## Naess-Schmidt, Erhard Trillingsgaard

# (1) Diffusion MRI findings in patients with extensive and minimal post-concussion symptoms after mTBI and healthy controls: a cross sectional study

In this study we aim compare diffusion MRI measures in patients with extensive and minimal post-concussion symptoms 2-5 month after their mTBI. Additionally a healthy control group are also compared. We hypothesize that patients with extensive post-concussion symptoms will differ from the two other groups in terms of microstructural changes in the middle brain as measured with "The mean of the kurtosis tensor" (MKT) along with other diffusion MRI metrics.

#### External collaborators:

Center of functional and integrative neuroscience (CFIN), Aarhus University and Center of functional disorders, Aarhus University Hospital

(2) Microstructural Changes in the Brain During Recovery After Mild Traumatic Brain Injury. In this study we aim compare diffusion MRI measures in patients with extensive post-concussion symptoms which are randomized to either 8 weeks of extended treatment or treatment as usual. Patients are enrolled 2-5 month after their mTBI. We hypothesize that microstructural changes in the middle brain as measured with "The mean of the kurtosis tensor" (MKT) will correlate with changes in post-concussion symptoms as measured with the Rivermead post-concussion questionnaire (RPQ).

#### External collaborators:

Center of functional and integrative neuroscience (CFIN), Aarhus University and Center of functional disorders, Aarhus University Hospital

# (3) Physiotherapy in the private sector for patients with severe physical disabilities - An investigation of basic characteristics, function level, activity level and quality of life in people with chronic disease in a Danish context

In this study we investigate basic characteristics, function level, activity level and quality of life in people with chronic disease. In Denmark people with chronic disease have the right to receive physiotherapy for free if they fulfill sudden criteria's. Until now it has not been possible to collect basic characteristics, function level, activity level and self-reported quality of life data systematically. Using national databases, a novel physio-research database (FysDB) and setting up a specific RCT in patients with sclerosis we aim to introduce a platform of knowledge for future quality development of examination and treatment in patients with chronic disease.

## External collaborators:

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