

DDSIG New and Noteworthy

APTA Neurology Section

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New

A randomized, controlled trial of a multi-modal exercise intervention in Huntington's disease. Quinn et al. *Parkinsonism and Related Disorders*, 2016 Oct 31:46-52. [Article Link](#)

INTRODUCTION:

This study aimed to evaluate the feasibility and benefit of a structured exercise intervention in people with Huntington's Disease (HD).

METHODS:

This study was conducted at 6 sites, and participants were randomized into either exercise or control (usual care) groups, and were assessed at baseline, 13 and 26 weeks. The intervention was a 12 week, three times per week progressive exercise program, including aerobic (stationary cycling) and upper and lower body strengthening exercise with tapered 1:1 support for 20 of 36 sessions.

RESULTS:

314 adults were assessed for eligibility: 248 did not meet inclusion criteria, 34 declined, and 32 were recruited and randomized. Three individuals in the intervention group were

withdrawn within the first month due to concomitant medical conditions, resulting in 14 participants in intervention and 15 in control groups. There were two AEs in the intervention group, both related to previous medical conditions, and there were two SAEs, both in the control group. The intervention group had better fitness (predicted VO2 max difference: 492.3 ml min⁻¹, 95% CI: [97.1, 887.6]), lower UHDRS mMS (difference 2.9 points, 95% [-5.42, -0.32]) and lower weight at Week 13 (difference 2.25 kg, 95% CI: [-4.47, -0.03]).

CONCLUSION:

- This study demonstrates that a short-term exercise intervention is safe and feasible.
- Individuals with HD may benefit from structured exercise, and intensity, monitoring and support may be key factors in optimizing response.
- Larger scale trials are now required to fully elucidate the extended clinical potential of exercise in HD.

CONCLUSIONS and CLINICAL IMPLICATIONS: Pyramidal system dysfunction decreases stability and increases fall risk. PwMS with pure sensory impairment have a better prognosis. If pyramidal and sensory dysfunction is present, solely training the sensory

Noteworthy

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European Huntington's Disease Network Plenary Meeting in The Hague, The Netherlands.

- A phase 2 trial of supervised exercise in patients with early-mid stage HD resulted in significant improvements on the UHDRS (disease rating scale). *Monica Busse (Cardiff)*
- ENROLL-HD, a global registry of HD patients and families has recruited 11,721 participants at 133 sites in 14 countries.
- In a small trial (n=10), training with mental imagery of motor behaviors (i.e. swimming) with live in-MRI-biofeedback of supplementary motor area activity increase the activity of the SMA over time. *Marina Papoutsi (London)*

Volunteer with the DDSIG!

<https://docs.google.com/forms/d/e/1FAIpQLScijsKHje902JR-DWqNK3eOtsl7JPdWQQBl1CD2hYR1-hw/viewform>

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