Abstract

Introduction: H1 receptors mediate actions in brain activity, and antihistamines such as chlorpheniramine (CPA) act as H1 antagonists. Objective: This study investigated the effects of chronic treatment with CPA on anxiety and emotional memory in mice in the elevated plus-maze (EPM). Method: Male Swiss albino mice received chronic treatment with saline or CPA for 15 days. After this, the test was performed on two consecutive days. In Trial 1, mice received an injection of saline or CPA, and 40 minutes later they were exposed to the EPM. Twenty-four hours later, the mice received injections again and were retested. Results: Results showed no effects on anxiety or locomotor activity. During trial 2, open-arm exploration diminished in mice treated only with CPA with a dosage of 16 mg/kg (ANOVA, SNK<0.05). Conclusion: Results suggest that the aversive information obtained in the open arms in Trial 1 was remembered by the animals which were chronically treated with CPA (16mg/kg).

Keywords

Anxiety, Chlorpheniramine, Maze learning, Memory.