Isolated intramedullary spinal artery aneurysm

Figure 1 Cervical cord MRI and angiography

(A) T2-weighted MRI demonstrates hemosiderin deposits, suggesting hematoma, at the C1 level (white arrow) and a diffuse high intensity from medulla oblongata to the T1 level, suggesting edema. (B) Right vertebral angiogram demonstrates intramedullary spinal artery aneurysm at the C1 level (black arrowhead) fed by the anterior spinal artery.

An 84-year-old man presented with sudden onset left hemiparesis without facial paresis or sensory changes. CT was negative. On day 2, quadriplegia developed, Babinski responses, and a C2 sensory level; MRI demonstrated an intramedullary C1 hematoma (figure 1A). Angiography (figure 1B) showed an isolated intramedullary spinal artery aneurysm fed by the anterior spinal artery. He developed respiratory dysfunction and died. Autopsy showed a ruptured cervical spine aneurysm and hematomyelia (figure 2, A and B). Isolated intramedullary spinal artery aneurysm without subarachnoid hemorrhage is rare¹ and should be included in the differential diagnosis of spinal cord vascular lesions.

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(A) Autopsy shows hematomyelia in the upper cervical spinal cord. (B) Immunostaining by anti-CD31 demonstrates the existence of endothelium confirming the diagnosis of aneurysm. The bar indicates 1 mm.

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