Cerebral amyloid angiopathy: an important differential diagnosis in case of haemorrhagic stroke

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Introduction: Cerebral amyloid angiopathy (CAA) is a progressive disease characterized by B-amyloid deposition in the walls of small and medium-sized arteries in the cerebral cortex and leptomeninges, which can lead to recurrent intracerebral haemorrhage and, in some cases, death. Diagnosis can be a challenge, and the modified Boston Criteria define several levels of confidence.

Case Report: An 85-year-old woman, independent for activities of daily living, had a past medical history significant for hypertension, controlled with medication, dementia and two haemorrhagic strokes, in 2015 and 2017. In January of 2018, she was brought to the emergency department because she was less responsive, disoriented and presented new-onset right hemiparesis, in the absence of trauma. The head computed tomography showed an acute left frontal cortico-subcortical haemorrhage, with 46x34 millimetres.

The application of the modified Boston Criteria revealed probable CAA. Since there were no concerns requiring neurosurgical admission, she was admitted under Internal Medicine care. The patient was initially treated with mannitol for 48 hours, progressing to furosemide and dexamethasone the following week. She presented a favourable clinical recovery, with increased awareness and total recovery of motor deficits, maintaining only dysarthria at discharge.

Conclusion: CAA has a wide spectrum of clinical manifestations. This diagnosis should be suspected, and excluded, in patients with non-traumatic haemorrhagic stroke, especially when over the age of 60. Although there is no specific treatment, a prior haemorrhagic event increases the risk of recurrence, and thus prevention through modifiable risk factor reduction should be the focus in these patients.

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Abstract

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