

Disorders of saccadic refixation in people with neurodegenerative disease

<https://www.neurodegenerationresearch.eu/survey/disorders-of-saccadic-refixation-in-people-with-neurodegenerative-disease/>

Principal Investigators

Piotr Walecki

Institution

Jagiellonian University Medical College

Contact information of lead PI

Country

Poland

Title of project or programme

Disorders of saccadic refixation in people with neurodegenerative disease

Source of funding information

Ministry of Science and Higher Education

Total sum awarded (Euro)

€ 5,692

Start date of award

01/01/2015

Total duration of award in years

3

Keywords

Research Abstract

Saccadic eye movement disorders occurring in neurodegenerative diseases accompanied by motor and emotional dysfunctions, which is related to impairments of the structures of the nervous system and neural connections associated with the cognitive, emotional and motor functioning. The theoretical assumptions concerning the pathophysiology of neurodegenerative diseases presented in this study suggest an important role of impairments within the basal ganglia, in the process of formation of pathological symptoms of the disease – also motor dysfunctions. Neurobiological mechanisms of motor function are closely related to subcortical structures and their connections.

The main objective of the research presented in this paper is to assess saccadic eye movement disturbances occurring in neurodegenerative disease. Impairments of eye movement function in patients with neurodegenerative disease occur in the early, preclinical stage of the disease, however, it's impossible to detect them in a standard medical examination.

The aim of this study is to find the features and / or the values of parameters in patients with AD differ from healthy individuals using objective measurement methods that could help in the future to differentiate people with an uncertain diagnosis. An additional aim of work is to assess the usefulness of the methods used for measuring movement parameters in the diagnosis of neurodegenerative disease. Measurement and in-depth analysis of movement parameters, in particular the dynamics of saccade parameters may be useful in the diagnosis of neurodegenerative disease. Objective analysis of movement parameters is a innovative method to deepen knowledge on Alzheimer's disease and other neurodegenerative diseases.

Saccadic eye movement disorders occurring in neurodegenerative diseases accompanied by motor and emotional disfuncios, which is related to impairments of the structures of the nervous system and neural connections associated with the cognitive, emotional and motor functioning.

The theoretical assumptions concerning the pathophysiology of neurodegenerative diseases presented in this study suggest an important role of impairments within the basal ganglia, in the process of formation of pathological symptoms of the disease – also motor disfunctions.

Neurobiological mechanisms of motor function are closely related to subcortical structures and their connections.

The main objective of the research presented in this paper is to assess saccadic eye movement disturbances occurring in neurodegenerative disease. Impairments of eye movement function in patients with neurodegenerative disease occur in the early, preclinical stage of the disease, however, it's impossible to detect them in a standard medical examination.

The aim of this study is to find the features and / or the values of parameters in patients with AD differ from healthy individuals using objective measurement methods that could help in the future to differentiate people with an uncertain diagnosis. An additional aim of work is to assess the usefulness of the methods used for measuring movement parameters in the diagnosis of neurodegenerative disease. Measurement and in-depth analysis of movement parameters, in particular the dynamics of saccade parameters may be useful in the diagnosis of neurodegenerative disease. Objective analysis of movement parameters is a innovative method to deepen knowledge on Alzheimer's disease and other neurodegenerative diseases.

Further information available at:

Types:

Investments < €500k

Member States:

Poland

Diseases:

N/A

Years:

2016

Database Categories:

N/A

Database Tags:

N/A