

The Effects of Sansoninto on the Insomnia in Socially Isolated Mice

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Abstract

Sansoninto (SAT) is a hypnotic herbal medicine used for individuals with a sleeping disorder caused by exhaustion. We have evaluated the effects of SAT on socially isolated mice with insomnia since there has been no report of such testing conducted. Four-week old, male ICR mice were used for this study. They were kept either in an independent, isolated rearing or in a group rearing for nine weeks. Administering 730 mg/kg of SAT in their drinking water each day for seven days, then we investigated their electroencephalogram and electromyogram, the locomotor activities for 24 hours, and the corticosterone concentration in plasma for evaluating insomnia and behavioral changes. Socially isolated mice showed higher locomotor activities during the lighted period than the group-housed mice. Proceeding SAT use, they showed a sign of effect in the amount of activity. Awake-time of the subjects under the isolated rearing increased for both lighted and unlighted periods. NREM sleep time shortened, but REM sleep time showed no changes. SAT showed improvements in awake-time and NREM sleep time. Plasma corticosterone concentration increased for the isolated, and was showed improvements after the SAT treatment. Socially isolated mice showed higher locomotor activities during the day, and their amount of sleep time were shorter than those of group rearing. Stress load seems to be the culprit for the difference found. SAT reduced the motor activity on this test and prolonged the length of sleeping period; thus, it suggests that SAT has positive effects on insomnia from surrounding environments.

Key words: Herbal Medicine, Sansoninto, Isolated stress, Insomnia, Mice