Balanseat

Gepubliceerd: 10-03-2021 Laatst bijgewerkt: 18-08-2022

We hypothesize that a six-week exercise program with the Balanseat according to the protocol contributes to therapy adherence and improves balance and gait in an elderly population.

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON25419

Bron
NTR

Verkorte titel
TBA

Aandoening

Elderly with walking and balance problems.

Ondersteuning

Primaire sponsor: Research group; Healthy Ageing, Allied Health Care and Nursing, Hanze University of Applied Sciences Groningen
Overige ondersteuning: Regular source Hanze University of Applied Sciences

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

- Therapy adherence; Adherence to the intervention will be assessed based on adherence to the balanseat program during the study. Adherence to the balanseat program will be calculated based on completion of exercise bouts.

- Gait and balance parameters to be measured before, during (after 6 sessions) and after the intervention (post 12 sessions) include; timed up and go (TUG), 10 meter walk test (10MWT), short physical performance battery (SPPB), functional reach test (FRT) and Falls efficacy scale (FES).

Toelichting onderzoek

Achtergrond van het onderzoek

The fall incidence in the elderly increases with increasing age and can lead to harmful consequences and even premature death. Reduced motor control while walking, such as reduced trunk and pelvic rotation is a common gait impairment among the elderly and is considered a risk-factor for falls. Exercise regimens that target pelvis and trunk rotation are effective in reducing falls among seniors. However, adherence to exercise therapy is often insufficient, because elderly people often find the exercises too difficult, they feel insecure or the usefulness of doing exercises is not recognized. Moreover, elderly people with mobility problems may find it difficult to visit a therapist and also depend on when the therapist is available. Exercise in a relaxed, seated position such as with Balanseat may enhance adherence, especially among individuals with balance disorders. In settings with limited resources, the use of such technology may also provide a cost-effective approach for training. The Balanseat (Mopair Technologies, Ltd., Givat Nili, Israel) is a thoraco-pelvic assisted exercise device (CE certified) in which the participant is seated comfortably and safely. The advantage of the Balanseat is that previous experiences indicated that participants found exercising with the Balanseat pleasant, secure and of no burden. The Balanseat scientific background on improving balance and gait is based on two concepts; The mechanical concept reflects exertion of a passive movement in a specific plane that may increase the ability of relevant joints to pass through a predetermined range of motion. Additionally, the motor control concept assumes that the device increases the sensory feedback from the mechano-sensory afferents to improve the dynamic control of the movement. The earlier study on the Balanseat did not study therapy adherence and used a pre-post-test design without a control group in a small sample size. Hence, we propose this controlled intervention study to evaluate the true effects of the Balanseat on therapy adherence, gait and balance compared to usual daily activity in an elderly population in the Netherlands.

Doel van het onderzoek

We hypothesize that a six-week exercise program with the Balanseat according to the protocol contributes to therapy adherence and improves balance and gait in an elderly population.

Onderzoeksopzet

Baseline, 3 weeks, 6 weeks

Onderzoeksproduct en/of interventie

One group receives 20 minutes of exercise with the Balanseat, twice a week, over 6 weeks (total of 12 sessions), the control group their usual care.

Contactpersonen

Publiek

Hanze University of Applied Sciences
Hans Drenth

(+31)50 - 595 3539

Wetenschappelijk

Hanze University of Applied Sciences
Hans Drenth

(+31)50 - 595 3539

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

• Age 65+ years • Ability to walk at least 10 meters on a flat surface, with or without an assistive device • Decreased walking speed; gait speed < 0.8 m/sec, during walk test • An informed consent was signed by the participant

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

• Individuals with a major disease or unstable health that prevents their participation • Individuals with amputees or who had surgery in the past three months • Individuals following physical therapy related to back, walking and/or balance problems • Individuals with MCI or dementia

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Geneesmiddel

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	10-03-2021
Aantal proefpersonen:	88
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Toelichting
N/A

Ethische beoordeling

Positief advies

Datum:	10-03-2021
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL9330
Ander register	METC UMC Groningen : METc 2020/184

Resultaten

Samenvatting resultaten
N/A