

Personal Experience of Treatment of Trigeminal Neuralgia

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Objective: The author has a wide experience regarding the treatment of trigeminal neuralgia (TN) for more than 30 years. Although there exists debates on etiology of TN, most of the cases result from vascular compression on root entry zone (REZ) of the Trigeminal nerve. The purpose of this study is to introduce therapeutic strategy and outcomes based on the personal experience.

Methods: From January 1985 to December 2013, a total of 519 patients with trigeminal neuralgia were treated at Department of Neurosurgery, Kyung Hee University Medical Centre. Among them 281 patients underwent Microvascular Decompression (MVD) for TN by the single neurosurgeon. 79 patients were treated with gamma-knife radiosurgery (GKRS). The number of female patients (n=196) were found more than the male patients (n=85).

Results: Among 281 patients, 161 patients underwent MVD only, 78 patients underwent MVD with partial rhizotomy, 33 patients underwent MVD with Rhee's method and 9 patients underwent partial rhizotomy only. The mean follow-up duration after surgery ranged from 3 months to 5.5 years. The results of these four procedures were analysed. Successful initial relief of pain was achieved in 96% (82% excellent pain relief, 14% good pain relief) in the patients who underwent these procedures. In 5 years follow-up outcome, 87% of the patients who treated with MVD only, MVD and Rhee's method were still in the state of pain relief (excellent and good). And 91% of the patients who underwent MVD with rhizotomy, and rhizotomy only were also found pain relieved.

Conclusion: These procedures are not only safe and effective for the treatment of trigeminal neuralgia, but also they offer the advantage of avoiding postoperative sensory loss and associated dysesthesias. Partial sensory rhizotomy should be considered in conjunction with MVD to decrease late recurrence in elderly patients, patients who have questionable offenders and history of past procedures.



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