Multimodal Assessment For Predicting Specific Pathological Substrate in Frontotemporal Lobar Degeneration

https://www.neurodegenerationresearch.eu/survey/multimodal-assessment-for-predicting-specific-pathological-substrate-in-frontotemporal-lobar-degeneration/

Principal Investigators

Tartaglia, Maria Carmela

Institution

University Health Network (Toronto)

Contact information of lead PI
Country

Canada

Title of project or programme

Multimodal Assessment For Predicting Specific Pathological Substrate in Frontotemporal Lobar Degeneration

Source of funding information

CIHR

Total sum awarded (Euro)

€ 372,375

Start date of award

01/07/2014

Total duration of award in years

5

Keywords
Research Abstract
Frontotemporal dementia (FTD) is the most common cause of dementia before the age of 60. It is characterized by progressive impairment of behavior (behavioral variant FTD or bvFTD) or language (primary progressive aphasia or PPA). Three other clinical entities strongly linked to FTD at a clinical and pathological level are corticobasal syndrome (CBS), progressive supranuclear palsy (PSP) and FTD-Motor neuron disease. Frontotemporal lobar degeneration

(FTLD), the underlying pathology responsible for the different clinical syndromes is heterogeneous with molecular abnormalities in three different proteins implicated: Tau, TDP-43 and Fused in Sarcoma (FUS). It is difficult to predict the underlying pathology in many of these syndromes but the emergence of protein-specific treatments warrants accurate diagnosis of the clinical syndrome as well as the causative protein. Although some syndromes are more often associated with one protein abnormality, in many cases, it is still impossible to predict the underlying pathology with certainty. With the development of a Positron Emission Tomography (PET) Tau ligand, it will be possible to diagnose Tau invivo. Unfortunately, PET is not readily available and the relationship between PET Tau binding and MRI as well as cerebrospinal fluid levels of neurodegenerative markers is unknown. The overall goal of this project is to use a multimodal approach that includes clinical, neuroimaging and cerebrospinal fluid data to predict the underlying pathology and thus guide treatment.

Further information available at:

Types:
Investments < €500k

Member States:
Canada

Diseases:
N/A

Years:
2016

Database Categories:
N/A

Database Tags:
N/A