

RESIDUAL HEMIFACIAL SPASM AFTER MICROVASCULAR DECOMPRESSION: WHEN SHOULD WE DO REOPERATION?

SS Chung

Department of Neurosurgery, Pochon CHA University, College of Medicine,

Introduction: Postoperative course of hemifacial spasm(HFS) after microvascular decompression(MVD) varies widely. The purposes of this study are to determine the incidence, clinical course and causative factors, if any, of the postoperative residual spasm and also to define the failure of microvascular decompression and optimal timing for revision.

Method: The author performed 1548 MVD in 1525 patients with HFS between September 1978 and February 2004. This study included 1238 patients who were followed more than 24 months since 1987. In these patients with residual spasm, various factors were analyzed to find out the causes of the residual spasm and to predict the postoperative course. We analyzed factors such as age, sex, symptom side and duration of the spasm, type of compressing vessel, severity of compression of facial nerve in operating field, preoperative botulinum toxin injection, the amount of inserted Teflon and postoperative facial weakness. The mean follow-up duration was 30.9(24.1-196.8) months.

Results: The incidence of postoperative temporary residual spasm(delayed improvement) was 38.8%. Among 480 patients with residual spasm, 430 patients (89.6%) were eventually improved. The median timing of disappearance of residual spasm was 8 weeks(2days-2.9years) after MVD. Ten(0.8%) patients showed extremely delayed response after 1 year since the MVD. Among 430 patients with delayed improvement, 179 patients(14.5% of total patients) had symptom-free period between the MVD and the reoccurrence of spasm. The median duration of ;°transient spasm-free period;± was 3 days(1 day-1 year). There was no statistically significant factors related to the timing of symptom improvement or ;°transient spasm-free period;± after MVD. Reoperation was performed in 16 patients(1.3%) and the timing of the 2nd MVD was 55.0(12.4-134.7)months after the 1st MVD.

Conclusions: The occurrence of postoperative residual spasm did not mean the failure of MVD. Most of the postoperative residual spasm improved within 1 year after MVD, but extremely delayed response could be possible. The postoperative course could not be predicted from perioperative data. Therefore, long-term follow-up of the patients after MVD is essential and revision should be cautiously considered at least 1 year after the MVD, especially for the patients with worsening or sustained spasm, if the initial decompression was sufficient.