The curious case of a woman with multiple dissecting aneurysms

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Abstract

Introduction: Arterial dissections result from primary or secondary lacerations of the arterial wall due to a mural hematoma. The CADISP (Cervical Artery Dissections and Ischaemic Stroke Patients) study showed that spontaneous dissections can be frequently multiple.

Case Report: A 52-year-old woman was admitted to the Emergency Department with sudden onset of headache, nausea and vomiting. There was no history of trauma. Brain computed tomography (CT) showed acute ischaemic stroke in the posterior inferior cerebellar artery (PICA) territory and a subarachnoid haemorrhage in the basal cisterns and inter-hemispheric cleft. Brain Angiography detected signs of chronic dissection of the right internal carotid artery and a small dissecting aneurysm of the proximal right PICA. During a therapeutic angiography, a new dissection of the right vertebral artery (VA) was found. Therapeutic angiography was rescheduled. It revealed almost total resolution of the dissection of the right VA, and right PICA fusiform aneurysm with more regular calibre. It was decided not to perform endovascular treatment and control with brain and cervical CT angiography in 2 months. No evidence of vasculopathy was found. Three weeks later, the patient was discharged without neurological deficits and without event recurrence.

Conclusions: Spontaneous dissections can sometimes present with multiple dissections in the absence of a vasculopathy. These dissections may occur without an explicit event in the past, indicating vascular fragility, and have a spontaneous recovery.