

 IMAGES OF SPINE CARE

Ruptured spinal artery aneurysm associated with coarctation of the aorta

A 55-year-old woman presented with unconsciousness and tetraparesis. Routine blood tests were normal. Computed tomography (CT) of the brain showed ventricular hemorrhage and associated mild hydrocephalus (**Fig. 1**). Urgent external ventricular drainage was performed. Craniocervical magnetic resonance imaging showed an intradural paramedullary lesion primarily consistent with an aneurysm at the C6 level.



Fig. 1. Axial brain CT showed intraventricular hemorrhage (arrow).

Diffuse spinal hematoma and aneurysm was also seen on CT (**Fig. 2**). Computed tomography angiography showed coarctation of the aorta (**Fig. 3**). Spinal angiography showed coarctation of aorta with a ruptured, 10-mm, dissecting spinal artery aneurysm (SAA). The aneurysm was occluded successfully with endovascular coiling (**Fig. 4**).

Spinal artery aneurysms are very rare pathologies. Coarctation of the aorta is a well-recognized risk factor for SAA aneurysm formation.

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Fig. 2. Sagittal T2-weighted cervical MRI and sagittal reformatted CT images show a mass lesion (black arrows) located anteriorly at the level of the C6 vertebra. The lesion compressed the spinal cord. Diffuse spinal hematoma was also noted on CT as well as MRI (white arrows). Cervical spinal cord hyperintensity represents myelomalacia.



Fig. 3. Computed tomography angiography section shows coarctation of the aorta (arrow).

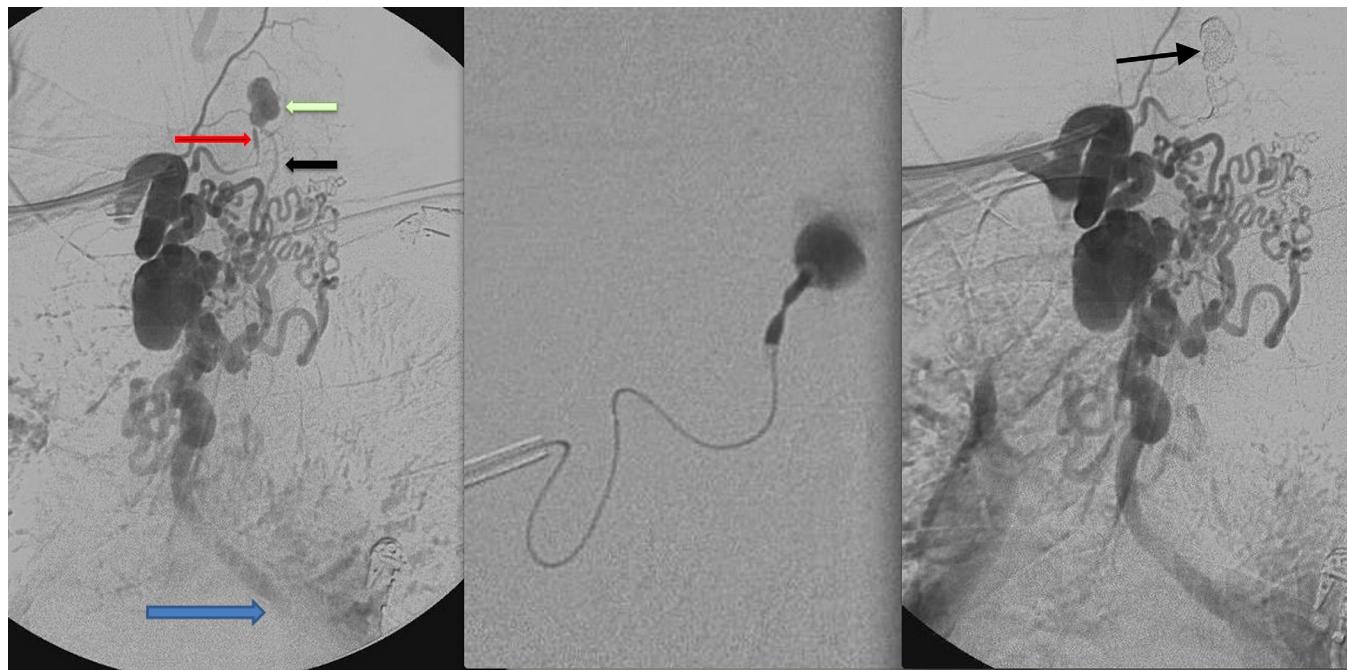


Fig. 4. (Left) Angiography shows spinal artery aneurysm with coarctation of the aorta. Red arrow indicates the radiculomedullary artery. Green arrow indicates the aneurysm. Black arrow indicates the anterior spinal artery. Blue arrow indicates the collateral flow that supplies the thoracic aorta distally from coarctation. (Middle) Microcatheter injection of the related aneurysm. (Right) Angiography shows occlusion of the aneurysm (arrow) with endovascular coiling.