Elipse Gastric Balloon System for Weight Loss: Short and Long-Term Multicenter Results in 509 Patients after Balloon Treatment, and 1 Year after Balloon Passage.

Background:

The Elipse Gastric Balloon System (EGBS) is a 4-month non-endoscopic balloon for weight loss. The Bluetooth-connected scale and unique cell-phone App allows close follow-up both during treatment, and longer term after balloon passage.

Objective:

To determine the short and long-term efficacy of EGBS at 4 months and at 1 year after passage of the balloon using augmented follow-up with the Bluetooth-connected scale and cell-phone App.

Methods:

Data was retrospectively analyzed from 9 international obesity centers for all balloon placements between March 2016 and February 2019. Patients had been followed monthly throughout balloon treatment, and for 1 year after balloon passage. The Bluetooth-connected scale and cell-phone App allowed an augmented “virtual follow-up” adding close support to the patients. Results for WL, TBWL, EWL, BMIL and metabolic data were collected.

Results:

One-year follow-up data was available from 509 patients (321F, 188M). Mean weight and BMI before the procedure were 102.6 ± 21.3kg and 35.9 ± 5.8kg/m^2. After 4 months of treatment, weight loss, %TBWL, %EWL and BMIL were 14.4 ± 7.7kg, 13.9 ± 6.4%, 55.5 ± 36.9% and 5.1 ± 2.6kg/m^2 respectively. All metabolic parameters improved significantly in the 192 patients where this data had been collected. One year after balloon passage, weight loss, %TBWL, %EWL and BMIL were 14.1 ± 11.7kg, 13.3 ± 9.9%, 50.8 ± 44.0% and 4.9 ± 4.0kg/m^2 respectively. Adverse events observed were: Intolerance 1.2%, gastric dilation 0.2%, gastritis 0.2% and gastric perforation requiring laparoscopic repair 0.2%. Seven patients (1.3%) passed the balloon by vomiting at the end of balloon residence without any side effects.

Conclusion:

EGBS demonstrated excellent short and long-term efficacy for weight loss with very few adverse events. Close communications using a Bluetooth-connected scale and a unique cell-phone App allowed for an augmented “virtual follow-up” both during EGBS treatment and longer term after passage of the balloon. This resulted in a 13.9% TBWL at 4 months and 13.3% TBWL 1 year after balloon passage, a 95% maintenance of %TBWL.