A double dilemma in one patient

Catarina Perry da Câmara¹, Carolina Pinheiro¹, Marcos Veiga¹, Teresa Morais¹, Mariana Diogo¹, Sofia Galego², Isabel Fragata¹, Patrícia Ferreira², Ana Paiva Nunes², and João Reis¹

Background: Dissection of the carotid artery can cause stenosis and occlusion. In certain cases, acute phase carotid stenting is an option.

Methods: We present a case of stent placement in the acute phase of bilateral dissection of internal carotid artery (ICA).

Results: We report a case of a 46-year-old woman, with no past relevant history. Her only medication was oral contraception. She presented with headache, vertigo and bilateral leg paresis with left predominance. At the emergency room (ER), no neurological focal signs were detected and she was discharged. In the following day, she returned to the ER with the same symptoms. This time she had left hemianopia, central facial palsy (LCFP), dysarthria and left hemiplegia (NIHSS 16). CT revealed an ischemic lesion on the right middle cerebral artery (rMCA) territory with occlusion of the right ICA and stenosis of the left ICA, with no repercussion on the transcranial Doppler (TCD). Three days later, TCD showed low blood flow velocity in the left MCA and anterior cerebral artery (ACA), with collateral compensation by the posterior circulation, suggesting a distal ICA lesion. It that time, the patient underwent digital subtraction angiography, showing an irregular stenosis of nearly 80, with cervical aneurysmatic dilatation of the left ICA, and a delay in distal perfusion. A carotid stent was placed with satisfactory reperfusion. The neurosonological study was repeated, revealing an occlusion of the stent and the patient was submitted to mechanical thrombectomy. The patient’s age and angiographic features suggested bilateral carotid dissection with rICA occlusion and left ICA stenosis. The patient was discharged with NIHSS of 12.

Conclusion: Acute phase carotid stenting is not consensual, but what should we do when facing contralateral occlusion?