Occipital Condylectomy

Tumors around the cervicomedullary junction are rare and constitute 5% of spinal tumors and 1% of cranial tumors. The approach to these lesions is difficult because of the close proximity of the medulla and cervical spinal cord, lower cranial nerves, and vertebral artery (VA) as well as the complex articulation between occipital condyle, C1 and C2. Cervicomedullary junction meningiomas are commonly classified based on their origin in relation to the dentate ligament, but the relationship to the VA typically plays an important role in deciding the surgical approach. For lesions located dorsal to the dentate ligament and not involving the VA, a midline approach is typically sufficient. However, when the VA is involved a far lateral approach is preferred as it offers better access to the V4 segment. Budohoski et al. described a case of a 55-yr-old man who presented with accessory nerve palsy and mild upper motor neuron signs and was found to have a C1 meningioma encasing and narrowing the VA at the V3/V4 segment. Informed consent was obtained. The patient was treated with a right far lateral approach with limited condylectomy to gain access to the V4 segment. They described the steps used for safe resection of the tumor around the VA from distal to proximal. They demonstrated the relationship of the tumor to the VA and the need to completely skeletonize the VA to achieve a gross total resection. They supplemented the discussion with a 3D surgical video. [1)].

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