

Aplastic Basilar Artery without a Primitive Carotid–Vertebrobasilar Anastomosis

—Case Report—

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Abstract : Aplastic basilar artery (BA) without a primitive carotid–vertebrobasilar (CA–VBA) anastomosis is exceedingly rare. A 56–year–old woman presented with sudden progressive vertigo and drastic back neck pain at our hospital. Magnetic resonance imaging (MRI) did not demonstrate any organic change, thus suggesting an ischemic lesion in the brain parenchyma, but a magnetic resonance angiogram (MRA) showed no distal part of the BA. Cerebral angiography revealed an aplastic BA and a tortuous bilateral posterior communicating artery (Pcom) including the bilateral superior cerebellar artery (SCA) to supplement the perfusion of the area. When the basilar artery shows aplasia or hypoplasia, the posterior circulation is supplied from primitive segmental arteries in most cases. We herein describe a case of aplastic BA without any primitive CA–VBA anastomosis which was related to an organic pathology.

Key words : Aplastic basilar artery, Primitive carotid–vertebrobasilar anastomosis, Digital subtraction angiography, Non–ischemic lesion