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[Intervention Review]

Kava extract versus placebo for treating anxiety

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ABSTRACT

Background

Constraints on resources and time often render treatments for anxiety such as psychological interventions impracticable. While synthetic anxiolytic drugs are effective, they are often burdened with adverse events. Other options which are effective and safe are of considerable interest and a welcome addition to the therapeutic repertoire.

Objectives

To assess the effectiveness and safety as reported in rigorous clinical trials of kava extract compared with placebo for treating anxiety.

Search methods

All publications describing (or which might describe) randomised, double-blind, placebo-controlled trials of kava extract for anxiety were sought through electronic searches on EMBASE (1974 to January 2005), MEDLINE (1951 to January 2005), AMED (1985 to January 2005)), CISCOM (inception until August 2002) and Central/CCTR and CCDANCTR (issue 1, 2005). The search terms that were used were kava, kawa, kavain, Piper methysticum and Rauschpfeffer (German common name for Piper methysticum). Additionally, manufacturers of kava preparations and experts on the subject were contacted and asked to contribute published and unpublished material. Hand-searches of a sample of relevant medical journals (Erfahrungsheilkunde 1996 - 2005, Forsch Komplementärmed Klass Naturheilkd 1994 - 2005, Phytomed 1994 - 2005, Alt Comp Ther 1995 - 2005), conference proceedings (e.g. FACT - Focus on Alternative and Complementary Therapies 1996 - 2005) and our own collection of papers were conducted. No restrictions regarding the language of publication were imposed.

Selection criteria

To be included studies were required to be randomised, controlled trials (RCTs), i.e. trials with a randomised generation of allocation sequences, and conducted placebo-controlled and double-blind, i.e. trials with blinding of patients and care providers. Trials using oral preparations containing kava extract as the only component (mono-preparation) were considered. Trials using single constituents of kava extract alone, assessing kava extract as one of several active components in a combination preparation or as a part of a combination therapy were excluded.

Data collection and analysis

Data were extracted systematically according to patient characteristics, interventions and results. Methodological quality of all trials was evaluated using the standard scoring system developed by Jadad and colleagues. The screening of studies, selection, data extraction, validation and the assessment of methodological quality were performed independently by the two reviewers. Disagreements in the evaluation of individual trials were largely due to reading errors and were resolved through discussion.

Main results

Twelve double-blind RCTs (n=700) met the inclusion criteria. The meta-analysis was done on seven studies using the total score on the Hamilton Anxiety (HAM-A) scale as a common outcome measure. The result suggests a significant effect towards a reduction of the HAM-A total score in patients receiving kava extract compared with patients receiving placebo (weighted mean difference: 3.9, 95% confidence interval: 0.1 to 7.7; p = 0.05; n = 380). The results of the five studies that were not submitted to meta-analysis largely support these findings. Adverse events as reported in the reviewed trials were mild, transient and infrequent.

Authors' conclusions

Compared with placebo, kava extract is an effective symptomatic treatment for anxiety although, at present, the size of the effect seems small. The effect lacks robustness and is based on a relatively small sample. The data available from the reviewed studies suggest that kava is relatively safe for short-term treatment (1 to 24 weeks), although more information is required. Rigorous trials with large sample sizes are needed to clarify the existing uncertainties. Also, long-term safety studies of kava are required.

PLAIN LANGUAGE SUMMARY

Kava extract for treating anxiety

Systematic literature searches were conducted to assess the evidence for or against the effectiveness of kava extract for treating anxiety. Twenty-two potentially relevant double-blind, placebo-controlled RCTs were identified. Twelve trials met the inclusion criteria. The meta-analysis of seven trials suggests a significant treatment effect for the total score on the Hamilton Anxiety Scale in favour of kava extract. Few adverse events were reported in the reviewed trials, which were all mild, transient and infrequent. These data imply that, compared with placebo, kava extract might be an effective symptomatic treatment for anxiety although, at present, the size of the effect seems to be small. Rigorous trials with large sample sizes are needed to clarify the existing uncertainties. Particularly long-term safety studies of kava are needed.