FUNCTIONAL GASTROINTESTINAL DISORDERS

Biofeedback therapy reduces regurgitation episodes in rumination

Biofeedback-guided control of abdomino-thoracic muscular activity can help reduce the number of regurgitation episodes in patients with rumination syndrome, according to the findings of a recent study.

Rumination syndrome is a functional gastrointestinal disorder that is characterized by regurgitation of recently ingested food, followed by spitting or re-mastication and swallowing. Elizabeth Barba and colleagues decided to perform a prospective study to investigate whether rumination could be reduced by behavioural treatment.

The researchers enrolled 28 patients in their study. Patients received electromyography-guided biofeedback training with the aim of teaching them to control abdomino-thoracic muscle activity and thus reduce regurgitation. Electromyographic recordings were taken before training and during three treatment sessions. Clinical outcomes

were measured using daily patient questionnaires for 10 days before training, immediately after training, and 1, 3, and 6 months after training. Patients reported 27 ± 1 regurgitation episodes per day at baseline, which reduced to 8 ± 2 episodes per day immediately after treatment and further reduced to 4 ± 1 episodes per day at 6 months after training.

“Our data indicate that rumination is produced by an unperceived, somatic response to food ingestion that disrupts abdominal accommodation and that can be effectively corrected,” conclude the authors. A randomized, placebo-controlled trial is in progress to confirm the efficacy of this treatment approach.

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Original article Barba, E. et al. Biofeedback-guided control of abdomino-thoracic muscular activity reduces regurgitation episodes in patients with rumination. *Clin. Gastroenterol. Hepatol.* doi:10.1016/j.cgh.2014.04.018