

## Dangerous duo: Antiepileptics plus herbals

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Herbals and botanicals may cause seizures or interact with and reduce the efficacy of antiepileptic drugs

**A**ntiepileptic drugs (AEDs)—one of the most frequently prescribed medication classes—are used to manage seizures, epilepsy, pain syndromes, migraines, and psychiatric disorders such as bipolar disorder, anxiety, schizophrenia, and depression. When prescribing AEDs and monitoring patient response, consider possible adverse interactions with complementary and alternative medicines (CAM).

Approximately 40% of Americans use herbals or botanicals,<sup>1</sup> whose pharmacokinetics, efficacy, or safety have not been rigorously studied. When used concurrently, these alternative remedies may reduce AEDs' efficacy, increase the risk of seizures, or cause other neurologic adverse effects.

**Common agents.** In the United States, the most commonly used herbals and botanicals are garlic, ginkgo biloba, soy, melatonin, kava kava, St. John's Wort, saw palmetto, and ginseng.<sup>2</sup> Many first- and second-generation AEDs are known to interact with herbals and botanicals. All first-generation AEDs (such as carbamazepine, valproic acid, phenytoin, phenobarbital, and primidone) are cytochrome P-450 inducers or inhibitors, which means they have the potential to interact with other drugs that undergo hepatic metabolism. Because these interactions are unpredictable, it is important to carefully question your patient about the clinical effect of a prescribed AED.

Moreover, some botanicals—such as black cohosh, water hemlock, ephedra,

kava kava, yohimbine, guarana, and ginkgo seeds—are known to induce seizures, which could negate an AED's efficacy.

**Communication.** When managing psychiatric patients taking AEDs, maintain open communication regarding CAM. If a patient does not show clinical response to an AED or reports an adverse effect, gently inquire about his or her use of herbal remedies. Maintain a nonjudgmental tone when a patient reports using alternative remedies. Several studies have shown that patients often are reluctant to share this information with their physicians<sup>2-4</sup> because they fear the physician may have a negative opinion about CAM.

The key to any patient inquiry regarding herbals is to identify why the patient initially chose the CAM. Doing so might reveal that the patient is not happy with the prescribed therapy, in which case you might be able to lower the risk of an adverse drug interaction by switching to another AED or persuading the patient to discontinue the herbal remedy.

### References

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