UNIVERSITÄTSKLINIKUM
Schleswig-Holstein

UKSH, Institute of Systems Motor Science, Ratzeburger Allee 160, 23562 Lübeck

Campus Lübeck

Institute of Systems Motor Science
Director: Prof. Dr. med. Alexander Münchau

Contact:
Anne Weißbach: anne.weissbach@uksh.de
Christina Bolte: christina.bolte@uksh.de
www.uksh.de
www.ISMS.uni-luebeck.de

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Metacognitive therapy and neuro-physiotherapy for the treatment of functional Movement disorders - a randomized, observer-blinded feasibility study (ReMAP-FMD)

Patients with functional movement disorders exhibit abnormal movements that are incongruent with symptoms of well-defined neurological disorders. Although functional movement disorders are very common, to date there are no uniformly valid treatment recommendations, which is why many patients do not receive satisfactory treatment for their symptoms. This is particularly unfortunate as effective treatment can sometimes lead to a complete reduction in symptoms. The reason for this is that functional movement disorders are not based on structural lesions in the nervous system. Rather, there is probably an abnormal interaction between individual areas of the brain, resulting in impaired motor function.

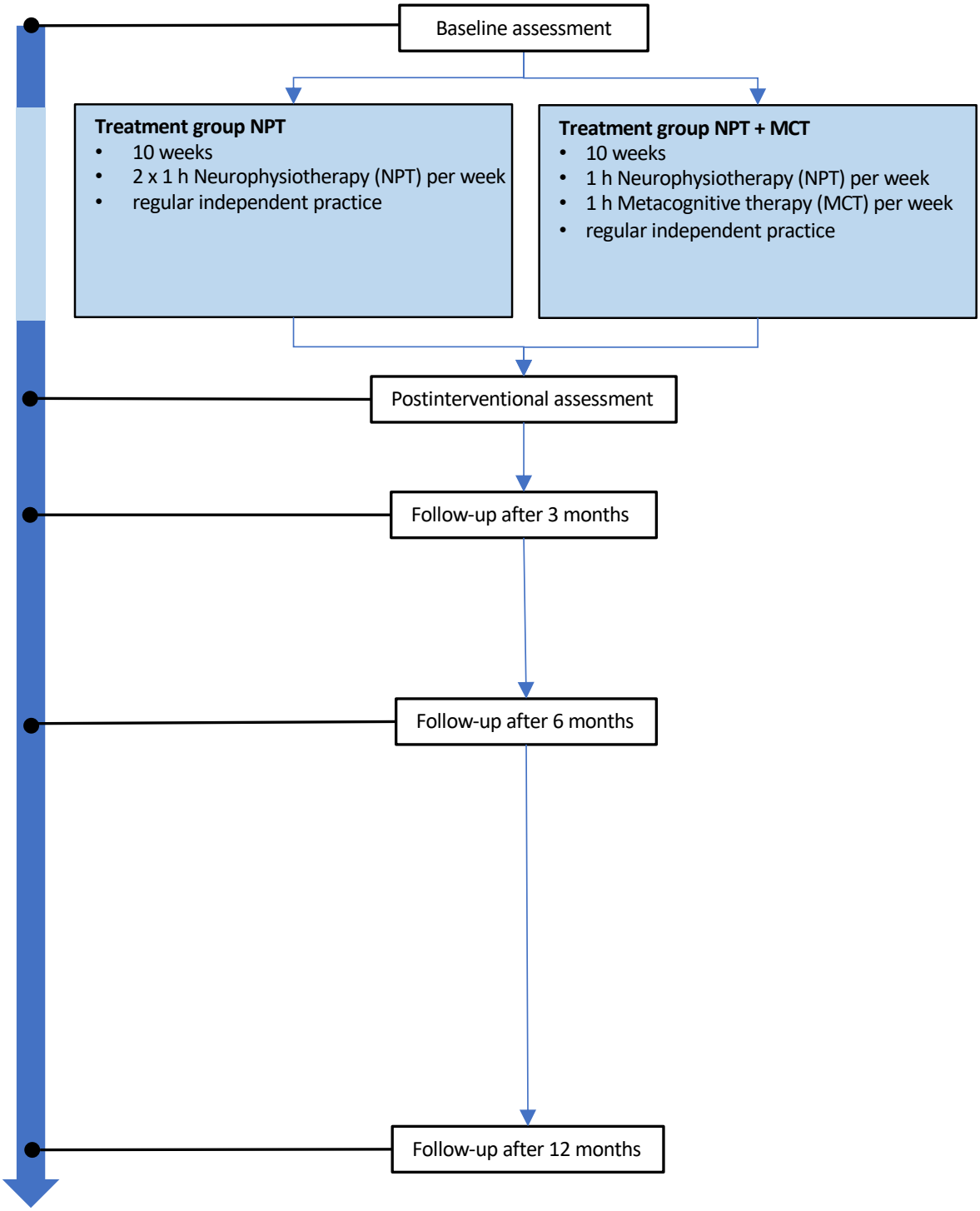
In our neurological clinic and the Institute of Systems Motor Science, we treat many patients with functional movement disorders and have found that a large proportion of patients show an increased attentional focus on their abnormal movements and, associated with this, a disturbed perception of self-generated movements. Recent scientific studies on this disease confirm this view.

From a conceptual point of view, this requires therapeutic approaches in which the reorientation of attention is trained. In this regard, Neurophysiotherapy (NPT) is based on refocusing patients' attention on physiological movements that are unaffected by the disease. This results in a decrease of symptoms in the affected body region and shows patients that normal movements are possible and promotes patients' confidence in their own ability to move.

Another therapeutic approach is a specialized psychotherapy called Metacognitive therapy (MCT). This focuses on patients' beliefs about their own mind and cognition (metacognition). It explains how dysfunctional thought patterns and self-perceptions can lead to and maintain functional movement disorders and specifically trains patients to consciously redirect their attention away from unpleasant or disruptive mental processes by externalizing their attention towards sounds.

In addition to NPT alone, the feasibility and efficacy of a combination of NPT and MCT will be investigated in this study.
The therapy will be performed twice a week for ten weeks and patients will be instructed in additional home training. Efficacy will be analyzed up to twelve months after the intervention through validated, specific, blinded video assessments. Questionnaires and rating scales on motor and non-motor symptoms as well as neurophysiological (e.g., transcranial magnetic stimulation (TMS), a motor metacognition task and sensor-based gait and balance analysis) and imaging assessments (magnetic resonance imaging (MRI)) will be performed to comprehensively understand the condition.

The study will be conducted at the University Clinic of Schleswig-Holstein (UKSH) in Lübeck and Kiel, Germany. Inclusion criterion is a clinically confirmed diagnosis of a functional movement disorder. Exclusion criteria include other significant psychiatric and neurological diseases in need of treatment, isolated pain disorders, lack of knowledge of the German language, and being a minor (< 18 years).



If you have any questions or would like more information, please feel free to contact us at the above email address.

Best regards,
your ReMAP-FMD Team