Abstract

Background: Neuropsychological assessment plays a key role in cognitive impairment diagnosis. Moreover, determining the cognitive profile can help to uncover the aetiology of the impairment. Previous studies found that memory impairment is especially typical for Alzheimer's disease. In UDS 2, one of most common neuropsychological batteries, this is manifested by a low score in Logical Memory test.

Aims: To describe a profile of early cognitive deficit in Alzheimer disease using the UDS 2 battery in comparison with deficits of other aetiologies and to assess the ability of UDS 2 to distinguish Alzheimer's disease from other causes of cognitive deficit.

Methods: 190 patients with Mild Cognitive Impairment underwent an assessment of Alzheimer's disease biomarkers, UDS 2 battery and other neuropsychological tests. The probability of suffering from Alzheimer's disease was modelled with the use of binominal regression on the neuropsychological assessment results.

Results: Using UDS 2 battery, Alzheimer's disease patients can be best discriminated from patients with otherwise caused cognitive deficit with the test of episodic memory (delayed recall score in Logical Memory test). Other tests significantly improved the accuracy of the estimate of probability of suffering from Alzheimer's disease. Therefore, the assessment with the UDS 2 battery is not sufficient to accurately assess the aetiology of present Mild Cognitive Impairment.

Key words