

## EFFICACY OF A BRISK WALKING PROGRAM IN PATIENTS WITH HUNTINGTON'S DISEASE, *LOOKING BACK TO MOVE FORWARD*

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### Introduction

Progressive motor dysfunction is a major characteristic of Huntington's disease (HD) causing considerable disability in many patients. In a recent study the reliability and minimal detectable change of instruments that measure motor functioning in HD patients were examined.<sup>1</sup> Remarkably, late stage patients scored better on most outcome measures compared to early staged patients. A post-hoc analysis revealed that 7 out of 24 late stage patients participated in a brisk walking program compared to none in the early stage group (n=20) and one in the middle stage group (n=20).

1. Quinn et al. Phys Ther. 2013 Jul;93(7):942-56.

### Aim of the study

To examine in a retrospective study whether a brisk walking program improves motor functioning and functional capacity in HD patients.

### Conclusion

A weekly brisk walking program does not seem to influence the course of motor functioning in HD patients, but may slow down total functional deterioration.

### Limitations and Considerations

The main limitation of this study is the retrospective design. Consequently data collection was not standardised. Although this study revealed no efficacy of a brisk walking program on motor functioning in HD patients, we still consider this

type of program of use in improving selfconfidence and mental state. This is particularly based on the feedback of patients who joined this program.

### Methods

23 patients participated in a brisk walking program for at least 3 months. Patients were randomly tested by trained physical therapists in the course of one year before and two years after the program started using instruments that measure motor function and functional capacity. Linear mixed model

analysis was used to compare the changes in outcome before and after the program was initiated.

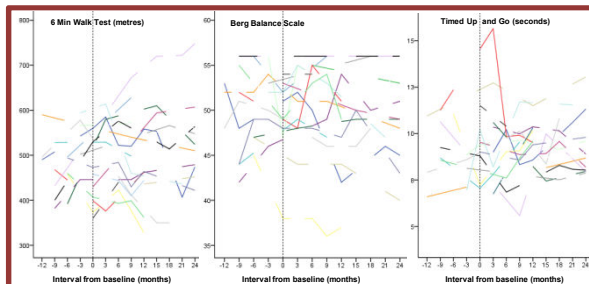
### Content of the Brisk Walking Program

The brisk walking program was introduced in 2010. Every week for 40-60 minutes a group of HD patients walk a challenging trail on a sandy underground in the dunes of Katwijk. The program includes walking, running, jumping, turning and other exercises.



### UHDRS Total Functional Capacity score

Months from start	TFC mean (SE)	F value (p value)
-12	10.2 (0.8)	(4, 5.5) = 37.6 (0.00)
0	6.7 (0.2)	
12	5.0 (1.6)	(8, 8.7) = 1.7 (0.22)
24	4.2 (0.8)	



### Results

We found no difference in change for any of the outcome measures except for UHDRS total functional capacity (TFC). Before the start of the program mean (SE) TFC scores significantly decreased from 10.2 (0.8) one year before the start of the program to 6.7 (0.2) at baseline (p=0.000). After the program was initiated the course of TFC scores leveled off with 5.0 (1.6) after 12 months and 4.2 (0.8) after 24 months (p=0.221).