Biofeedback for fecal incontinence: a randomized study comparing exercise regimens.

Posted At: August 13, 2011 2:03 PM | Posted By: Tim Brunson, PhD

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BACKGROUND: Fecal incontinence affects up to 11% of Australian community-dwelling adults and 72% of nursing home residents. Biofeedback is a recommended conservative therapy when medication and pelvic floor exercises have failed to improve patient outcomes. OBJECTIVE: This study aimed to investigate the impact of a new exercise regimen on the severity of fecal incontinence and the quality of life of participants. DESIGN: This was a randomized clinical study. SETTINGS: This study was conducted at the Anorectal Physiology Clinic, Townsville Hospital, Queensland, Australia. PATIENTS: Seventy-two participants (19 male), with a mean age of 62.1 years, attended 5 clinic sessions: 4 weekly sessions followed by a follow-up assessment session. A postal survey was conducted 2 years later. INTERVENTION: Thirty-seven patients (12 male) were randomly assigned to the standard clinical protocol (sustained submaximal anal and pelvic floor exercises) and 35 patients (7 male) were randomly assigned to the alternative group (rapid squeeze plus sustained submaximal exercises). MAIN OUTCOME MEASURES: The main outcomes were measured by use of the Cleveland Clinic Florida Fecal Incontinence score and the Fecal Incontinence Quality of Life Scale survey tool. RESULTS: No significant differences were found between the 2 exercise groups at the beginning or at the end of the study or as a result of treatment in objective, quality-of-life, or fecal incontinence severity measures. Sixty-nine participants completed treatment. The severity of fecal incontinence decreased significantly (11.5/20 to 5.0/20, P < .001). Eighty-six percent (59/69) of participants reported improved continence. Quality of life significantly improved for all participants (P < .001). Results were sustained 2 years later. Patients who practiced at least the prescribed number of exercises had better outcomes than those who practiced fewer exercises. LIMITATIONS: This study was limited because it involved a heterogeneous sample, it was based on subjective reporting of exercise performance, and loss to follow-up occurred because of the highly mobile population. CONCLUSIONS: Patients attending this biofeedback program attained significant improvement in the severity of their fecal incontinence and in their quality of life. Although introduction of rapid muscle squeezes had little impact on fecal incontinence severity or patient quality of life, patient exercise compliance at prescribed or greater levels did.

Dis Colon Rectum. 2011 Jul;54(7):846-56. Bartlett L, Sloots K, Nowak M, Ho YH. 1School of Public Health, Tropical Medicine & Rehabilitation Science, North Queensland Centre for Cancer Research, James Cook University, Townsville, Australia 2Clinical Measurements Unit, The Townsville Hospital, Townsville, Australia 3School of Medicine and the Australian Institute of Tropical Medicine, North Queensland Centre for Cancer Research, James Cook University, Townsville, Australia.

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