Microsurgical Resection of Medulla Oblongata Hemangioblastoma: 2-Dimensional Operative Video

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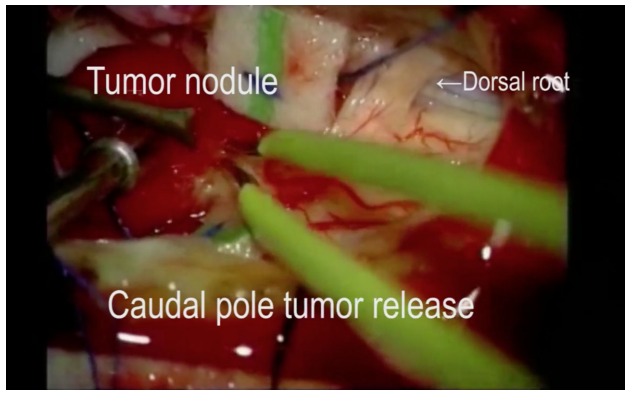

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This video demonstrates the microsurgical resection of brainstem hemangioblastoma. The patient is a 32-yr-old woman with Von Hippel Lindau syndrome who presented with quadriparesis and inability to swallow. Magnetic resonance imaging (MRI) of the neuroaxis revealed a brainstem cystic lesion with contrast-enhancing tumor nodule right along the posterior aspect of the lower part of medulla oblongata. The surgery was performed in the prone position with suboccipital craniectomy and partial C1 posterior arch removal. The aim of the surgery was to remove the tumor nodule.[1-12]

The tumor was separated from the right dorsal nerve roots, and then progressively dissected with coagulation of arterial feeders and draining vein and division of the pia circumferentially. Postoperative MRI revealed complete resection. The patient completely recovered from her quadriparesis and difficulty swallowing.

KEY WORDS: hemangioblastoma, medulla oblongata, Von Hippel Lindau syndrome, microsurgery, resection

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Disclosure

The authors have no personal, financial, or institutional interest in any of the drugs, materials, or devices described in this article.

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COMMENTS

This video reviews a well described procedure with an excellent outcome. This operative video can serve as a tutorial for surgeons attempting to perform this approach.

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The authors present a video of resection of medulla oblongata hemangioblastoma. The accent is done on a technique of nodule tumor removal. Video demonstrates step-by-step technique when at last stage coagulation and an intersection of draining vein is carried out.[1] This maneuver allows one to avoid venous congestion at early stages of a nodule removal and thereby to decrease the risk of related complications. The aim of the surgery is an en block removal of the tumor that was well shown by presented video.

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