Microsurgical resection of intramedullary spinal cord cavernous malformation. Operative video and technical nuances

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Intramedullary spinal cord cavernous malformations account for approximately 5% of all intraspinal lesions. These lesions can present with either acute neurological compromise secondary to hemorrhage inside the spinal cord, or with chronic progressive myelopathy due to repeated microhemorrhages. Surgical resection of spinal cord cavernous malformations remains the definitive treatment strategy for symptomatic lesions. Because of the intimate relationship with surrounding eloquent neural tissue, these lesions can be technically challenging to remove with a significant risk for morbidity. In this operative video, the author demonstrates an illustrative step-by-step technique for microsurgical resection of a large intramedullary spinal cord cavernous malformation at C4–5 causing progressive myelopathy. Complete resection was achieved without neurologic compromise. The operative technique and surgical nuances, including the surgical approach, intradural cavernoma removal, and spinal stabilization are illustrated.

The video can be found here: http://youtu.be/3FUjGSyrKO0. (http://thejns.org/doi/abs/10.3171/2014.V3.FOCUS14155)

Key Words • cavernous malformation • spinal cord • intramedullary • cavernoma • microsurgical resection • technical nuances • video