NO RELATIONSHIP BETWEEN AMYLOID ANGIOPATHY AND CEREBRAL MICROBLEEDS IN A LARGE AUTOPSY COHORT OF HOSPITALISED ELDERLY

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Objectives: To examine the frequency of cerebral microbleeds (CMB) in different brain regions and their relationship with amyloid angiopathy (CAA).

Methods: The frontal, parietal, occipital cortex with the adjacent white matter and basal ganglia of 88 consecutive autopsies of old hospitalized patients were examined for CMBs, identified on haematoxylin-eosin-stained histological slides as areas around small vessels with hemosiderin-containing macrophages. CAA was visualised using an anti-amyloid antibody (4G8).

Results: CMBs were present in at least one region in 95.5 % of the cases and CAA was observed in 46.6 % of this series. CMB were more frequent in the parietal and frontal lobe followed by the occipital region and basal ganglia. In contrast, CAA was most frequent in the occipital lobe and observed in only 1 case in the basal ganglia. No statistical correlation was found between the two lesions. Regarding lobar localisation, CAA was intracortical, in contrast to CMB, which was mainly subcortical. Furthermore CAA and CMB affected different type of arteries.

Conclusions: CMB are frequently encountered on postmortem histological examinations and are not associated with CAA.