

C1 and C2 huge size nerve sheath tumor treatment using posterior midline approach

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C 1 and C 2 nerve sheath tumors have certain specific characteristics such as multiplicity, hourglass expansion, and the relation to the vertebral artery and the specific surgical problems. These are benign tumors arise from nerve sheath and grow slowly and press on nerve roots and spinal cord and cause weakness in extremities. A 48-year-old man presented with progressive weakness all extremities, with severe posterior neck pain, suboccipital pain and right shoulder, arm pain for 4 weeks. He was evaluated with cervical MRI. MRI scan showed huge size dumbbell mass on right C1-C2 with compression of cord, large portion extending to paraspinal region. Digital sub-traction angiography (DSA) was performed for evaluation vascular structures. The patient was placed in a prone position. A midline vertical incision was performed, and the paraspinal muscles on the side of the tumor were dissected subperiosteally. Under the microscope, without partial resection of the posterior arch of the atlas and C2 hemilaminectomy, we were performed and extended laterally to expose the tumor bulk and the spinal dural tube. The posterior wall of the tumor was incised, and intratumoral debulking was performed by ultrasonic surgical aspirator. There was profound bleeding during tumor removal. Fortunately, the involved C2 nerve was resected together with the tumor. Finally, the tumor was completely resected. In conclusion, C 1 and C 2 nerve sheath tumors have special features as compared to other spinal sites and the tumors at this region should be considered as a separate clinical entity. Surgical procedures and relative approach are to be done early in disease course to achieve better outcome