

## **MAINTENANCE OF WEIGHT LOSS FOLLOWING REMOVAL OF INTRAGASTRIC BALLOON (IGB)**

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### **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. 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) the measurements were observed at body mass index (BMI) 30kg/m<sup>2</sup>, mean percent of excess weight loss (EWL) 53%, and percentage total body weight loss (TBWL) 14%. Telephone follow-up occurred after a mean of 4 years after removal of the IGB. Regain has been observed for BMI 34 kg/m<sup>2</sup>, %EWL 28%, and %TBWL4%. Three patients (25%) maintained a mean %TBWL of 16% (mean %TBWL of 20% at removal), while five patients have kept a mean %TBWL of <4% (mean %TBWL of 13% at removal). There were no complications related to the IGB treatment. Four patients returned to baseline body weight, 2 of whom reached %TBWL 13% and 20% at the time of IGB removal.

### **DISCUSSION**

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 dietitian 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.