Staging cerebral amyloid angiopathy: from marker to model

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Stellingen behorende bij het proefschrift getiteld:

Staging cerebral amyloid angiopathy:
from marker to model

by

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1. Sex differences are present in cerebral amyloid angiopathy onset and disease course: males have an earlier onset (sporadic cerebral amyloid angiopathy) and more hemorrhagic disease course (sporadic and hereditary Dutch cerebral amyloid angiopathy) compared to women. (this thesis)
2. Intragyral hemorrhage, a striped occipital cortex and cerebellar siderosis are MRI biomarkers for cerebral amyloid angiopathy and are present in the symptomatic stage of the disease. (this thesis)
3. Cerebrospinal fluid hyperintensities at non-contrast 7T FLAIR can be seen in the pre-symptomatic stage of cerebral amyloid angiopathy and show dynamic properties over time. (this thesis)
4. The discovery of novel biomarkers for cerebral amyloid angiopathy and their temporal ordering in a patho-physiological framework allows for a better understanding of the disease process, as well as a reference point for future discoveries and therapy trials. (this thesis)
5. Dutch-type cerebral amyloid angiopathy is a pure, hereditary form of cerebral amyloid angiopathy with a similar histopathology albeit an accelerated disease course (Zhang-Nunes et al. Brain pathology 2006). This makes it a suitable genetic model for (hemorrhagic) sporadic cerebral amyloid angiopathy in which the pre-symptomatic disease phase can be studied.
6. The variability in cerebral amyloid angiopathy disease course suggests that it is affected by partially unknown (epi)genetic or environmental factors (Charidimou et al. The Lancet Neurology 2014). Uncovering these factors could lead to new targets for possible treatments.
7. Small vessel disease should be seen as a spectrum, with cerebral amyloid angiopathy and deep perforator arteriopathy on opposing ends (based on Schreiber et al. Neuropathology and applied Neurobiology 2020), and not as two separate diseases.
8. The ideal biomarker for cerebral amyloid angiopathy is clinically meaningful, represents the disease's underlying biological progression, can reflect changes in disease activity such as a response to treatment, is reliably and reproducibly measurable and easily generalizable across different trial sites (Greenberg et al. The Lancet Neurology, 2014). As no such ideal biomarker is as of yet available, further research after CAA biomarkers is of the utmost importance.
9. Climate change is the single biggest health threat facing humanity; it is our responsibility as humans to create a planet that provides a home not just for us, but for all life on earth. (based on the WHO and a quote by David Attenborough)
10. Music can stimulate neuroplasticity, decrease cortisol levels, improve cognition and motor skills and recovery after brain injury: it is the medicine of the mind. (based on quotes by John A. Logan and Oliver Sacks)