

Effects of Mind-Body Therapy on Quality of Life and Neuroendocrine and Cellular Immune Functions in Patients with Ulcerative Colitis

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Abstract

Background: The aim of this study was to investigate the effects of mind-body therapy on neuroendocrine and cellular immune measures, health-related quality of life and disease activity in patients with ulcerative colitis (UC) in remission. **Methods:** Thirty UC patients in remission or with low disease activity were randomly assigned to an intervention group (n = 15) or a usual-care waiting control group (n = 15). Intervention consisted of a structured 60-hour training program over 10 weeks which included stress management training, moderate exercise, Mediterranean diet, behavioral techniques and self-care strategies. Quality of life, perceived stress and disease activity were assessed with standardized questionnaires (IBDQ, SF-36, PSS, CAI). In addition, the distribution of circulating lymphocytes and lymphocyte subsets as well as the β -adrenergic modulation of TNF- α production in vitro were analyzed. Urine catecholamines and plasma cortisol, prolactin and growth hormone were measured pre- and postinterventionally, and were compared with a healthy control group (n = 10). **Results:** In response to therapy, patients in the intervention group showed significantly greater improvement in the SF-36 scale Mental Health and the Psychological Health Sum score compared with changes observed in the usual-care waiting control group. Patients in the intervention group showed significantly greater improvement on the IBDQ scale Bowel Symptoms compared with the control group. However, no significant group differences in circulating lymphocyte subsets or endocrine parameters were observed in response to therapy. In addition, no significant effects of intervention on either the basal levels of TNF- α or the suppressive action of the β -adrenergic agonist isoproterenol on TNF- α production were observed. **Conclusion:** Mind-body therapy may improve quality of life in patients with UC in remission, while no effects of therapy on clinical or physiological parameters were found, which may at least in part be related to selective patient recruitment