(우수논문상-1)

Anxiolytic-Like Effects of Ginsenosides on the Elevated Plus-Maze Model in Mice

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Abstract

This study was performed to investigate the anxiolytic-like effects of ginsenosides Rb1, Rg1, Rg3-R and Rg2-S in elevated plus-maze model. Futhermore, the anxiolytic-effects of Rb1, Rg1, Rg3-R and Rg3-S were compared to a well-known active anxiolytic drug (diazepam). The ginsenoside Rb1 (25 and 50 mg/kg) significantly increased the number of open arm entries and the time spent on the open arm, compared with that of the control. Ginsenoside Rg1 (50 mg/kg) also significantly increased the number of open arm entries and the time spent on the open arm. Ginsenosides Rg3-R and Rg3-S did not increase the number of open arm entries or the time spent on the open arm. On the other hand, ginsenoside Rb1 (25 and 50 mg/kg) decreased locomotor activity in a manner similar to diazepam. These data indicate that ginsenoside Rb1 and Rg1 have anxiolytic-like effects in this model.