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A Systematic Review On Pharmacokinetic, Pharmacodynamic, Interaction with Other Drugs, Toxicity and Clinical Effectiveness of Anti Histamine Drug (H1 Antagonist)

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Abstract: HI antagonist antihistamines are a family of therapeutic drugs that are extensively used and clinically significant. They are intended to prevent and treat a wide range of allergic responses. Histamine is a key player in the physiological reactions that occur during allergen exposure, including bronchoconstriction, vasodilation, increased capillary permeability, and sensory neuron activation, all of which contribute to the typical symptoms of allergic illness. These drugs efficiently lessen symptoms, including sneezing, itching, rhinorrhea, urticaria, and conjunctival irritation, by specifically inhibiting HI receptors on different target tissues, resulting in quick symptom alleviation.

First-generation (sedating) and second-generation (non-sedating) antihistamines are the two major categories into which these medications are divided, mostly on the basis of their capacity to pass across the blood-brain barrier. Triprolidine and diphenhydramine are examples of first-generation H1 antagonists that easily enter the central nervous system and cause severe sleepiness, cognitive slowness, and anticholinergic side effects. Because of their quick start-up effect, they are nonetheless helpful in acute allergy situations, despite these disadvantages. Second-generation antihistamines, such as cetirizine and levocetirizine, on the other hand, show little penetration of the central nervous system and great selectivity for peripheral H1 receptors. They are therefore ideal for long-term treatment in patients with allergic rhinitis, chronic urticaria, and other persistent hypersensitivity disorders since they produce little to no drowsiness.

The foundation of contemporary pharmacological treatment of allergic illnesses is made up of H1 antihistamines, which are safe and effective in a variety of clinical contexts.

Keywords: Anti-Histamine, H1antagonist, Diphenhydramine, Cetirizine , Pharmacokinetic, Pharmacodynamic, Interaction with other drug, Toxocity, Clinical effectiveness





