Learning unit: H₁ antihistamines

Impact of the learning unit

 H_1 antihistamines are indispensable drugs in the treatment of allergies. They block histamine H_1 receptors, preventing the major mediator of allergic reactions - histamine.

Relevant terms

histamine receptors antihistamines inverse antagonism

- H₁ antihistamines
 - H₁ antihistamines of 1st generation bisulepin dimetinden promethazine moxastine
 - H₁ antihistamines of 2nd generation cetirizine loratadine azelastine levocabastine
 - H₁ antihistamines of 3rd generation levocetirizine desloratadine bilastine rupatadine
- H₃ antihistamines

betahistine

paradoxical stimulation

Learning outcomes

Student knows the principles of antagonizing the effects of histamine.

Student will present examples of antihistamines of the 1st - 3rd generation and example of H3 antihistamines (betahistine).

Student knows the main differences between antihistamines 1st, 2nd and 3rd generation.

Student knows basic pharmacological profile (mode of action, unwanted effects, indications and contraindications) of antihistamines.

Recommended study materials

RITTER, James, R. J. FLOWER, Graeme HENDERSON, Yoon Kong LOKE, David J. MACEWAN a H. P. RANG. *Rang and Dale's pharmacology*. Ninth edition. Edinburgh: Elsevier, 2020. xvi, 789. ISBN 9780702074486.

Study materials in IS aVLFA0822p and aVLFA0822c.

Exam questions

Special pharmacology: 21. H₁ antihistamines *Essential drugs:* cetirizine, betahistine