Reactive balance training to improve balance control and reduce falls in older adults: a randomized controlled trial.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON25249

Source
Nationaal Trial Register

Brief title
TBA

Health condition

No specific diseases; older adults with a recent fall incident

Sponsors and support

Primary sponsor: n/a
Source(s) of monetary or material Support: n/a

Intervention

Outcome measures

Primary outcome

The primary outcome is balance control measured with the mini BESTest.

Secondary outcome

Secondary outcomes are daily-life falls incidence (prospective, 6 months), fear of falling (FES-I) and long-term injurious falls incidence (24 months).
Edit: Also the acceptability of the reactive balance training program will be evaluated through semi-structured interviews in a sample of subjects from the intervention group.

Study description

Background summary

Falls are a common cause of injury and hospitalization among older adults. One in three older adults aged 65 and older experience a fall each year, and a large percentage (40-73%) of older adults are afraid of falling during their daily activities. Having previously fallen significantly increases the risk of experiencing another fall in the future. Balance training can effectively reduce fall incidence in older adults. Until recently, most balance training interventions have focused on proactive balance, which is an improtant part of maintaining balance in voluntary or expected movements. However, many falls occur due to unexpected balance perturbations, forcing the individual to rely on reactive balance control. Therefore, there has been increasing interest in reactive balance training as an intervention to decrease falls in older adults. This is a form of training that specifically aims to improve reactive balance control after destabilizaing perturbations in a safe and controlled environment. Evidence for the effectiveness of this type of training as a way to reduce falls in older adults has been emerging. however, the optimal type, duration and frequency of training in a clinical setting remains unclear. This study will investigate a training protocol based on an earlier review in a clinical setting.

Objective: To investigate the effectiveness of a reactive balance training intervention to imrpove balance control and decrease prospective falls in community-dwelling older adults with a recnt history of falls, in comparison to usual care.

Study objective

Reactive balance training is more effective to improve balance control in community-dwelling older adults with a recent history of falls than usual care (physical therapy).

Study design

The measurements are performed at baseline, 1 week and 3 months post-intervention. Falls incidence will be monitored from inclusion until 6 months post-intervention. Injurious falls will be checked at 24 months post-intervention through the electronic patient file.

Intervention

Three weeks of reactive balance training (3x30 minutes) on the Computer Assisted Rehabilitation Environment (CAREN, Motek). The training consists of gait adaptability, and

reactive balance training during standing and walking with perturbations in the anteroposterior and mediolateral directions. The control intervention is usual care, which currently consists of a referral for physical therapy. Usual care will be monitored but not influenced in this study.

Contacts

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Eligibility criteria

Inclusion criteria

Community-dwelling older adults (age 65 or older) who recently experienced a fall (past 3 months) and are able to walk 15+ minutes without aid.

Exclusion criteria

Falls caused by third parties or during sports activities, recent fracture or severe contusion to the lower extremities or back, use of medication known to increase fall risk (antidepressants, benzodiazepines, sedatives, hypnotics, antipsychotics), diagnosed with osteoporosis, any disease or disorder that may influence the safety of training, inability to follow intructies or provide written informed consent in Dutch.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	15-03-2019
Enrollment:	80
Type:	Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date:	17-04-2019
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL7680
Other	METC azM/UM : METC18-049

Study results