Although used as a palliative measure, the benefits are such that we think this should be considered an option for rescue treatment in HD.

**J15** AKATHISIA AS A SIDE EFFECT OF TETRABENAZINE TREATMENT IN HD PATIENTS

Karolina Ziora-Jakutowicz, Iwona Stepiak, Grzegorz Witkowski, Anna Sulek, Ewelina Elet-Dobkowska, Wlodzeta Krysa. Institute of Psychiatry and Neurology, Warsaw, Poland

10.1136/jnnp-2022-ehdn.265

Background Only symptomatic treatment is currently available for Huntington’s disease (HD). One of the drugs used to treat chorea is Tetrabenazine, the effectiveness of which has been confirmed in the clinical trials. The effectiveness of the therapy is however limited by the occurrence of various side effects.

Aims Demonstration of akathisia as an adverse effect requiring immediate discontinuation of Tetrabenazine therapy due to significant clinical deterioration in HD patients at stable doses of the remaining drugs.

Methods Assessment of the proportion of patients with complications of akathisia among all Tetrabenazine-treated, ENROLL-HD participants in the Institute of Psychiatry and Neurology, Warsaw. For each patient history was taken, UHDRS Motor, TFC, Function, HADS-SIS, medical observation of the patient’s behavior were performed.

Results 8 out of 159 (5%) patients treated with Tetrabenazine developed akathisia. The scales used did not reflect the severity of akathisia in these patients. During the researcher’s observation during the visit, these patients were very restless, they were walking around, they were unable to focus attention.

Conclusions Some patients develop paradoxical reactions during Tetrabenazine therapy, with an increase of motor agitation, and thus a general deterioration of the patient’s functioning. Clinically severe akathisia is found. The scales used to assess HD patients do not reflect well the degree of akathisia occurring as a complication of Tetrabenazine treatment. For patients on this therapy, we suggest using the Barnes Akathisia Scale (BARS) for a more adequate assessment of their clinical condition. The results require confirmation in a larger cohort.

**J16** EXPLORING THE ACCEPTABILITY AND KEY COMPONENTS FOR SUCCESS OF A 12 MONTH PHYSICAL ACTIVITY INTERVENTION IN EARLY TO MIDDLE-STAGE HUNTINGTON’S DISEASE

Cheney Drew, Katy Hamana, Rhys Williams-Thomas, Rebecca Playle, Monica Busse, Lori Quinn. Centre for Trials Research, Cardiff University, UK; School of Healthcare Sciences, Cardiff University, UK; Teacher’s College, Columbia University, USA

10.1136/jnnp-2022-ehdn.266

Background The PACE-HD trial investigated the feasibility of conducting a randomised controlled trial of a 12-month physical activity intervention delivered by physiotherapists.

Aim To conduct a process evaluation of the PACE-HD intervention to specifically assess intervention components affecting acceptability and fidelity of intervention delivery.

Method Intervention delivery and acceptability was assessed via an end of study questionnaire completed by participants randomised to receive the intervention as part of an evaluation framework. Questionnaires required respondents to rate items relating to various intervention components on a scale from 1 [strongly disagree] to 5 [strongly agree] and additional open text questions. Scores of 4 and above were rated as positive.

Results Twenty participants completed the questionnaire. Responses regarding the support of therapists were largely positive (99%) with full enjoyment of and satisfaction with coach-led sessions (100%), plus high enjoyment of self-supported sessions (85%). Only some (65%) participants reported that the provided workbook aided goal setting and its use was not frequent. Most (80%) participants used the Fitbit to monitor their physical activity despite only 5.5% agreeing that it was easy to use and 65% that its use was motivational. Participants indicated increased confidence for physical activity after 12 months; 90% of whom stated that they felt confident continuing with physical activity after the trial.

Outcome The PACE-HD intervention was acceptable to HD participants and they felt supported by the intervention therapists. Knowledge gathered in this process evaluation can inform successful implementation, potential causal mechanisms and contextual factors that may affect intervention outcomes.

**J17** HD-DRUM – A NOVEL COMPUTERISED DRUMMING TRAINING FOR MOVEMENT AND COGNITIVE ABILITIES IN PEOPLE WITH HUNTINGTON’S DISEASE – APP DEVELOPMENT AND PROTOCOL OF A RANDOMISED CONTROLLED FEASIBILITY STUDY

Claudia Metzler-Baddeley, Monica E Busse, Cheney IG Drew, Philip Pallmann, Derek K Jones, Anne E Rosser. Cardiff University Brain Research Imaging Centre (CUBRIC), School of Psychology, Cardiff University, Maindy Road, Cathays, Cardiff, UK; Centre for Trials Research (CTR), Cardiff University, Heath Park, Cardiff, UK; School of Biosciences, Cardiff University, Museum Avenue, Cardiff, UK; Department of Neurology and Psychological Medicine, Hadyn Ellis Building, Cardiff, UK

10.1136/jnnp-2022-ehdn.267

Background Huntington’s Disease (HD) causes cell loss in the basal ganglia (BG) that are important for cognitive and motor functions. Learning novel drumming sequences requires BG abilities of attention, multi-tasking, and the planning and execution of motor sequences, all of which are affected in HD. Previously, we observed that rhythmic Bongo drumming improved attention and motor abilities and strengthened callosal white matter pathways in people with HD.

Aims To assess the feasibility of HD-DRUM, a novel computerised drumming training app that optimises the training difficulty for each user with an automatic stair-case procedure. To obtain estimates of effects of HD-DRUM on cognitive and motor abilities and on white and grey matter microstructure in motor and executive networks of the brain.

Methods We will assess the feasibility (recruitment, retention, acceptability, adherence) of three months of HD-DRUM (15 min per day, 5 days a week) in 50 people with HD at pre-manifest to mild-moderate manifest stages recruited from five clinics in the UK. They will be randomly allocated to the training or a standard-care control group. Further, 25 healthy control participants will be recruited who will also use HD-DRUM. All participants will undergo cognitive and motor assessment (ENROLL protocol) and magnetic resonance imaging (MRI) scans.