Untangling tau imaging

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Abstract

In vivo imaging of tau deposits is providing a better understanding of the temporal and spatial tau deposition in the brain, allowing a more comprehensive insight into the causes, diagnoses, and potentially treatment of tauopathies such as Alzheimer’s disease, progressive supranuclear palsy, cortico-basal syndrome, chronic traumatic encephalopathy, and some variants of frontotemporal lobar degeneration. The assessment of tau deposition in the brain over time will allow a deeper understanding of the relationship between tau and other variables such as cognition, genotype, and neurodegeneration, as well as assessing the role tau plays in ageing. Preliminary human studies suggest that tau imaging could also be used as a diagnostic, prognostic, and theranostic biomarker, as well as a surrogate marker for target engagement, patient recruitment, and efficacy monitoring for disease-specific therapeutic trials.

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Keywords: PET; Tau imaging; Alzheimer’s disease; Positron emission tomography; Tauopathies; Dementia

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Supplementary data

Supplementary data related to this article can be found at http://dx.doi.org/10.1016/j.dadm.2016.05.001.

Reference mentioned in this video article can be found here.

References


