

Physical activity and health-related quality of life of patients with chronic pain after total knee replacement: evidence from a physiotherapy randomised controlled trial

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Abstract

Objectives:

The aim of this study was to describe how physical activity and health-related quality of life (HRQoL) evolved over the first year after total knee replacement (TKR) for patients with and without chronic pain (CP), using data from a randomised controlled trial.

Methods:

We used data from the PEP-TALK randomised controlled trial, which tested the effectiveness of a behaviour change physiotherapy intervention to increase physical activity compared with usual rehabilitation after primary Total Knee Replacement (TKR). Chronic pain (CP) was identified using a cut-off point of 14 or lower in the Oxford Knee Score Pain Subscale (OKS-PS) at 6 months after knee replacement. Mean UCLA Activity Scale and EQ5D values for participants with CP and non-CP were compared at six and 12 months after TKR. We tracked the trajectory of participants in and out the CP groups at each time point.

Results:

Of the 83 participants, 71 (85.5%) were categorised as with CP based on their OKS-PS score six months after TKR. For those with CP, UCLA score remained unchanged from before surgery to six months after, then decreasing at 12 months. Those without CP had a noticeable improvement in physical activity after surgery, then plateaued. Participants with CP reported lower baseline HRQL, although both groups improved their mean health utility over one year. Some participants fluctuated in and out of CP status groups between 6 and 12 months. Of the participants with CP at baseline 57.6% recovered at 6 months, however 10.5% of them fluctuated back into the CP group after 12 months.

Conclusion:

Chronic pain appears linked to physical activity and health utility and for some patients these outcomes can change in the first 12 months after knee surgery. Understanding how chronic pain evolves after TKA will help promote rehabilitation programmes that benefit those most in need.

