A Clinical Analysis on Microvascular Decompression Surgery for Treatment of Hemifacial Spasm: 2500 Cases Review in a Single Institute

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Introduction

Hemifacial spasm (HFS) is caused by vascular compression of the facial nerve at its root exit zone at the brainstem. Microvascular decompression (MVD) is the only treatment option that offers the prospect of a definitive cure for HFS. However,occasionally this surgery can be risky and the postoperative outcomes might not be good enough. At our institution MVD for HFS is done frequently and have a good database of these patients. Hence, in order to understand the outcomes of these patients we we performed an exclusive analysis and review.

Methods

Out of 2500 cases of MVDs which were performed in our institution between January 2000 and December 2015, 2196 patients were enrolled in the current study. They were retrospectively analyzed with emphasis on postoperative outcomes and complications.

Results

Postoperatively, complete cease of spasm occurred immediately in 73.4%. The symptoms improved at some degree in 22.7%. The spasm not improved at all in 3.9%. However, symptom free rate was found to be 88.3% at 6 months after surgery. Nevertheless, the success rate was increased by 93.1% at 1 year after MVD. Major complications included permanent hearing disturbance (1.13%), permanent facial palsy (0.4%), vertebral artery injury (0.2%), subdural hemorrhage (0.2%), and epidural hemorrhage (0.1%). Minor complications included transient cerebrospinal fluid leakage (1.3%), infection (0.6%).

Conclusions

MVD is a safe and effective treatment for HFS. A precise recognition of the neurovascular conflict site usually leads to a satisfactory outcome.

Learning Objectives

Outcomes after MVD

References

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