

The Longwood Herbal Task Force
(<http://www.mcp.edu/herbal/default.htm>) and
The Center for Holistic Pediatric Education and Research
(<http://www.childrenshospital.org/holistic/>)

Clinician Information Summary

VALERIAN

(*Valeriana officinalis*)

SUMMARY

The major modern and historical uses for valerian are as a sedative and anxiolytic, but it is also used to treat “nervous stomach”. Clinical trials have demonstrated that valerian extract is effective in the treatment of mild-to-moderate sleeping disorders and states of restlessness and tension. It significantly improves subjectively recalled sleep quality compared to placebo and shows a favorable adverse effect profile compared with other commonly prescribed sedative hypnotics and anxiolytics. Most studies, however, have been of short duration with small and inadequately defined patient populations. Acute toxicity is limited to rare and mild gastrointestinal upset; animal studies have suggested that valerian may potentiate the effects of alcohol and barbiturates, but no human trials have confirmed these effects. Valerian should not be used within several hours of driving or operating heavy machinery. There are no studies specifically evaluating its safety during pregnancy, lactation or childhood.

POPULAR USES: Sedative hypnotic, anxiolytic, and spasmolytic for nervous stomach; ADHD

CHEMICAL CONSTITUENTS: Over 150 constituents have been identified; none are solely responsible for valerian’s sedative effects. Compounds thought to contribute include the iridoid valepotriates and their breakdown products (baldrinals); the volatile, essential oil including bornyl acetates, valerenic acid, valerenal and valeranone; and the lignan hydroxypinoresinol.

SCIENTIFIC DATA

In vitro: Valerian contains minute amounts of GABA; some constituents bind weakly with CNS GABA receptors, inhibit GABA breakdown and increase GABA concentrations in synaptic clefts.

Valerenic acid, valtrate and valeranone exert spasmolytic effects on guinea pig ileum.

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In animals: In mice, rats and cats, valerian exerts significant sedative and anticonvulsant effects; it potentiates the effect of pentobarbital on sleep in mice and suppresses symptoms of benzodiazepine withdrawal in rats. In rabbits, mice and cats, valerian has coronary dilating and antiarrhythmic effects, increasing coronary blood flow.

In humans: Numerous case reports and randomized placebo-controlled trials support valerian's effectiveness as a remedy for insomnia and anxiety. Herbal combinations containing valerian and other herbs (eg, hops and lemon balm) are as effective as low doses of benzodiazepines, but cause fewer side effects and no morning hangover. No randomized trials have evaluated valerian's effects in treating ADHD, irritable bowel syndrome or specific cardiac disorders.

TOXICITY AND SIDE EFFECTS

Side effects: Allergic reactions to valerian are rare. Acute side effects including nausea, headache and upset stomach have been reported in fewer than 10% of subjects in randomized trials. Valerian is on the Generally Recognized as Safe (GRAS) list. Sudden discontinuation of high doses may lead to withdrawal symptoms such as restlessness, insomnia and vague cardiac disturbances. Valerian may cause sedation and interfere with judgment for three to four hours after use; it should not be taken immediately before driving or operating heavy equipment.

Interactions with other medications: None known. The potential for interactions with barbiturates, benzodiazepines and other psychoactive medications suggests the need for caution in patients combining valerian and these medications.

Contraindications: None known.

Pregnancy and lactation: No clinical studies

Pediatric use: No clinical studies

ADDITIONAL RESOURCES

- HOME: <http://www.mcp.edu/herbal/default.htm>
- Complete Monograph: <http://www.mcp.edu/herbal/valerian/valerian.pdf>
- Patient Fact Sheet: <http://www.mcp.edu/herbal/valerian/valerian.ph.pdf>

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