Acute stroke due to bilateral spontaneous carotid artery dissection

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Abstract

Introduction: Internal carotid artery dissection (ICAD) accounts for only 1-2% of all ischaemic strokes. It may be traumatic or spontaneous, with multi-factorial aetiology. Most patients with ICAD present with cerebral or retinal ischaemic symptoms. Local symptoms such as headache, neck pain and cranial nerve signs (including hypoglossal nerve lesions or Horner’s syndrome) arouse the suspicion of ICAD. Bilateral ICAD at presentation is a rarer event, accounting for approximately 2-10% of all ICADs.

Case Report: The authors describe the case of a 63-year-old man who was admitted to the emergency department due to abrupt onset of motor aphasia and right-sided hemiparesis (NIHSS 21). He had no significant history of disease or trauma. There were no acute ischaemic lesions on the brain computerized tomography (CT). CT-angiography revealed a bilateral ICAD. This diagnosis was later confirmed by magnetic resonance angiography, which also disclosed signs of acute ischaemic lesions in the territory of the left middle cerebral artery.

During hospitalization, the patient integrated a rehabilitation program consisting of physical therapy, occupational therapy and speech therapy, with full recovery of the motor deficits.

Conclusion: ICADs are a noteworthy cause of ischaemic stroke. This case is a reminder that, although bilateral ICAD is a rare event, a high index of suspicion is crucial in order to make the correct diagnosis, especially in the absence of a traumatic event, and even with atypical clinical presentation. The authors highlight the excellent neurological recovery of this patient, who currently has no functional impairment.