Boston criteria for cerebral amyloid angiopathy

The Boston criteria were first proposed in 1995 in order to standardize the cerebral amyloid angiopathy diagnosis. They comprise of combined clinical, imaging and pathological parameters.

These criteria were superseded by the modified Boston criteria, which in turn have been superseded by the Boston criteria 2.0 in 2022 5,6.

The criteria are divided into four tiers and are as 1,3,4:

definite CAA full post-mortem examination reveals lobar, cortical, or cortical/subcortical hemorrhage and pathological evidence of severe cerebral amyloid angiopathy probable CAA with supporting pathological evidence clinical data and pathological tissue (evacuated hematoma or cortical biopsy specimen) demonstrate a hemorrhage as mentioned above and some degree of vascular amyloid deposition doesn't have to be post-mortem probable CAA pathological confirmation not required patient older than 55 years appropriate clinical history MRI findings demonstrate multiple hemorrhages with no other explanation possible CAA patient older than 55 years appropriate clinical history MRI findings reveal a single lobar, cortical, or cortical/subcortical hemorrhage without another cause, multiple hemorrhages with a possible but not a definite cause, or some hemorrhage in an atypical location The Boston criteria for diagnosis of 'probable CAA' was pathologically validated in 2009 and was found to be highly specific (100%, 95% confidence interval (CI) 77% to 100%), but only had a sensitivity of 44% (95% CI 28% to 62%) 2. Hence, while the patients who meet the Boston Criteria for probable CAA are likely to have underlying CAA, over half the patients with CAA are also missed and not picked up by these criteria.