Transformed migraine (TM) is not included in the International Headache Society (IHS) classification of headaches but it has a characteristic history. TM begins in early adulthood as episodic migraine, then evolves to near-daily headache with attenuated associated symptoms of migraine. However, complete migraine attacks can occasionally occur as well. TM may be due to overuse of symptomatic medications to which patients may have become dependent. They may also be refractory to prophylactic medication. TM, therefore, is challenging to treat successfully.

Topiramate has demonstrated efficacy as migraine prophylaxis in small, open-label studies. The exact mechanism of action of topiramate in migraine is not known but is thought to consist of 3 properties: state-dependent inhibition of voltage-gated sodium and calcium channels, inhibition of glutamate-mediated neurotransmission at AMPA/kainate receptors, and enhancement of gabapentin A (GABA_A) receptor-mediated chloride flux.

This study of 14 TM patients, 16 years to 65 years of age, evaluated the efficacy of topiramate in TM. Only patients diagnosed with TM were included in this study, and they had at least 4 headache days or disabling episodes of TM per month. During the 4-week baseline period, patients kept a headache diary and evaluated the severity of their headaches based on a 10-point scale, with 10 being the most severe rating. At week 4, patients received topiramate, which was titrated up to a maximal dose of 100 mg/day bid over 6 weeks. Patients remained on 200 mg topiramate (or the highest tolerated dose) for an additional 6 weeks, and then continued on with treatment at their discretion. During the 6-week maintenance phase, patients continued making entries in their headache diaries.

Response was defined as “improvement,” which was a reduction in severity score of 1 to 5 points from baseline to the end of the maintenance period, and “dramatic improvement,” which was a reduction in severity score of more than 5 points. Those showing no change or an increase in pain were termed “no improvement.”

The results showed that 50% of the participants experienced improvement and 36% experienced dramatic improvement with topiramate. The adverse events were typical of those seen with topiramate in migraine: sleep disturbances, weight loss (mean = 21 pounds), paresthesias, fatigue, and decreased appetite.

The results suggest that further study is warranted of topiramate in TM. Eighty-six percent of the patients in this study showed improvement with typical, minor side effects.

The therapeutic goals for TM are, if not a headache-free state, reduced frequency and severity of the headaches and increased functionality. Future clinical studies should use a composite score incorporating frequency and severity of headaches as well as quality-of-life measures.

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REFERENCES