



St. John's Wort (hypericum)

Depression is an ever increasing problem in our fast paced, high pressure society. Millions of prescriptions are written every year for anti-depressant medications. The older medications, while effective, had frequent unpleasant side effects in some patients like weight gain and light headedness. The newer medications, known as Selective Serotonin Re-uptake Inhibitors (SSRI's), like *Zoloft*, *Paxil*, *Celexa*, and *Wellbutrin*, seem to be better tolerated from a side effect profile but are much more expensive. Nonetheless, these can also have serious side effects like weight gain, anxiety, and the serotonin syndrome.

The active ingredient in SJW is an extract from the flower of *Hypericum perforatum*. It is Hypericin, a photoactive compound derived from *Hypericum* that is thought to be the active ingredient. It has been used for centuries to treat depression, and is more widely prescribed in Germany than some prescription anti-depressants like Prozac.

The mode of action of *Hypericum* is unknown to date. It is postulated that a weak MAO inhibitor activity is responsible for the clinical effect. Interestingly, Hypericin, the supposed "active" ingredient has no MAO effect. Other theories include: 1) a decrease of serotonin receptor density, and 2) an effect on cytokine production by peripheral blood mononuclear cells, as Hypericin does not cross the blood brain barrier. Also, slow wave sleep is increased with doses of 300mg. 3 times daily.

Studies: Many studies have been done in Europe. A meta-analysis of these studies showed that 61% improved on 300 mg. three times daily, and 75% improved on higher doses, up to 2.7 mg. daily. The majority of these studies were done on mildly depressed individuals. Subjects who had somatic symptoms in addition to mild depression had a better response clinically. It seems that certain subsets of depressed individuals respond better to treatment with *Hypericum*.

Side effects: Usually are only mild and infrequent. *Hypericum* generally has a lower incidence of side effects compared with typical anti-depressant medication. The most common symptoms seem to be dry mouth, dizziness, constipation, and confusion. Even so, less than 1% of people stopped taking *Hypericum* due to side-effects compared with 3% for traditional anti-depressants. There have been reports of **sun sensitivity**, though this was not a problem compared to placebo (dummy pills). **Safety in pregnancy or nursing is unknown.** *Hypericum* **should not be taken together with other anti-depressants** - the side effects may be **lethal** - the **serotonin syndrome** (mental

status changes, tremor, blood pressure and temperature problems, headache, and severe agitation or anxiety) is one of these!

Some newer concerns with **fairly serious medication interactions**:

1. **Decreased effect of anti-rejection medications** used in transplant patients causing loss of the transplanted organs - **DO NOT USE THIS MEDICATION!**
2. **Decreased blood thinning** in those on Coumadin - Use with caution and only with your physician's knowledge so the Prothrombin time may be monitored!
3. **Marked decrease in effect of anti-AIDS medications** called protease inhibitors. **DO NOT USE THIS MEDICATION!**
4. **Decrease in the effectiveness of birth control pills** - no pregnancies reported to date, but breakthrough bleeding occurred. Use with caution, and with another effective method of birth control!
5. **Decreased levels of some other medications** - Lanoxin, Theophylline, Amitriptyline, and others yet to be studied - use with caution and only with your physician's knowledge!

Common Doses: 300 mg. 3 times daily, and increased to 600mg. 3 times daily as needed for clinical response. It is noted that marked variation in quality and content of off the shelf products - buy carefully, and stick to the same brand once you start.

Summary: St John's Wort has become a very popular alternative treatment for depression available from many sources. Combined with other alternative therapies like relaxation, hypnosis, and counseling, hypericum could be a viable treatment option that is lower in cost with a very mild side effect profile for some people. More studies are needed before concerns about efficacy in all types of depression, and safety are answered.

References:

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