

Do mobility strategies improve patient outcomes after hip fracture?

Clinical Question

What are the benefits and harms of interventions aimed at improving mobility and physical functioning after hip fracture surgery?

Bottom Line

There is high-certainty evidence that mobility strategies lead to a small, clinically-meaningful increase in mobility compared with control in the post-hospital setting. Mobility strategies make small, clinically meaningful improvements in walking speed compared to control (high-certainty evidence), lead to a small, non-clinically meaningful improvement in functioning (high-certainty evidence) and probably lead to a slight increase in health-related quality of life that may not be meaningful (moderate-certainty evidence).

Mobility strategies probably make little or no difference to short-term mortality compared with control (moderate-certainty evidence). Mobility strategies may make little or no difference to the adverse outcomes of long-term mortality or re-admission (low-certainty evidence). It is unclear whether mobilisation strategies affect re-operation, pain or the number of people who fall, due to low- and very low-certainty of evidence. There is moderate-certainty evidence, however, that number of falls were probably reduced by 21% compared with control.

Mobility strategies included exercises, physical training and muscle stimulation, used at various stages in rehabilitation.

Caveat

The majority of trials excluded older people who were cognitively impaired (70%) or had a history of immobility, medical conditions affecting mobility or both (72%). The results of this review may therefore not be applicable to these high-risk groups. Of the 22 post-hospital trials included in this review, nine reported follow-up at one to three months, six reported follow-up at four to six months, one at nine months and six reported 12-month follow-up.

Context

Most hip fractures occur in older people. Females predominate over males and the injury is usually the result of a simple fall. People experiencing a hip fracture frequently have other medical and physical problems associated with ageing, including impaired mobility and frailty. Mobilisation is a major component of postoperative care and rehabilitation. Various mobilisation strategies are in use. These include mobilisation interventions, such as exercise and electrical stimulation of muscles. Exercise programmes may include one or more types of exercise.

Cochrane Systematic Review

Fairhall NJ, Dyer SM, Mak JCS, Diong J, Kwok WS, Sherrington C. Interventions for improving mobility after hip fracture surgery in adults. Cochrane Database of Systematic Reviews 2022, Issue 9. Art. No.: CD001704. DOI: 10.1002/14651858.CD001704.pub5. This review contains 40 trials with a total of 4059 participants.

Pearls No. 709, September 2022, written by Assoc Professor Vanessa MB Jordan.

Systematic review link:

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD001704.pub5/full