Endovascular treatment of a spinal dural arteriovenous malformation (DAVF)

Vijay Agarwal, M.D.,1 Ali Zomorodi, M.D.,1 Pascal Jabbour, M.D.,2 Nohra Chalouhi, M.D.,2 Stavropoula Tjoumakaaris, M.D.,2 Ranjith Babu, M.D.,1 Adam Back, M.D.,1 and L. Fernando Gonzalez, M.D.1

1Division of Neurosurgery, Duke University Medical Center, Durham, North Carolina; and 2Department of Neurosurgery, Thomas Jefferson University, Philadelphia, Pennsylvania

We present a case of a patient with rapid loss of motor strength in his lower extremities. He became bedridden with bowel and bladder incontinence, and developed saddle anesthesia. MRI of the lumbar spine showed edema in the conus medullaris and multiple flow voids within the spinal canal. A spinal angiogram showed a dorsal Type I spinal AVF. This was treated successfully with Onyx 18 (eV3, Irvine, CA). The patient showed rapid post-procedure improvement, and at discharge from the hospital to a rehabilitation center he was fully ambulatory. At 3-year follow-up, the patient was found to ambulate without difficulty. He also had improved saddle anesthesia, and he was voiding spontaneously. There was no evidence of flow voids on repeat MRI of the lumbar spine.

The video can be found here: http://youtu.be/SDYNIGNQIW8.

Key Words • thrombosed • giant aneurysm • Onyx • carotid • video