

Hypericum perforatum L. Extracts (St. John's Wort)
10/21/11

Statement of the Problem

To determine the efficacy of nutritional supplements (Hypericum perforatum L.) 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

Hypericum perforatum L., most widely known as St. John's Wort (SJW), is a medicinal plant with established antidepressant properties. There have been multiple randomized, double-blind studies that have compared SJW to placebo as well as to standard antidepressants in the treatment of depression. In a review of the literature it was found that 16 out of the 18 placebo controlled trials found a decrease in depressive symptoms in the groups receiving SJW (Linde, Berner & Kriston, 2008). The same review analyzed 17 trials comparing SJW to standard antidepressants and found there were no relevant differences in the treatment outcomes between the groups, however; participants using SJW were less likely to drop out of the study and reported less negative side effects (Linde, Berner & Kriston, 2008). A year long safety study was conducted and found that SJW not only has no long term side effects but is also suitable for relapse prevention (Brattstrom, 2009). A more recent study looked at how SJW effected depression relapse and recurrence compared to a placebo and a standard antidepressant. It was found that SJW is more efficient in lowering depression relapse and recurrence rates of responders when compared to an antidepressant and placebo (Singer, Schmidt, Hauke & Stade, 2011). SJW is empirically supported as an effective treatment of depression. SJW has been shown to produce the same results as antidepressants but with fewer side effects. In addition, SJW does not have any long term effects.

There have been few studies looking at the effects of SJW on anxiety. Only four RCTs and two uncontrolled observational studies have been completed looking at treating anxiety with SJW. The published studies present contradictory results (Lakhan & Vieira, 2010).

Side Effects: There is a risk of drug interactions between hypericum and other drugs. An interaction was recently discovered between hypericum and Indinavir, a protease inhibitor used to treat HIV (FDA, 2000). It is possible that hypericum has interactions with other protease inhibitors as well as other types of drugs.

Gaps in the literature

There is no literature looking specifically at SJW as a treatment intervention for suicide or how it affects risk taking behaviors. There is also not sufficient evidence for or against using SJW as a treatment for anxiety. More research is needed to draw a conclusion.

Despite having multiple empirical studies supporting SJW as a treatment of depression it would be helpful to investigate SJW and how it affects suicide.

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

Recommendations

Review of the current literature suggests that SJW is a safe and effective treatment option for major depression, a well known correlate of suicide risk. There is insufficient data on which to base recommendations for treatment of anxiety. Due to the complete lack of research examining SJW directly as a suicide prevention agent, use for this purpose cannot be recommended at this time.

References

- Brattstrom, A. (2009). Long-term effects of St. John's wort (*Hypericum perforatum*) treatment: A 1-year safety study in mild to moderate depression. *Phytomedicine*, *16*, 277-283. doi: 10.1016/j.phymed.2008.12.023
- Lakhan, E., & Vieira, K. (2010) Nutritional and herbal supplements for anxiety and anxiety-related disorders: Systematic review. *Nutrition Journal*, *9*, 1-14.
- Linde, K., Berner, M.M., & Kriston, L. (2008). St. John's wort for major depression. *Cochroane Database of Systematic Reviews* *4*, 1-107. doi: 10.1002/14651858.CD000448.pub3.
- Singer, A., Schmidt, M., Hauke, W., & Stade, K. (2011) Clinical trials with hypericum extracts in patients with depression-Results, comparisons, conclusions for therapy with antidepressants drugs. *Phytomedicine*, *9*, 468-474. doi: 10.1016/j.phymed.2011.02.016.
- U.S. Food and Drug Administration (FDA). (2000). FDA Public Health Advisory. Retrieved from <http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientandProviders/DrugSafetyInformationforHeathcareProfessionals/PublicHealthAdvisories/ucm052238.htm>.

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