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## Antiallergic Effects of Mequitazine. I. In Vitro Experiments.

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The *in vitro* antiallergic effects of mequitazine were investigated. In the isolated trachea and lung parenchyma of guinea pigs, mequitazine showed a potent antagonistic action against contraction induced by histamine, acetylcholine and leukotriene D<sub>4</sub>. The Schultz-Dale reaction and Ca<sup>2+</sup>-induced contraction of the isolated guinea pig trachea were slightly inhibited. Immunological and non-immunological release of mediators from rat peritoneal cells, human leukocytes and lung fragments were inhibited by mequitazine.

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## Antiallergic Effects of Mequitazine. II. In Vivo Experiments.

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The *in vivo* antiallergic effects of mequitazine ware investigated. Mequitazine in doses of 2 and 5 mg/kg given p.o. inhibited the 48-hr PCA dose-dependently. The experimental asthma induced by i.v. injection of antigen into passively sensitized guinea pigs was fairly inhibited by 5 mg/kg of mequitazine administered p.o. The experimental asthma induced by aerosolized antigen was also fairly inhibited by 5 mg/kg of mequitazine given p.o.

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## In Vitro and in Vivo Antigen-Induced Release of High-Molecular Weight Neutrophil Chemotactic Activity from Human Nasal Tissue.

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High molecular weight neutrophil chemotactic activity has been identified in resected human nasal polyps, inferior turbinates, and nasal secretions following antigen challenge. The estimated molecular weight, by gel filtration chromatography, was approximately 600,000. However, a heterogeneity of molecular weight in some patients was recognized. Our results suggest a possible role for high molecular weight neutrophil chemotactic activity in the pathogenesis of hypersensitivity in the human nasal cavity.