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Editorial

Significance of H1 Antihistamines in Preventing Morning Sickness

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Abstract

This research clear about the mechanism of preventing motion sickness on giving H1 antihistamines also about its mechanism.

Keywords: Antihistamines; Antimuscarinic; Motion Sickness; Histamines

Action of H1 antihistamines

First generation antihistamines easily crosses the blood brain barrier and antagonize with H1 receptor [1]. Pharmacological action H1 antihistamine is 4 to 6 hours [2].

H1 antihistamines are metabolized in liver using cytochrome P450 [3].

Action produced by antihistamine to prevent morning sickness

Parietal cells in the gastrointestinal tract secrete hydrochloric acid. They undergo regulation by acetylcholine, gastrin, and also histamine [4]. Histamine is released from enterochromaffin-like (ECL) cells. When histamine binds to the H-2 receptors on parietal cells, cyclic adenosine monophosphate (cAMP) increases, inducing protein kinase A. This action then leads to [5] phosphorylation of the proteins that take part in the transport of hydrogen ions. Thus increased histamine leads to increased stomach acid, e.g., HCl secretion [6].

The use of antihistamines specific to the H-2 receptor blocks the entire process and reduces stomach acid secretion.

As H1 antihistamine can antagonize H1 and H3 receptor present in vestibular system in brain so they can prevent motion sickness, vomiting in pregnancy and have appetite stimulating effect (according to above observation) and can also help in parkinsonism in reducing tremor.

Discussion

In this we discussed about the mechanism of H1 antihistamines in preventing motion sickness.

Conclusion

H1 antihistamines crosses blood brain barrier and prevent motion sickness by reducing release of histamine and ghrelin.

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