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Classification of trigeminal neuralgia: clinical, therapeutic, and prognostic implications in a series of 144 patients undergoing microvascular decompression.

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Object:

Trigeminal neuralgia (TN) presents a diagnostic challenge because of the variety of symptoms, findings during microvascular decompression (MVD), and postsurgical outcomes observed among patients who suffer from this disorder. Recently, a new paradigm for classification of TN was proposed, based on the quality of pain. This study represents the first clinical analysis of this paradigm. Methods The authors analyzed 144 consecutive cases involving patients who underwent MVD for TN. Preoperative symptoms were classified into 1 of 2 categories based on the preponderance of shocklike (Type 1 TN) or constant (Type 2 TN) pain. Analysis of clinical characteristics, neurovascular pathology, and postoperative outcome was performed.

Results:

Compared with Type 2 TN, Type 1 TN patients were older, were more likely to have right-sided symptoms, and reported a shorter duration of symptoms prior to evaluation. Previous treatment by percutaneous or radiosurgical procedures was not a predictor of symptoms, surgical findings, or outcome ($p = 0.48$). Type 1 TN was significantly more likely to be associated with arterial compression. Venous or no compression was more common among Type 2 TN patients ($p < 0.01$).

Type 1 TN patients were also more likely to be pain-free immediately after surgery, and less likely to have a recurrence of pain within 2 years ($p < 0.05$). Although a subset of patients progressed from Type 1 to Type 2 TN over time, their pathological and prognostic profiles nevertheless resembled those of Type 1 TN.

Conclusions:

Type 1 and Type 2 TN represent distinct clinical, pathological, and prognostic entities. Classification of patients according to this paradigm should be helpful to determine how best to treat patients with this disorder.