Mindfulness-Based Stress Reduction in Symptomatic Patients with Controlled Rheumatoid Arthritis

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Current treatments of rheumatoid arthritis (RA) are very effective at controlling inflammation and preventing joint and bone destruction. Some RA patients continue to report distressing patient-reported outcomes (PROs) such as pain, fatigue, depression or functional impairment despite clinically controlled inflammation (controlled RA) according to the physician. The best approach to improve PROs in these patients is currently unknown.

In a pragmatic pilot study,[1] we offered free participation to group mindfulness-based stress reduction (MBSR) sessions led by a certified therapist. MBSR is an 8-week group intervention shown to be effective to help patients with a number of diseases.[2] We included patients with controlled RA (2 swollen joints or less; normal C-reactive protein [CRP]) coming to their regular follow-up visit who had high depressive symptoms (Centre for Evaluation Studies-Depression [CES-D] scores ≥16) and/or Patient General Assessment of disease activity (PGA) at least 2/10 higher than Evaluator General Assessment (EGA). Evaluations were completed before and 6 and 12 months after MBSR and included CES-D, PGA, the Modified-Health Assessment Questionnaire (M-HAQ), Simplified Disease Activity Index (SDAI), and measures of anxiety (General Anxiety Disorder 7 [GAD-7]), coping strategies (Coping with Health Injuries and Problems [CHIP]), and 0-10 Visual Analog Scales for sleep disturbance and pain.

Out of 306 screened patients, 65 (about 50% of those potentially eligible according to chart data from their previous visit) were referred by their rheumatologist to research personnel, 39 (60%) signed consent, 29 (45%) participated in at least one session and 28 (43%) completed the 8 MBSR sessions. Anticipated burden, timing and frequency of weekly group meetings, commuting issues, age extremes, and comorbidities were barriers to participation.

The proportion of patients with CES-D ≥16 decreased from 67.9% at baseline to 36% (p=0.01) and 11.8% (p=0.002) at 6 and 12 months, respectively. M-HAQ≥1, indicative of at least moderate disability, decreased from 57.1% at baseline, to 32.1% at 6 months (p=0.007), and 26.1% at 12 months (p=0.008). At 12 months after completion of MBSR, anxiety, emotion-oriented coping and sleep also significantly improved. Yet, no significant impact was observed on pain, PGA or SDAI. Interviews of 9 patients at 6 months after completion of MBSR sessions revealed that benefits to patients including integration of effective coping strategies into regular activities were maintained.

We addressed MBSR feasibility issues and the selection of outcomes in patients with controlled RA patients still expressing distressing PROs. For patients who chose to participate in group MBSR, lasting benefits were evident for anxiety, depression, sleep, and function. Less demanding interventions, such as web-based MBSR groups, might allow better participation. Larger studies will be required to evaluate the weaker impact of the intervention on pain and PGA.

References:
1. Gaboury I, Dobkin PL, Gendron F, Roberge P, Beaulieu MC, Carrier N, Dagenais P, Roux S, Boire G. Mindfulness-based stress reduction to improve depression, pain and high patient global assessment in controlled rheumatoid arthritis. *Rheumatol Adv Pract.* 2022 Sep 5; 6(3):rkac074. doi: 10.1093/rap/rkac074.
2. The Center for Mindfulness in Medicine, Health Care, and Society. Mindfulness-based stress reduction (MBSR): standards of practice. Available at *htpps://mindfulness.au.dk/fileadmin/mindfulness.au.dk/Artikler/Santorelli_mbsr_standards_of_practice_2014.pdf.* Accessed February 27, 2023.