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[Intervention Review]

St John's wort for major depression

Klaus Linde¹, Michael M Berner², Levente Kriston²

¹Institut für Allgemeinmedizin / Institute of General Practice, Technische Universität München / Klinikum rechts der Isar, München, Germany. ²Department of Psychiatry and Psychotherapy, University Medical Center Freiburg, Freiburg im Breisgau, Germany

Contact address: Klaus Linde, Institut für Allgemeinmedizin / Institute of General Practice, Technische Universität München / Klinikum rechts der Isar, Wolfgangstr. 8, München, 81667, Germany. Klaus.Linde@lrz.tu-muenchen.de.

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ABSTRACT

Background

In some countries extracts of the plant *Hypericum perforatum* L. (popularly called St. John's wort) are widely used for treating patients with depressive symptoms.

Objectives

To investigate whether extracts of hypericum are more effective than placebo and as effective as standard antidepressants in the treatment of major depression; and whether they have fewer adverse effects than standard antidepressant drugs.

Search methods

Trials were searched in computerised databases, by checking bibliographies of relevant articles, and by contacting manufacturers and researchers.

Selection criteria

Trials were included if they: (1) were randomised and double-blind; (2) included patients with major depression; (3) compared extracts of St. John's wort with placebo or standard antidepressants; (4) included clinical outcomes assessing depressive symptoms.

Data collection and analysis

At least two independent reviewers extracted information from study reports. The main outcome measure for assessing effectiveness was the responder rate ratio (the relative risk of having a response to treatment). The main outcome measure for adverse effects was the number of patients dropping out due to adverse effects.

Main results

A total of 29 trials (5489 patients) including 18 comparisons with placebo and 17 comparisons with synthetic standard antidepressants met the inclusion criteria. Results of placebo-controlled trials showed marked heterogeneity. In nine larger trials the combined response rate ratio (RR) for hypericum extracts compared with placebo was 1.28 (95% confidence interval (CI), 1.10 to 1.49) and from nine smaller trials was 1.87 (95% CI, 1.22 to 2.87). Results of trials comparing hypericum extracts and standard antidepressants were statistically homogeneous. Compared with tri- or tetracyclic antidepressants and selective serotonin reuptake inhibitors (SSRIs), respectively, RRs were 1.02 (95% CI, 0.90 to 1.15; 5 trials) and 1.00 (95% CI, 0.90 to 1.11; 12 trials). Both in placebo-controlled trials and in comparisons with standard antidepressants, trials from German-speaking countries reported findings more favourable to hypericum. Patients given hypericum extracts dropped out of trials due to adverse effects less frequently than those given older antidepressants (odds ratio (OR) 0.24; 95% CI, 0.13 to 0.46) or SSRIs (OR 0.53, 95% CI, 0.34-0.83).

Authors' conclusions

The available evidence suggests that the hypericum extracts tested in the included trials a) are superior to placebo in patients with major depression; b) are similarly effective as standard antidepressants; c) and have fewer side effects than standard antidepressants. The association of country of origin and precision with effects sizes complicates the interpretation.

PLAIN LANGUAGE SUMMARY

St. John's wort for treating depression.

Depression is characterised by depressed mood and/or loss of interest or pleasure in nearly all activities and a variety of other symptoms for periods longer than two weeks. Extracts of St. John's wort (botanical name *Hypericum perforatum L.*) are prescribed widely for the treatment of depression.

We have reviewed 29 studies in 5489 patients with depression that compared treatment with extracts of St. John's wort for 4 to 12 weeks with placebo treatment or standard antidepressants. The studies came from a variety of countries, tested several different St. John's wort extracts, and mostly included patients suffering from mild to moderately severe symptoms. Overall, the St. John's wort extracts tested in the trials were superior to placebo, similarly effective as standard antidepressants, and had fewer side effects than standard antidepressants. However, findings were more favourable to St. John's wort extracts in studies from German-speaking countries where these products have a long tradition and are often prescribed by physicians, while in studies from other countries St. John's wort extracts seemed less effective. This difference could be due to the inclusion of patients with slightly different types of depression, but it cannot be ruled out that some smaller studies from German-speaking countries were flawed and reported overoptimistic results.

Patients suffering from depressive symptoms who wish to use a St. John's wort product should consult a health professional. Using a St. John's wort extract might be justified, but important issues should be taken into account: St. John's wort products available on the market vary to a great extent. The results of this review apply only to the preparations tested in the studies included, and possibly to extracts with similar characteristics. Side effects of St. John's wort extracts are usually minor and uncommon. However, the effects of other drugs might be significantly compromised.