Piper methysticum (Kava)
10/21/11

Statement of the Problem

To determine the efficacy of Kava in the treatment and prevention of suicide, and other closely related mental conditions, including, depression, anxiety, and risk-taking behaviors.

Summary of the relevant literature

Kava is derived from the plant Piper methysticum. It has been known to relieve anxiety, sleeplessness, stress, and insomnia in many cultures for centuries without the sedative effects commonly associated with benzodiazepines (Cawte, 1985; Singh, 1992; Lakhan & Vieira, 2010).

Scientific evidence that supports the use of Kava to alleviate anxiety symptoms includes five double-blind, randomized controlled trials, one randomized open trial, and one observational study. Each of these studies found positive results in using Kava supplements to reduce anxiety symptoms. Volz et al. (1997) conducted a double-blind RCT in which participants were given Kava extract or a placebo over 25 weeks. Participants who were given the Kava extract showed statistically significant improvement over the placebo group on primary and secondary anxiety symptoms on both self-report and physician report measures. Four other RCTs and an observational study supported the results of Volz et al.'s findings (Boerner, Sommer, Berger, Kuhn, Schmidt, Mannel, 2003; Watkins, Connor, Davidson, 2001; Malsch & Kieser, 2001; Cagnacci, Arangino, Renzi, Zanni, Malmusi, & Volpe, 2003; Sarris, Kavanagh, Byrne, Bone, Adams, & Deed, 2009). This research suggests that Kava could be an alternative anxiolytic treatment to benzodiazepines with less of the sedative side effects.

Four RCTs showed that Kava by itself or in combination with St. John's wort showed no statistically significant improvement over placebo in improving anxiety symptoms (Gastpar & Klimm, 2003; Sarris, Kavanagh, Deed, & Bone, 2009; Connor & Davidson, 2002; Jacobs, Bent, Tice, Blackwell, & Cummings, 2005).

Side Effects: There was a consumer advisory warning (FDA, 2002) published on the potential for Kava to cause liver problems, none of the participants (n = 435*)* in the above mentioned studies had any reports of liver problem. Teschke et al. (2008) reported that the risk for liver damage may have been due to poor Kava quality, overdose, and/or co-medication since Kava had been well-tolerated until the first report of liver toxicity in 1998. **However, the scientific community still strongly recommends that Kava not be taken as a regular supplement due to concerns over toxicity (H. Lieberman, personal communication, October, 20, 2011).**

Gaps in the literature

There is a paucity of research on the association between suicidal behavior, depression, and risk-taking and the use of Kava. Kava has been researched primarily in relation to anxiety due to its anxiolytic effects. The PDR for Herbal Medicine (2000) states that Kava is contraindicated for depressed patients because of the increased risk of suicide. One study by Vignier et al. (2011)

found that, among Kanak youth, there was an association between Kava usage and suicidal ideation and behavior. Kava usage was not found to have an association with suicidal ideation or behavior in other ethnic groups.

Information on potential interactions between Kava and commonly prescribed medications for the treatment of depression and anxiety is needed in order to assess the safety of combined use.

Recommendations

Evidence in support of Kava to treat anxiety is mixed. Although it does not produce sedation or have a similar risk in overdose as benzodiazepines, concern about toxicity of the substance precludes recommendation for use as a first line treatment. Due to the complete lack of research examining Kava directly as a suicide prevention agent, use for this purpose cannot be recommended at this time.

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