FECAL INCONTINENCE

Magnetic anal sphincter augmentation shows promising outcomes in patients with fecal incontinence

Treatment options for patients with severe fecal incontinence remain limited. A feasibility study of magnetic anal sphincter augmentation has demonstrated promising outcomes for this technique.

Magnetic sphincter augmentation was first developed with the aim of augmenting the lower esophageal sphincter in patients with GERD. The same principles of the technique can be applied to anal sphincter augmentation in patients with fecal incontinence. The idea is that the device provides sufficient support to keep the anal sphincter closed (that is, to prevent episodes of incontinence). To defecate, the patient pushes in the normal defecation manner—the force causes the device to open so stool can pass through.

Paul-Antoine Lehur and colleagues have conducted a multicenter, prospective, observational, clinical feasibility study of magnetic anal sphincter augmentation. "The purpose of this feasibility study was to understand the safety profile as well as the potential benefit of this new device when it is implanted in patients with fecal incontinence," the authors write. The primary outcome measure was a reduction in the number of incontinence episodes.

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14 female patients with severe, end-stage fecal incontinence had a magnetic anal sphincter device implanted. All patients had previously attempted, or been candidates for, conservative therapeutic approaches. An average of at least two fecal incontinence episodes per week was required for inclusion in the study.

Adverse events occurred in seven patients. In two patients development of a local infection was associated with treatment failure (owing to the infection in one case, and because of patient preference in the other case). In one patient, the device was passed spontaneously following separation from the suture connection. To date, no long-term adverse effects have been reported. Five patients reported a reduction in the mean number of weekly incontinence episodes. Two patients reported perfect continence after 1 year of follow-up.

The authors conclude that this procedure is safe and simple. "Compared with existing devices [this study] demonstrates that implantation is simple and it requires no adjustments from the physician or patient once implanted," they write.

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Original article Lehur, P.-A. *et al.* Magnetic anal sphincter augmentation for the treatment of fecal incontinence: a preliminary report from a feasibility study. *Dis. Colon Rectum* **53**, 1604–1610 (2010)