

Project's aim is to disclose and assess the prevalence of covered cerebral ischemia in working age population of Polish. By term „covered cerebral ischemia” we refer to cerebral abnormalities resulting from cerebrovascular changes not manifesting evident clinical stroke symptoms.

It is suspected that covert brain ischemia present at the early stage of life and later accumulation of this incidents may lead during later stage of life to development of dementia, e.g. Alzheimer disease, at present included to group of civilization diseases. Study results will allow to evaluate a model including environmental, individual and clinical risk factors of dementia. Practically it means creating procedures for physicians to undertake prophylactic actions already at the early stage of life to prevent the development of dementia.

To confirm the hypothesis of impact of covered brain ischemia on dementia development the study will include large group of people (N=1200) at the age between 40 and 60 years of life that will undergo medical examination, laboratory examination, MR examination with use of up to date techniques allowing for detection of covered ischemia and neuropsychological examination allowing to disclose subtle cognitive deficiencies (e.g. memory or concentration problems), that could be significant factors leading to development of dementia.

Psychological, environmental and clinical factors will be examined with use of standardized questionnaire methods, structured interviews, medical examination and medical documentation analysis.

Team of experienced scientists and physicians will participate in the study: internal medicine specialists, psychiatrists, radiologists, psychologists allowing for conduct of reliable examinations at the large population, hence obtaining precise and trustworthy results. Thanks to study results we will elaborate a model of covert cerebral ischemia influence on distortion of cognitive functions such as memory and concentration problems which are risk factors of dementia development being at present time huge scientific and social challenge.