Abstract:

Due to the aging of the population, there is an increasing incidence of neurodegenerative diseases. In clinical practice there is a need to for a cheap and noninvasive method for screening and early diagnosis of neurodegenerative disorders. To this end, markers of disease progression and prognosis must be determined.

EEG correlates provide information that can be used in the diagnosis and prognosis of neurodegenerative disorders. Individual diseases have their specific EEG abnormalities that are closely related to different stages of the disease. Individual illnesses - Alzheimer's disease, Parkinson's disease, Huntington's disease have their specific changes in the basic rhythms of the brain that correlate with motor and cognitive changes. This work focuses on the quantitative (qEEG) correlates of the above-mentioned diseases.

Key words: brain, neural activity, EEG, quantitative EEG analysis, biomarker, connectivity, neurodegeneration, Alzheimer's disease, Parkinson's disease, Huntington's disease.