



Hypericum: An antidepressant traditional Western herb

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Abstract

Hypericum's complete botanical name is *Hypericum perforatum*. Perforatum is Latin for "perforated". The flowers are a bright yellow orange. It has served as a sedative, painkiller, and analgesic. The blossoms have been added to sweet oil (a refined olive oil used medicinally) for a soothing dressing for cuts." Herbalists credit it with increasing and inducing a sense of well-being. Hypericum is available in tablets, capsules, drops and teas. It is also available as an oil for external use. The oil cannot be recommended for internal use as an antidepressant. In a study of 3,250 patients taking hypericum, only 2.4 percent experienced any side effects at all. The side effects reported tended to be mild. Gastrointestinal irritations accounted for 0.6 percent, allergic reactions for 0.5 percent, tiredness for 0.4 percent, and restlessness for 0.3 percent. It is a rhizomatous perennial herb upto 3 ft. high, distributed in the western Himalayas at altitudes of 3000-10500 ft.

Keywords: *Hypericum*, toxicity, diarrhea, nausea

Introduction

Hypericum is the herb "*Hypericum perforatum*" also known as "St. John's wort" (wort means plant). Hypericum has been used for thousands of years as a medicine. It has a long history of folk use. Dioscorides, the foremost physician of ancient Greece, as well as Pliny (in ancient Rome) and Hippocrates administered St. John's wort in the treatment of many illnesses. In modern herbal medicine, St. John's wort is used first and foremost to treat depression. As the medical studies on hypericum become better known to health care professionals, the use of hypericum may become the first line of treatment in traditional western medicine as well. Hypericum opens whole new avenues of treatment for the eighteen million people of European countries, "who have depression. More than twenty million people in Germany regularly take hypericum for depression. A report on recent medical research shows that this drug may change the way depression is treated in America. (Vagbhata 1993, Hunter 2005)

Hypericum

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"perforated". The leaves of Hypericum when held to the light, reveal translucent dots, giving the impression that leaf is perforated. The dots are not holes in the leaf, but a layer of colorless essential plant oils and resin. The flowers are a bright yellow orange. The petals are peppered with black dots. When the black dots are rubbed between the fingers, the fingers become red. Many herbalists say the translucent "perforations" and the "black-red spots" contain the most active medicinal qualities. This is a plant which grows wild (its' considered a troublesome weed in Colorado and Australia), blooms in summer. This corresponds to the celebration of St. John's Tide. The hypericum flowers, which can cover a field in brilliant yellow blooms, were called St. John's wort because they appeared around St. John's Tide. The stem of Hypericum is unique. The plant has two raised lines down the stem. This is something quite unusual in the plant world. Round or four-square stems are the general rule. It is only *H. perforatum* which these two raised lines, making the stem appear pressed flat (Rodale's Encyclopedia of Herbs, 1987).

Hypericum as Medicine

Its Latin name, *Hypericum perforatum*, is derived from Greek and means "over an apparition," a reference to the belief that the herb was so obnoxious to evil spirits that a whiff of it would cause them to depart. In folk medicine, it has been

used in the treatment of wounds (it has powerful antibacterial and antiviral properties), kidney and lung ailments and depression. Rodale's illustrated Encyclopedia of Herbs reports - "The herb is said to soothe the digestive system. In particular, its ingredients were thought to relieve ulcers and gastritis, and the herb was called on as a folk medicine for diarrhea and nausea. Bruises and haemorrhoids are said to respond to it. It has served as a sedative, painkiller, and analgesic. The blossoms have been added to sweet oil (a refined olive oil used medicinally) for a soothing dressing for cuts." Herbalists credit it with increasing and inducing a sense of well-being. Long before depression was isolated as an illness by traditional western medicine, the symptoms of depression - worry, nervous unrest, sleep disturbances and others were treated in folk medicine by hypericum. Hypericum is currently being medically studied as a treatment for AIDS, several forms of cancer, bed wetting and night terrors in children, skin diseases such as psoriasis, rheumatoid arthritis, peptic ulcers etc.

Scientific description of Hypericum

The drug consists of the dried above-ground part of *Hypericum perforatum* collected shortly before or during the flowering period. It contains not less than 0.04% naphthodianthrones of the hypericin group (so-called total hypericin). Lower parts of the stem contain few active ingredients.

