

Press release

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Basic information

Name: Brigitta R Villumsen Email: brigvill@rm.dk Phone: 78439425

Department of: Clinical Medicine

Main supervisor: Professor, consultant, PhD Michael Borre

Title of dissertation: Effectiveness of Unsupervised Home-based Exergaming in Prostate Cancer Patients Receiving Androgen Deprivation Therapy: A Randomized Controlled Trial

Date for defence: 7 February 2019 at (time of day): 2 pm Place: Foredragssal I, Regional Hospital Holstebro

Press release (Danish)

Betydningen af fysisk træning for prostatakræftpatienter i kastrationsbehandling

Hjemmetræning i 12 uger med spillekonsollen Xbox 360 forbedrer fysisk funktion og kolesteroltallet HDL hos prostatakræftpatienter i kastrationsbehandling, viser et nyt ph.d.-projekt fra Aarhus Universitet, Health. Projektet er gennemført af Brigitta R Villumsen, der forsvare det d. 7. februar 2019.

Tidligere studier udført i træningscentre med instruktører viser, at kredsløbs- og styrketræning har en positiv effekt på velkendte bivirkninger ved medicinsk kastrationsbehandling såsom tab af muskelmasse, nedsat livskvalitet og træthed samt forekomst af livsstilssygdomme. For at tilgodese prostatakræftpatienter, der foretrækker fleksible træningstider og uafhængighed, har dette ph.d.-projekt undersøgt, om hjemmetræning ved hjælp af spillekonsollen Xbox 360 kunne have samme gavnlige effekt.

Resultaterne viser hjemmetræningens positive effekt på både fysisk funktionsniveau og kolesteroltallet HDL. Træningsprogrammet i studiet var på et aktivitetsniveau svarende til 24-32 km rask gang eller jogging pr. uge. Patienter med knoglemetastaser deltog i studiet, og der blev ikke rapporteret alvorlige træningsskader. Træningsprogrammet anses således for at være uden risiko for denne gruppe patienter og er dermed klar til at blive afprøvet i større patientgrupper.

Ph.d.-projektet blev gennemført som et lodtrækningsstudie, hvor 23 patienter med prostatakræft blev instrueret i at træne hjemme i 12 uger med spillekonsollen Xbox 360, mens kontrolgruppens 23 patienter ikke ændrede deres aktivitetsniveau.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 7. februar kl.14 i Foredragssal I, Regionshospitalet Holstebro. Titlen på projektet er Effectiveness of Unsupervised Home-based Exergaming in Prostate Cancer Patients Receiving Androgen Deprivation Therapy: A Randomized Controlled Trial. Yderligere oplysninger: Ph.d.-studerende Brigitta R Villumsen, e-mail: brigvill@rm.dk, tlf. 78439425.

Bedømmelsesudvalg:

Professor og overlæge, ph.d., Palle J.S. Osther, Syddansk Universitet.

Professor, ph.d., John M Saxton, Northumbria University, England.

Lærestolsprofessor og overlæge, ph.d., Signe Borgquist, Kræftafdelingen, Aarhus Universitetshospital. (Formand).

Press release (English)

The impact of exercise in men with prostate cancer receiving androgen deprivation therapy

A 12-week homebased exercise program using the Xbox 360 gaming console improves physical function and increases HDL cholesterol in prostate cancer patients receiving androgen deprivation therapy. That is the conclusion in a new PhD study from Aarhus University. The project was carried out by Brigitta R Villumsen, who is defending her dissertation on the 7th of February 2019.

Previous supervised exercise interventions in fitness centers have shown positive effect of aerobic-and resistance exercise on therapy-related loss of muscle mass, decreased quality of life, fatigue, and lifestyle diseases. To meet patients' demands of flexibility and independence, this PhD project was designed to investigate whether homebased exercise using the Xbox 360 gaming console could have a similar positive effect.

The study showed that 12 weeks of homebased exercise using the gaming console had positive effect on physical function and HDL cholesterol levels. The exercise corresponded to 24-32 km of brisk walking or jogging per week. Some of the study subjects had bone metastases, but none reported severe exercise-related injuries. The exercise program is considered safe in this group of patients and is thus ready to be investigated in larger patient groups.

The study was randomised with 46 prostate cancer patients receiving androgen deprivation therapy allocated to either intervention or usual care group on a 1:1 basis.

The defence is public and takes place on the 7th of February 2019 in Foredragssal I at Regional Hospital Holstebro. The title of the project is Effectiveness of Unsupervised Home-based Exergaming in Prostate Cancer Patients Receiving Androgen Deprivation Therapy: A Randomized Controlled Trial. For more information, please contact PhD student Brigitta R Villumsen, email: brigvill@rm.dk, Phone +45 78439425.

Assessment committee:

Professor and consultant, PhD, Palle J.S. Osther, University of Southern Denmark.

Professor, PhD, John M Saxton, Northumbria University, England.

Professor and consultant, PhD, Signe Borgquist, Oncological department, Aarhus University Hospital (chairman).

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