

Abstract

The diagnosis of neurodegenerative diseases leading to dementia is increasingly moving to the earlier stages in an effort to find the disease-modifying treatment for these diseases. Prodromal and preclinical stages of the diseases have become the primary research interests. Neuropsychology is specifically focused on early cognitive markers and development of methods that would be able to reliably assess these markers and to evaluate the risk of progression of cognitive decline in individual cases.

The theoretical part of the thesis presents the current knowledge in the field of neurodegenerative diseases, it is specifically focused on Alzheimer's disease (AD) as the most common cause of dementia. We also present the current trends in neuropsychological diagnostics of early AD and the approach to subjective and objective evaluation of cognitive functioning. Building on that, we present the rationale for the empirical part of the thesis.

The empirical part of the thesis extends the existing knowledge in the field of AD. We present and discuss seven original publications that follow three basic objectives: first, to characterize subjective cognitive complaints of individuals at risk of AD, second, to evaluate the potential of selected standard and experimental neuropsychological methods to detect early cognitive deficit, and third, to validate an experimental test of spatial orientation for evaluation of the drug effect.

Key words: subjective cognitive decline, mild cognitive impairment, Alzheimer's disease, subjective cognitive complaints, neuropsychological assessment.