



Short communication

Central effect of histamine in a rat model of acute trigeminal pain

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Abstract:

In conscious rats implanted with an intracerebroventricular (*icv*) cannula, effect of *icv* injections of histamine, chlorpheniramine (H_1 -receptor antagonist) and ranitidine (H_2 -receptor blocker) was investigated in a rat model of acute trigeminal pain. Acute trigeminal pain was induced by putting a drop of 5 M NaCl solution on the corneal surface of the eye and the numbers of eye wipes were counted during the first 30 s. Histamine (20, 40 μ g) and chlorpheniramine (80 μ g) significantly decreased the numbers of eye wipes. Ranitidine alone had no effect. Pretreatment with chlorpheniramine did not change the histamine-induced analgesia, whereas the histamine effect on pain was inhibited with ranitidine pretreatment. These results indicate that the brain histamine, through central H_2 receptors, may be involved in the modulation of the acute trigeminal pain in rats.

Key words:

brain, histamine, acute trigeminal pain, rats
