

“Am I the right way up?” Investigating balance problems in posterior cortical atrophy

<https://www.neurodegenerationresearch.eu/survey/am-i-the-right-way-up-investigating-balance-problems-in-posterior-cortical-atrophy/>

Principal Investigators

Professor Sebastian Crutch

Institution

Institute of Neurology, University College London

Contact information of lead PI

Country

United Kingdom

Title of project or programme

"Am I the right way up?" Investigating balance problems in posterior cortical atrophy

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Alzheimer's Society

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€ 378,065

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01/06/2015

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3

Keywords

Research Abstract

Posterior cortical atrophy (PCA) is the most common atypical phenotype of Alzheimer's disease (AD), and is a clinicoradiological syndrome characterized by progressive visual dysfunction and parietal, occipital and occipito-temporal atrophy (Crutch et al., 2012). Unsurprisingly, previous studies have focussed upon the defining feature of the syndrome, namely the visual deficits, but many people with PCA also describe a disordered sense of balance and/or impaired integration of balance and visual (and other sensory) signals (exemplified by the titular question “Am I the right way up?”). The current project aims to characterize the nature and extent of balance problems in PCA and typical AD, establish their frequency and impact, and identify the balance

deficits and brain mechanisms underlying these symptoms. Thirty PCA patients, 20 typical AD patients and 20 age-matched healthy control participants will each complete neurological, neuropsychological, neuroimaging, optometric, neuro-otological, sensory and body sway background assessments. Participants will then complete a linked series of 4 experiments exploring the impact upon standing balance (measured by 3D motion capture and force plates) of visual information (orientation and motion cues) and vestibular information (galvanic stimulation) before directly examining the interaction between these channels. The project will raise awareness of balance deficits in dementia which currently are poorly recognized, understood or treated, and which may contribute directly or indirectly to a host of complex problems including reduced mobility, challenging behaviours (e.g. delusions, hallucinations, aggression) and reduced quality of life and activities. The outcomes of the research will also have implications for neurological and neuro-otological practice.

Further information available at:

Types:

Investments < €500k

Member States:

United Kingdom

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