Seeing beyond the eyes: successful treatment of basilar artery occlusion

Anna Viola Taulaigo1,2, Marisa Mariano1, Patrícia Ferreira1, Jaime Pamplona3, João Reis3, and Ana Paiva Nunes1

From the Lisbon Stroke Summit, Lisbon, Portugal. 5–6 April 2019.

Abstract

Background: Posterior circulation (PC) strokes often present with non-specific symptoms, delaying diagnosis and treatment. Moreover, considering events with low National Institutes of Health Stroke Scale Scores (NIHSS) at presentation, PC strokes have worse outcome than anterior circulation (AC) strokes. Acute phase treatment of minor PC strokes is not standardized and carefully clinical evaluation is warranted.

Clinical case: We report the case of a 78-years-old woman who presented to the emergency department with new onset anisocoria and flattened left nasolabial fold. Two hours before admission, she reported transient left sided paraesthesias and left arm weakness. Past medical history was relevant for hypertension, dyslipidaemia and unspecified arrhythmia, without anticoagulation therapy. Brain computed tomography (CT) showed basilar artery (BA) hyperdensity with no ischemic or haemorrhagic lesions and CT angiography confirmed top of BA occlusion. Despite minor neurological deficits (NIHSS 1), she started fibrinolytic therapy with recombinant tissue plasminogen activator (rt-PA) (0.9 mg/kg). She underwent cerebral angiography which showed recanalization of BA and occlusion of the P2 segment of left posterior cerebral artery (PCA). While attempting thrombectomy, spontaneous recanalization of P2 segment occurred with occlusion limited to P3/P4 segment and partial thrombus aspiration was performed. Magnetic resonance evaluation showed minimal acute ischemic infarctions in right superior cerebellum, temporal and occipital parasagittal left cortex, suggesting embolic origin. Etiologic study revealed atrial fibrillation and she started anticoagulation therapy. She was dismissed completely asymptomatic and with no functional impairment.

Conclusion: This case showed an example of major vessel occlusion with clinical minor neurological deficit, in which timely and successful treatment was performed, to prevent more severe consequences of PC stroke.