

Effect NMES on physical performance in frail elderly during hospitalization.

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NMES will reduce the deterioration of the m. quadriceps during admission in the hospital compared to functional physiotherapy.

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

Samenvatting

ID

NL-OMON23142

Bron

Nationaal Trial Register

Verkorte titel

-

Aandoening

Neuromuscular electrical stimulation
Physical performance
Frail elderly
Hospital admission
Sarcopenia

Neuromusculaire electrostimulatie
Fysiek functioneren
Kwetsbare ouderen
Ziekenhuisopname
Sarcopenie

Ondersteuning

Primaire sponsor: No sponsors

Overige ondersteuning: No financial or materiale support. Self-financed by the department of geriatrics.

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Short physical performance battery

HABAM

Knee extension

Muscle mass of the upper leg (m. quadriceps) determined by the use of the Maltron Bioscan 920-II

Toelichting onderzoek

Achtergrond van het onderzoek

In recent studies physical training against resistance appeared to be the most successful to prevent sarcopenia. Because of the bad physical condition of the elderly during a hospital admission resistance training can't be applied. A Pilot study of the students physiotherapy earlier this year showed that in the first days/week of a admission the physical load capacity is too low. That's why resistance training is not an option. Therefore we are looking for an other way to prevent functional loss during admission when training against resistance isn't possible. Other recent studies have shown that the application of neuromuscular electrostimulation (NMES) is a possibility to prevent functional loss. The aim of this research is therefore to examine the effect of NMES on prevention of progressive and generalised loss of muscle mass and strength and with that the prevention of functional loss.

Doel van het onderzoek

NMES will reduce the deterioration of the m. quadriceps during admission in the hospital compared to functional physiotherapy.

Onderzoeksopzet

-

Onderzoeksproduct en/of interventie

Neuromuscular electrostimulation of the m. quadriceps

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Frail elderly (defined by the GFI score, $GFI > 3$), 70 years and above, with a SPPB < 6 on day < 4 day after admission to the geriatric ward, duration of admission at least 7 days.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Bound to a wheelchair before admission
- Terminal illness
- Pain in the lower body which makes mobilisation impossible
- No recovery of the underlying illness on day 4 of admission in comparison with the first day after admission
- Presence of a pacemaker or ICD

- Impossibility to give the patient instructions concerning the NMES and his measurements
- Presence of an amputated leg or hemiparese

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	N.v.t. / één studie arm
Blinding:	Enkelblind
Controle:	Actieve controle groep

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-09-2014
Aantal proefpersonen:	30
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies	
Datum:	03-10-2014
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

NTR-new

NTR-old

Ander register

ID

NL4679

NTR4831

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Resultaten