

Herbal kava: reports of liver toxicity

Reason for posting: Health Canada advises that products containing kava should not be used.¹ The drug is used in a variety of herbal and homeopathic preparations to induce relaxation, treat anxiety or induce sleep. Health Canada is unaware of any kava-related adverse events in Canada, but the US Food and Drug Administration recently issued a warning letter about 25 reports of serious liver toxicity in Germany and Switzerland, including cases of cirrhosis, hepatitis and liver failure. It also cited a case in the United States of a previously healthy young woman who required a liver transplant after using a kava-containing supplement.²

The drug: Kava lactones, also known as kava pyrones, are derived from the dried root and rhizome of *Piper methysticum*.³ Kava extract is used in traditional recreational drinks in many South Pacific countries.^{3,4} In Western societies, kava is used as an over-the-counter anxiolytic, muscle relaxant, mood enhancer, sedative or treatment for premenstrual syndrome.^{1,2} It is sold under different ingredient names (see box).

A recent meta-analysis and a Cochrane review concluded that kava extract may be more effective than placebo as an anxiolytic in the short term,^{5,6} through a mechanism that is not well understood. Clinical trials of kava preparations have used doses of 70–240 mg of dried extract up to 3 times a day.^{4,7} However, many kava-containing products with drug identification numbers in the Health Canada drug product database contain 2000–3000 mg of extract per tablet.⁸

Several pharmacologic effects of kava have been observed, including platelet inhibition, difficulties with visual accommodation and photosensitivity, and possible dopaminergic antagonist activity. It was therefore recommended that kava not be used in conjunction with anticoagulants, antiplatelets or antipsychotics, or in patients with Parkinson's disease.^{3,10} Kava may also enhance the effects of other centrally acting agents such as benzodiazepines and alcohol.⁹

Long-term use of kava, especially in high doses (400 mg of kava pyrones daily),³ has been associated with the development of flaky, dry, yellow skin (kava dermatopathy) through an unknown mechanism; the effect may be reversible upon cessation of the drug.⁴ Other possible adverse effects include ataxia, hair loss, hearing loss and anorexia.⁴

Health Canada is conducting a safety assessment to determine whether additional action (e.g., product recall) is required regarding kava-containing products. In the meantime, consumers are advised not to use these products.¹

What to do: Physicians are asked to review cases of patients with liver toxicity and report any adverse events that may be related to the use of kava to Health Canada. Patients with signs or symptoms of possible liver disease should be asked about their use of herbal remedies. Also, physicians treating patients for stress, anxiety, insomnia or premenstrual syndrome should ask about self-treatment with herbal remedies and warn about risks related to kava. Physicians practising travel medicine may wish to warn patients (particularly those with liver disease, regular users of alcohol, those with Parkinson's disease or those using benzodiazepines or antipsychotic drugs) who will be visiting areas where kava is used recreationally of the potential exposures and risks.

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References

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The many names of kava¹

ava
ava pepper
ava root
awa
gea
gi
intoxicating pepper
intoxicating long pepper
kao
kava kava
kava root
kavain
kava pepper
kavapipar
kawa
kawa kawa
kawa pepper
kawapeffer
kew
Piper methysticum
Macropiper latifolium
Piper inebrians
maori kava
malohu
maluk
meruk
milik
rauschpfeffer
rhizoma di kava-kava
sakau
tonga
wurzelstock
yagona
yangona
yaqona
yongona