

Valerian

Valeriana is a well-known Indian traditional medicinal herb with sleep remedy. It has been used over the years to treat nervine and sedative in hysteria, epilepsy, and sedative in nervous anxiety. It has also been used as an aromatic stimulant and reported some distinctive indications, as well as its use for rheumatism, low-grade fevers, and aphrodisiac (Sundaresan et al., 2018).

The chemical composition of valerian includes terpenoids, alkaloids, and lignans. Valerenic acid, which is a sesquiterpenoid constituent of valerian extract and an indicator in standardisation, has a direct partial agonist

action on GABA A receptors (Yuan et al., 2004). Valerian is known to cause a dose-dependent release of neurotransmitters such as gamma-aminobutyric acid (GABA) and also inhibits the enzyme-induced breakdown of GABA in the brain (Ray et al., 2021). In addition, valerenic acid showed tranquilizer and sedative effects in animal experiments as well as a high affinity for GABA A receptors (Benke et al., 2009).

Valerian is reported to have significantly improved sleep quality, the symptoms of state anxiety, and depression (Tammadon et al., 2021). Several clinical studies have reported positive outcomes in terms of the improvement of sleep quality. A placebo-controlled, crossover, randomised clinical trial of 128 volunteers showed that 400 mg of valerian extract administered for three days significantly improved sleep quality ($p < 0.05$) and decreased sleep latency ($p < 0.05$) compared to a placebo (Leathwood et al., 1982). A randomized clinical trial of 405 participants with insomnia reported that the administration of 600 mg of valerian extract before bed for 14 days subjectively improved the participants' quality of sleep (Oxman et al., 2007).

Valerian acts more as a nervous system depressant than as a muscle relaxant to cause its sedative effect (Hattesoehl et al., 2008). There is some research that confirms its usefulness for anxiety. In one German study, 49 patients with anxiety responded to valerian and found it efficacious at a level similar to diazepam (a prescription benzodiazepine anxiolytic, sold in the US as Valium), and valerian was perceived to be superior when considering the risk–benefit ratio (Panijel, 1985). A more recent trial also revealed that valerian was effective in reducing symptoms of anxiety in patients with adjustment disorder with anxious mood (Bourin et al., 1997). These findings are preliminary, but suggest that valerian may offer some benefits in treating symptoms of anxiety.

NOTES

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