Cryptogenic cerebral microangiopathy and non-aneurysmal subarachnoid haemorrhage – a case report

Rita Rodrigues¹ and José Mário Roriz¹

Introduction: Cerebral microangiopathy usually manifests as lacunar infarcts, white matter lesions and cerebral microbleeds, resulting in lacunar stroke episodes and/or progressive cognitive impairment.

Case Report: Fifty-eight-year-old woman, without remarkable past medical history or known vascular risk factors. Admitted to the stroke unit with an isolated mild left hemiparesis beginning three days before. Brain computed tomography (CT) and magnetic resonance imaging revealed abundant scattered microangiopathic lacunar sequelae and leukoaraiosis. Protocol blood panel, cervical and transcranial ultrasonography, 24h-Holter, transthoracic echocardiogram and 24h-ambulatory blood pressure monitoring were unremarkable. Autoimmunity tests were normal (except for borderline cryoglobulins and IgM anticardiolipin). Urinalysis showed mild proteinuria. Genetic testing for CADASIL was negative (results pending for Fabry disease). Neuropsychological assessment showed mild cognitive impairment with a “frontal-subcortical” profile. She was readmitted five months later with a thunderclap headache after sexual activity, without focal neurological deficits. The CT scan revealed a diffuse subarachnoid haemorrhage. Acute-phase CT Angiogram and classical angiography excluded cerebral aneurysms or vascular irregularities. Cerebrospinal fluid analysis after approximately one month was normal. An angiographic control was programmed within 6 months.

Conclusion: Considering the age and absence of conventional risk factors, the patient underwent an exhaustive etiologic study. Nevertheless, a clear association between these events could not be demonstrated. We present this case to discuss how far we should investigate disproportionate small vessel disease, and whether these two events could be explained by a common cause.