AZYGOS ANTERIOR CEREBRAL ARTERY. REPORT OF TWO CASES AND REVIEW OF THE LITERATURE


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The azygos anterior cerebral artery (AACA) is a vessel formed by the fusion of both pericallosal arteries. Its presence in anatomical series is less than 5%. We present two cases of AACA, one associated with an aneurysm and other associated to an arteriovenous malformation (AVM). Clinical cases: Case 1 is a 52-year-old woman who was admitted to a hospital with sudden onset of sensory depression and headache. A cranial axial tomography (CT) demonstrated a sub-arachnoid hemorrhage. Cerebral angiography showed an aneurysm of an azygous anterior cerebral artery bifurcation. Surgical clipping was carried out with an excellent outcome. The second case is a 71-year-old man that had been operated 20 years before, of a right frontal AVM. He was admitted to a medical center with an acute severe left hemiparesis. The CT showed a right sided frontal haematoma and the cerebral angiography showed an AVM, partly fed by an AACA. The malformation was surgically treated, but the patient died at a later time as a consequence of sepsis. The AACA is seen as a transitional vessel in the human brain embryologic development, and is found in some inferior mammals and monkeys. This artery is seen in early stages related to the development of the corpus callosum. However, it disappears later on in most of the cases. Its existence in adults is infrequent, but has been reported in isolated cases sometimes associated with vascular malformations as those presented.

Key Words: Arterial circle of Willis. Vascular cerebral anatomy. Cerebral aneurysms.

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