Hypericum extracts contain at least ten components or groups of components that may contribute to the pharmacological effects. The substances most involved in the antidepressant action are thought to be the hypericin and flavonoids.

Studies on Clinical effects

Besides numerous case reports and drug monitoring studies (with more than 5,000 patients) on the efficacy and safety of standardized hypericum preparations, 25 controlled double blind studies (with more than 2000 patients) have been conducted. The major indication was mild to moderate depressive disorders. The studies compared hypericum with placebo and with reference treatments (Imipramine, Amitriptyline, Maprotiline, Sipropramine, Diazepam) shows both depressive symptoms (depressed mood, anxiety, loss of interest, feelings of worthlessness, decreased activity) and secondary symptoms (sleep

disturbances, lack of concentration, romantic complaints) improved significantly.

Pharmaceutical form and dosage

Hypericum is available in tablets, capsules, drops and teas. It is also available as an oil for external use. The oil cannot be recommended for internal use as an antidepressant. The optimum dosage of hypericum, based on the majority of medical studies, is 300 mg of hypericum extract containing 0.3 percent hypericum (an active ingredient of hypericum) three times a day. Small children should take a total of 300 mg of hypericum daily, while larger children should take 600 mg per day. For adolescents, the full adult dose is recommended. One should not be too anxious for an immediate cure as one might expect from aspirin or a decongestant. The best course is to be watchful for possible side effects, take hypericum "as directed" and make an objective evaluation of benefits six weeks after starting the therapy.

The side effects of Hypericum

Hypericum has an excellent safety record during centuries of folk medicine. Recent medical studies confirm this safety. No substance is perfectly safe. Indeed substances which are essential to human life, when ingested in sufficient quantities, very harmful. Even common table salt-a necessary mineral to human existence-is deadly when taken in excess. In exploring side effects, one must compare the dangers with the relative benefits. In both categories, hypericum is impressive.

Some of the most troublesome side effects of prescription antidepressants-reduced sexual drive or dysfunction, adverse interaction with alcohol or other drugs, dry mouth, and headache-were not reported by patients taking Hypericum. In a study of 3,250 patients taking hypericum, only 2.4 percent experienced any side effects at all. The side effects reported tended to be mild. Gastrointestinal irritations accounted for 0.6 percent, allergic reactions for 0.5 percent, tiredness for 0.4 percent, and restlessness for 0.3 percent. As to toxicity, hypericum is safer than aspirin. Five hundred to one thousand people die each year in the United States from aspirin, usually from internal bleeding. Hypericum, by comparison, does not have a single recorded human death in 2,400 years of known



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medicinal use. In fact, the only fatal toxicity known is in certain light-skinned animals, such a sheep, who die not from ingesting large quantities of St. John's wort while grazing, but of exposure to sun after. Hypericum increases the animals' susceptibility to sunlight, and they become sick and sometimes die from extreme sunburn. Medically, its known as phototoxicity the overexposure to light is harmful. This phenomenon, while theoretically possible in humans, has not been documented in the recommended doses for depression. Not a single case of phototoxicity has been reported in human medical studies at depression-dosage levels.

Conclusion

It is described in the wealth of India that Hypericum is known by the Hindi Names- Basant, Balsana, Dendhu by the Himalayan people. It is a

rhizomatous perennial herb upto 3 ft.high, distributed in the western Himalayas at altitudes of 3000-10500 ft. It seems that Hypericum is not mentioned in Ayurvedic texts. Since it is a herb, its knowledge and use can enrich the pharmacopia of Ayurveda. It's identification and pharmacological effects on Ayurvedic principles may be worked out which in turn may help suffering community to a larger extent.

References

Rodale's Illustrated Encyclopedia of Herbs, Rodale Press, 1987. Editors Claire Kowalchik & William Hylton.

John A.A. Hunter, Davidson's Principles and Practice of Medicine, 19th Ed, 2005 ch 22, p1133

Vagbhata, Ashtang Hridaya, Chikitsa sthana, 11thEd,1993, Choukhamba Sanskrit Sansthan, Varanasi

