

How to improve adherence to exercise therapy in osteoarthritis?

Joost Dekker, PhD

Department of Rehabilitation Medicine
VU University Medical Center
Amsterdam, The Netherlands

Background

Exercise therapy is recommended in all major guidelines on osteoarthritis of the hip or knee (1). This recommendation is based on systematic reviews which show that exercise therapy reduces pain and activity limitations in osteoarthritis of the knee (2,3); exercise in osteoarthritis of the hip is likely to have the same outcome (4,5).

Adherence to exercise is an important predictor of outcome: low adherence to exercise is associated with poor outcome. Patients may fail to show up or do not perform the prescribed home exercises: studies have shown that non-adherence predicts a poor outcome of exercise therapy (6).

This raises the question how adherence to exercise therapy can be improved, as improved adherence may result in better outcome. It has been suggested that adherence improves if exercise therapy is delivered in the following format:

- (i) exercise integrated in activities of daily life
- (ii) delivery of exercise using strategies to change patient behavior
- (iii) regular follow up sessions.

We have developed the Behavioral Graded Activity program (BGA-program), based on these principles (7). We have evaluated the impact of the BGA-program on exercise adherence and physical activity in patients with osteoarthritis of the hip or knee, compared to usual exercise therapy (8). The method and results of this trial are summarized below.

Method

Design. We performed secondary analyses on the data of a cluster randomized clinical trial with concealed

allocation and blinded assessors. The statistical analyses were carried out according to the intention-to-treat principle.

Patients. Two hundred patients with hip and/or knee osteoarthritis participated in the trial.

Interventions: The BGA-program was compared with usual exercise treatment (control group) according to the Dutch guideline for physiotherapy in patients with osteoarthritis of the hip or knee.

Outcome measures: Exercise adherence and physical activity were measured with self-report questionnaires. Assessments were conducted at 13 and 65 weeks follow-up (i.e. short term and long term follow up).

Results

The BGA-program resulted in significantly higher adherence to home exercises, both at short term and long term follow up. The BGA-program resulted in more patients meeting the recommendations for physical activity, compared to usual care, both at short term and long term follow up.

Conclusion

The Behavioral Graded Activity program results in better adherence to exercise and a higher level of physical activity than usual exercise therapy in patients with osteoarthritis of the hip or knee, both in the short term and the long term. In the BGA-program, exercise is integrated in daily activities, exercise is delivered according to strategies to change patient behavior, and there are regular follow up sessions. We believe that these ingredients are essential requirements for improving adherence to exercise in osteoarthritis.

References

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