% (±34.3), and %TBWL 4% (±8.4). Three patients (25%) maintained a mean %TBWL of 16% (mean %TBWL of 20% at removal). Five patients have kept a mean %TBWL of 4% (mean %TBWL of 13% at removal). Four patients (33%) returned to baseline body weight (%TBWL at 8-21% at removal). There were no complications related to the IGB treatment. One patient in the study suffered from unbearable nausea related to the IGB treatment and consequently underwent endoscopic IGB removal after 1 month. However, the patient was able to maintain %TBWL at the follow-up date.

CONCLUSION

IGB treatment is an effective and safe non-invasive surgery, which results in variable weight loss over a temporary period of time. However, once the IGB is removed, recidivism or weight regain is a significant problem for the long-term benefit of this procedure. IGB therapy has proven to be a long-term weight loss solution in only 25% of patients as opposed to 83% of patients who saw temporary success at the time of removal. Continuous multidisciplinary outpatient support in the form of psychotherapy, regimented exercise, and supervision by a dietician are necessary not only while the IGB treatment is in place, but also after the balloon is removed would yield the best long-term benefit for these patients. IGB can however, be extremely valuable as a short-term weight loss intervention.