

Increased incidence and prevalence of dementia syndrome is related to ageing of the population. The most common cause of dementia is Alzheimer disease (AD), which represents serious health, social and economical burden to the society. Current diagnostic criteria and research of AD tend to make a diagnosis of AD at the earliest stages of the disease, when the likelihood to influence the course of the disease is the highest and extension of the period with high quality of life can be expected. AD begins by impairment of medial temporal structures - amygdala and hippocampus. Atrophy in these critical brain structures is well detectable before the onset of dementia syndrome and can be manifested by first clinical symptoms. Presented PhD thesis deals with detection of these early signs of AD - spatial disorientation, emotional agnosia and behavioural disturbances of patients with mild cognitive impairment, the condition understood as prodromal stage of AD.