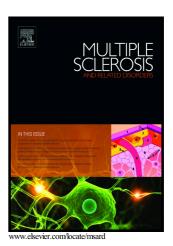
Author's Accepted Manuscript

Elevated cardiovascular risk factors in Multiple Sclerosis

Charly Keytsman, Bert O. Eijnde, Dominique Hansen, Kenneth Verboven, Inez Wens



PII: S2211-0348(17)30194-3

DOI: http://dx.doi.org/10.1016/j.msard.2017.08.011

Reference: MSARD630

To appear in: Multiple Sclerosis and Related Disorders

Received date: 21 March 2017 Revised date: 21 July 2017 Accepted date: 16 August 2017

Cite this article as: Charly Keytsman, Bert O. Eijnde, Dominique Hansen, Kenneth Verboven and Inez Wens, Elevated cardiovascular risk factors in Multiple Sclerosis, *Multiple Sclerosis and Related Disorders*, http://dx.doi.org/10.1016/j.msard.2017.08.011

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Elevated cardiovascular risk factors in Multiple Sclerosis.

Charly Keytsman*, Bert O Eijnde, Dominique Hansen, Kenneth Verboven, Inez Wens

REVAL Rehabilitation Research Center, BIOMED Biomedical Research Institute, Faculty of Medicine and Life Sciences, Hasselt University, Agoralaan Building A, Diepenbeek, Belgium

*Corresponding author: REVAL Rehabilitation Center – Biomedical Research Institute (BIOMED) – Hasselt University, Agoralaan Building A, B-3590 Diepenbeek, Belgium. Tel: +32477/61 11 22. charly.keytsman@uhasselt.be

ABSTRACT

Background

Multiple sclerosis (MS) is associated with elevated cardiovascular mortality. To prevent this a better understanding of their CVD risk factors and interrelations is necessary.

Methods

MS patients (n=52) and healthy controls (HC, n=24) were matched for age, height, weight, body mass index and physical activity. Body composition, resting blood pressure (BP), resting heart rate (HR), glucose tolerance, HbA1c, blood lipids (HDL, LDL, total cholesterol, triglyceride concentrations) and c-reactive protein concentrations were analyzed. Regression analyses identified independent CVD risk factors and their interrelations in MS.

Results

In MS and compared to HC, fat mass $(25.1\pm1.2\text{kg vs. }17.9\pm1\text{kg})$, fat percentage $(33.8\pm1.2\% \text{ vs. }28.4\pm1.5\%)$, systolic $(130\pm1.8\text{mmHg vs. }120\pm2.9\text{mmHg})$ and diastolic $(79\pm1.1\text{mmHg vs. }71\pm1.9\text{mmHg})$ BP, resting HR $(72\pm1.4\text{bpm vs. }60\pm2\text{bpm})$, blood triglycerides $(113.8\pm8.6\text{mg/dl vs. }98.2\pm17.4\text{mg/dl})$, fasting $(13.5\pm2.9\text{mU/l vs. }7.2\pm0.8\text{mU/l})$ and 2h insulin $(71.9\pm12.5\text{mU/l vs. }35.8\pm8.1\text{mU/l})$, 2h glucose $(6.3\pm0.5\text{mmol/l vs. }4.8\pm0.5\text{mmol/l})$ and HOMA index $(3.7\pm1.1 \text{ vs. }1.7\pm0.2)$ were significantly (p<0.05) elevated. Total cholesterol, blood HDL and

Download English Version:

https://daneshyari.com/en/article/5590858

Download Persian Version:

https://daneshyari.com/article/5590858

<u>Daneshyari.com</u>