Molecular pathology of hereditary cerebral hemorrhage with amyloidosis-Dutch type

Grand Moursel, L.

Stellingen

Behorend bij het proefschrift:

Molecular pathology of hereditary cerebral hemorrhage with amyloidosis-Dutch type (HCHWA-D)

Laure Grand Moursel

1- TGFβ deregulation correlates with CAA pathology severity in HCHWA-D. (*this thesis*)

2- The increase in ECM-related pathways in HCHWA-D indicate that fibrosis is an early phenomenon in the disease process. (*this thesis*)

3- CAA load in frontal and occipital cortex is similar but more perivascular changes and vascular calcifications occur occipitally. (*this thesis*)

4- CAA pathology is homogeneously severe in HCHWA-D cortex, therefore the study of patients at different disease stage is more informative of pathomechanisms than the study of different brain areas. (*this thesis*)

5- There is a need for developing more complex animal models incorporating vascular co-morbidities such as the constitutive cerebral expression of TGFβ in Alzheimer's Disease mice. (*inspired from Bhat 2015 Journal of Alzheimer's Disease*)

6- ''Due to their intimate association with brain cells, cerebral blood vessels have unique characteristics that set them apart from vessels in other organs.'' (*Iadecola, Neuron 2013*)

7- ''Advances in our understanding of CAA pathophysiology and how this translates into its clinical and radiological manifestations are a crucial development needed to advance the [CAA] field in future years.'' (*Banerjee et al, Journal of Neurology, Neurosurgery and Psychiatry 2017*)

8- Ischemic and hemorrhagic strokes result from disruption of cerebral hemostasis, a well-controlled and delicate balance between thrombotic and fibrinolytic pathways in cerebral blood vessels and surrounding brain tissue. (*modified from Van Nostrand, Biochimica et Biophysica Acta 2015*)

9- Making choices in science is hard for curious mind. ''To choose is to renounce.'' (*attributed to André Gide 1869-1951*)

10- Scientific discoveries require some freedom in investigation. "Some beautiful paths can't be discovered without getting lost." (*Erol Ozan 2016*)