Imaging tau, amyloid, and neurodegeneration in PPA

https://www.neurodegenerationresearch.eu/survey/imaging-tau-amyloid-and-neurodegeneration-in-ppa/

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Country

USA

Title of project or programme

Imaging tau, amyloid, and neurodegeneration in PPA

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NIH (NIA)

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Start date of award

01/09/2016

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5

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Primary Progressive Aphasia, tau Proteins, Amyloid, Nerve Degeneration, Alzheimer's Disease

Research Abstract

Abstract Primary progressive aphasia (PPA) is a devastating neurodegenerative syndrome that involves relentless development of aphasia with relative sparing of other cognitive functions, at least early in its course. There are multiple subtypes as well as multiple underlying pathologies.

PPA and its subtypes can be difficult to differentiate from other neurodegenerative disorders and from each other, particularly early in their course. There are currently few clinical tools to assist in the early specific diagnosis of PPA and its subtypes. We have recently made substantial preliminary progress toward the development of novel imaging techniques that could be extremely valuable in early specific diagnosis of the molecular basis of specific pathologies underlying PPA. We propose to use tau and amyloid imaging tracers to attempt to discriminate these underlying molecular pathologies, and FDG-PET, functional connectivity MRI, and morphometric structural MRI to measure and longitudinally monitor markers of neurodegeneration in the language network(s) and other brain regions. In addition to more accurate diagnosis, these measures will likely be important for prognostication and monitoring of decline and the effects of putative therapies. The overall goal of this proposal is to translate these methods from new scientific technologies into clinically useful tools that can be used by clinicians around the country and internationally to improve the diagnostic specificity and assessment capabilities for PPA and its subtypes.

Lay Summary
Project Narrative Primary progressive aphasia (PPA), a devastating neurodegenerative syndrome that involves relentless development of language impairment, is currently not treatable in part because of a lack of tools available for identifying the underlying molecular diagnosis and for monitoring patients. This project aims to employ and validate new imaging methods for use as markers in clinical research and care, one goal of which is to serve as markers to determine whether potential therapies are effective.

Further information available at:

Types:
Investments > €500k

Member States:
United States of America

Diseases:
Alzheimer's disease & other dementias

Years:
2016

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N/A

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