Spinal cord hemangioblastoma case series

Krüger et al. conducted a retrospective single-center study of all patients who, between January 2010 and January 2018, had been operated on for spinal cord hemangioblastoma via a minimally invasive approach performed at the surgeon's discretion. The surgical technique is described and the pre- and postoperative neurological and imaging results were analyzed descriptively. The primary outcome was the postoperative compared to preoperative neurological condition (McCormick grade). The secondary outcomes were the extent of tumor resection and postoperative complications.

Eighteen patients, 12 female and 6 male, harboring a total of 19 spinal hemangioblastomas underwent surgery in the study period. Seventeen patients had stable neurological findings with stable or improved McCormick grades (94.5%) at a mean of 4.3 months after surgery. One (5.5%) of the 18 patients developed progressive neurological symptoms with a worsened McCormick grade that did not improve in the long-term follow-up. Sixteen of the 18 patients had VHL disease, whereas 2 patients had sporadic spinal hemangioblastomas. In all patients, postoperative MRI showed complete resection of the tumors. No other surgery-related perioperative or postoperative complications were recorded.

A minimally invasive approach for the resection of selected spinal hemangioblastomas is safe and allows complete tumor resection with good clinical results in experienced hands ¹⁾.

Thirty-eight patients with SH were treated with microsurgery from January 2013 to December 2018. Clinical features and related factors were retrospectively analyzed in SH patients with and without syringomyelia.

Out of the total number of SH patients, 21 presented with remarkable syringomyelia, resulting in an incidence of 55.26% (21/38). Gross total resection was achieved in 36 cases (94.73%), and subtotal resection was obtained in 2 patients (5.27%). Neurological symptoms improved in 34 patients, remained stable in 2 patients and were aggravated in 2 cases during follow-up. In addition, there was a notable difference between the location of tumors and syringomyelia (P < 0.05). Syringomyelia occurred more frequently in the cervical segment than in any other spinal segment. Moreover, there was an association between symptom duration and clinical prognosis (P < 0.05). Ordinal regression analysis showed that the prognosis of middle duration groups (6-12 months) was better than early groups (0-6 months, P < 0.05, OR 20.21, 95%CI 2.34-336.97) and late groups (>12 months, P < 0.05, OR 11.54, 95%CI 1.30-102.21). Syringomyelia collapse or reduction occurred between two weeks and 15 months after surgery. An improvement of spinal function grade after surgery was more significant in syringomyelia reduction groups (P < 0.05).

The prevalence of syringomyelia due to SH is considerably high, and the initial clinical presentation of syringomyelia resulting from SH should be emphasized. Satisfactory outcomes were achieved by effective surgery in affected patients ²⁾.

From 1969 to 1975, 12 patients were operated upon at the Kantonsspital Zürich by the senior author (MGY) for intramedullary spinal hemangioblastoma with the help of microtechnique. The purpose of this paper is to describe in detail the surgical technique and the results, and to comment on the historical, clinical, pathological, and radiological aspects of spinal hemangioblastoma and the complex

of von Hippel-Lindau's Disease (multiple angiomatosis of retina, central nervous system, and viscera) with which it is associated ³⁾.

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