Review: evidence is incomplete on the benefits and risks of commonly used herbal medicines


QUESTION: What are the benefits and risks of commonly used herbal medicines?

Data sources
Systematic reviews were identified by searching Medline, EMBASE/Excerpta Medica, CISCOM, AMED, and the Cochrane Library (from inception to October 2000), and by contacting experts.

Study selection
Systematic reviews were selected if they included randomised controlled trials (RCTs) done in humans on ginkgo, St John’s wort, ginseng, echinacea, saw palmetto, or kava.

Data extraction
Data were extracted on the common and manufacturer names and uses of each herbal medicinal product, type and quality of the systematic reviews, sample sizes, and results.

Main results
2 reviews (of adequate and good quality) of ginkgo showed positive effects on memory impairment, although these results are questionable because of the possibility of publication bias. 2 reviews (of adequate to good quality) of ginkgo showed beneficial effects in dementia. 1 adequate quality review of ginkgo for tinnitus also had questionable results because of the lack of rigorous trials. 1 good quality review of ginkgo for intermittent claudication showed that ginkgo led to moderate and probably clinically significant increases in pain-free walking distances. Ginkgo’s adverse effects were usually mild, transient, and reversible.

Several good quality reviews showed that St John’s wort was more effective than placebo for moderate depression. 1 meta-analysis of 14 RCTs showed that St John’s wort was more effective than placebo (relative benefit 1.9, 95% CI 1.2 to 2.8) and similar to tricyclic antidepressants (relative benefit 1.2 CI 1.0 to 1.4) for depressive disorders. However, St John’s wort may interact with several prescription drugs (eg, anticoagulants, oral contraceptives, and antiviral agents), which may have clinically serious consequences.

1 adequate quality review showed that ginseng was not beneficial as a sedative, hypnотic, demulcent, aphrodisiac, antidepressant, or diuretic agent. 1 quality review showed that echinacea may be effective in preventing and treating upper respiratory tract infections, but trial data are not rigorous or conclusive. 1 good quality review showed that saw palmetto might reduce symptoms of benign prostatic hyperplasia (eg, nocturia and peak urinary flow) in the short term. Adverse effects of saw palmetto were rare and mild. 1 adequate quality review showed that kava might have short term effectiveness in treating anxiety; serious adverse effects of kava were rare.

Conclusions
Evidence suggests that St John’s wort may be effective in mild to moderate depression, although the effects may be overestimated. Data from weak studies suggest that echinacea may be effective in preventing and treating upper respiratory tract infections. Saw palmetto may have short term effectiveness in benign prostatic hyperplasia, and kava may have short term effectiveness in anxiety treatment. Data on ginkgo show positive effects for dementia and intermittent claudication, but are questionable for cognitive function and tinnitus. Ginseng is not beneficial for a variety of conditions. Overall, evidence is incomplete on the benefits and risks of these commonly used herbal medicines.