Headache Toolbox

Topiramate (Topamax) for Migraine Prevention

Migraine and epilepsy share many biologic features, and so not surprisingly certain of the newer antiepileptic drugs have proven to be effective for the prevention of migraine attacks as well as seizures. One of these drugs is topiramate (Topamax), and its successful performance in carefully conducted national studies has led to topiramate receiving the Federal Drug Administration indication for use in migraine prevention.

Precisely how topiramate prevents migraine is unclear, but, generally speaking, it appears to reduce the genetically derived brain hyperexcitability that provokes migraine attacks in susceptible individuals.

As a potent, "brain-active" medication, topiramate is not without potential side effects. Early in therapy topiramate may cause nausea or other gastrointestinal distresses. It also commonly produces an odd "pins and needles" sensation that may involve the hands, feet, or even the face; this side effect is benign, causes no neurologic injury, and is usually transient. More concerning is the drug's potential for causing cognitive disturbance, typically manifested by impairment of recent memory, impaired concentration, or word finding difficulties; while these cognitive side effects occur in a minority of patients and may be minimized by beginning with a low dose and gradually in-

creasing the dosage each week, the "start low/go slow" technique does not totally eliminate the risk. In rare instances, during the first 1 to 2 months of therapy the drug may cause impaired vision by increasing intraocular pressure ("glaucoma"). Topiramate not uncommonly causes weight loss, and the degree of weight reduction tends to correlate with dose and duration of therapy. Finally, the drug may cause carbonated beverages to taste "flat."

Usual dosing instructions for topiramate are as follows:

| Week | Morning (mg) | Bedtime (mg) |
|------|--------------|--------------|
| 1 | 0 | 25* |
| 2 | 25 | 25 |
| 3 | 25 | 50 |
| 4 | 50 | 50 |

^{*1} tablet = 25 mg.

Fifty milligrams twice daily was the dose proven to be the most effective and best tolerated in the clinical research trials conducted. In the individual patient, however, a lower or higher dose may be more appropriate.