WEIGHT LOSS BEFORE BARIATRIC SURGERY

Morbidly obese patients can achieve significant short-term weight loss after endoscopic implantation of a duodenal–jejunal bypass sleeve, according to a research team in The Netherlands.

Bariatric surgery is currently the only treatment that results in sufficient long-term weight loss; however, the results of bariatric surgery are highly variable, and surgery needs to be repeated in many patients. Preoperative weight loss is one strategy that can improve the outcomes of bariatric surgery, but “...most patients are not successful in losing weight preoperatively,” explains Ruben Schouten, lead researcher. “The EndoBarrier Gastrointestinal Liner (GI Dynamics, Inc., Lexington, MA) is designed to help patients achieve weight loss before bariatric surgery.”

To establish the safety and efficacy of the EndoBarrier Gastrointestinal Liner, Schouten *et al.* implanted the device in 26 patients (implantation could not be achieved in 4 other patients). 11 patients were included in a diet control group. Both groups followed a low-calorie diet and were assessed at 1, 4, 8 and 12 weeks postimplantation for weight loss, adverse events and changes in laboratory parameters.

At 12 weeks postimplantation, the device group had lost significantly more weight than the control group. The device patients all experienced adverse events (for example, abdominal pain, nausea), but none of the events was severe. The device also had a positive effect on type 2 diabetes mellitus.

These findings suggest that the EndoBarrier is a safe and feasible noninvasive short-term treatment for morbid obesity. The authors are now studying the effects of the Endobarrier in morbidly obese and less overweight patients with type 2 diabetes mellitus. They are also planning to improve experience with the device in a larger, long-term prospective study.

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Original article Schouten, R. *et al.* A multicenter, randomized efficacy study of the EndoBarrier Gastrointestinal Liner for presurgical weight loss prior to bariatric surgery. *Ann. Surg.* **251**, 236–243 (2010)