

SURGICAL TREATMENT OF HEMIFACIAL SPASM

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Introduction. With this study we want to detail the surgical technique for the treatment of hemifacial spasm caused by neurovascular conflict, as it is routinely used in our Department of Neurosurgery in Verona. This pathology causes a great impact on patients' everyday life, so it is crucial to use the most efficient and safe means to solve the conflict durably.

Materials and methods. We retrospectively analysed a series of 112 patients consecutively operated, from 2001 to 2016 in the Neurosurgery Department of Verona, for the surgical microvascular decompression (MVD) of the VII cranial nerve. In every case, the presence of a neurovascular conflict was demonstrated in the preoperative planning. All the patients were operated upon via a standard retrosigmoid approach in the semisitting position. In this period of time we progressively shifted from the classical Jannetta technique – with the interposition of a teflon sponge, in 19 cases – to the newer technique of the sling transposition with a Goretex lace (67). In 26 cases, both the techniques were used to solve complex conflicts.

Results. We found that, in most cases, the conflict with the VII nerve is determined by large caliber vessels, such as vertebral or basilar artery. We felt that the sling transposition may contribute to maintain the vessels in a position far from the nerve root exit zone in a more secure and firm fashion. We registered a good control on the symptoms from the early postoperative period, with 98% cases of disappearing of the spasm; particularly, in 95% of the patient treated with Teflon sponging, and 98,5% of those treated by sling transposition.

Conclusions. The use of a Goretex lace to anchor the vessels away from the nerve root exit zone is a safe and efficient method to treat hemifacial spasm, even if it requires a more refined surgical technique. In our experience we found a lesser incidence of recurrence in these cases, with the same rate of collateral effects as in the classical technique.