

Microvascular decompression in patients with isolated maxillary division trigeminal neuralgia, with particular attention to venous pathology

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Object

The authors have the clinical impression that patients with isolated V2, or maxillary division, trigeminal neuralgia (TN) are most often women of a younger age with atypical pain features and a predominance of venous compression as the pathology. The aim of this study was to evaluate a specific subgroup of patients with V2 TN.

Methods

Among 120 patients who underwent microvascular decompression (MVD) for TN in 2007, data were available for 114; 6 patients were lost to follow-up. Patients were stratified according to typical (Burchiel Type 1), mixed (Burchiel Type 2a), or atypical (Burchiel Type 2b) TN. A pain-free status without medication was used to determine the efficacy of MVD. All patients were contacted in June 2008 and again in January 2009 at 12–24 months after surgery (median 18.4 months) and asked to rate their response to MVD as excellent (complete pain relief without medication), fair (complete pain relief with medication or some relief with or without medication), or poor (continued pain despite medication; that is, no change from their preoperative baseline pain status).

Results

Of 114 patients, 14 (12%) had isolated V2 TN. Among these 14 were 2 typical (14%), 1 mixed (7%), and 11 atypical cases (79%) of TN. Among the remaining 100 cases were 37 typical (37%), 14 mixed (14%), and 49 atypical cases (49%) of TN. In the isolated V2 TN group, all patients were women as compared with 72% of women in the larger group of 100 patients ($p = 0.05$, chi-square test). The average age in the isolated V2 TN group was 51.2 years (median 48.1 years) versus 54.2 years (median 54.0 years) in the remainder of the group ($p = \text{NS}$, unpaired Student t -test). In the isolated V2 TN group, there was a predominance of atypical pain cases (79%) versus 49% in the remainder of the group, and this finding trended toward statistical significance ($p = 0.07$, chi-square test). Venous contact or compression (partly or wholly) was noted in 93% of the patients

with isolated V2 versus 69% of the remainder of the group ($p = 0.13$, chi-square test). The likelihood of excellent outcomes in the patients with V2 TN (71%) was compared with that in typical pain cases (79%) among patients in the rest of the group (that is, the bestoutcome group), and no difference was found between the 2 groups ($p = 0.8$, chi-square test).

Conclusions

The authors confirmed that patients with isolated V2 TN were more likely to be female, tended toward an atypical pain classification with venous pathology at surgery, and fared just as well as those presenting with typical pain.