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Clinical features and rehabilitation outcome after surgical treatment of spinal meningioma

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Abstract

Study design: Retrospective analysis of clinical routine data.

Objectives: Spinal meningioma is a common type of benign spinal tumor. Surgical removal is the standard therapeutic approach. While surgery is generally associated with excellent outcomes, little is known about the rehabilitation outcome of patients with postoperative deficits. Therefore, we aim to describe the clinical features and rehabilitation outcomes of patients after surgical removal of spinal meningioma.

Setting: Region of Swabia, Bavaria, Germany.

Methods: We conducted a retrospective analysis of patients with spinal meningioma who underwent a rehabilitation program for patients with non-traumatic spinal cord injury at our department over the past five years. In addition to routine data, we focussed on analysing the Barthel Index, SCIM III score, and ASIA impairment scale before and after rehabilitation.

Results: 15 patients were included in the analysis. While most of them only had a few restrictions relevant to activities of daily living, some had severely limited walking ability. The predominant clinical feature was incomplete paraplegia with or without neurogenic bladder and bowel affection. The Barthel Index and SCIM III score demonstrated positive changes in the majority of cases, while alterations in the ASIA impairment scale were observed in a minority.

Conclusion: Considering the results of outcome parameters, rehabilitation treatment appears effective for these patients. Nonetheless, further studies with larger patient cohorts are necessary to confirm these findings.

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