Learning unit: H_1 antihistamines

Impact of the learning unit

H_1 antihistamines are indispensable drugs in the treatment of allergies. They block histamine H1 receptors, preventing the major mediator of allergic reactions - histamine.

Important terms

histamine receptors
antihistamines
- H_1 antihistamines
  - H_1 antihistamines of 1st generation
    - dimetinden
    - promethazine
    - moxastine
    - ketotifen
  - H_1 antihistamines of 2nd generation
    - cetirizine
    - loratadine
    - fexofenadine
    - azelastine
    - levocabastine
  - H_1 antihistamines of 3rd generation
    - levocetirizine
    - desloratadine
    - bilastine
    - rupatadine
- H_3 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

Rang & Dale's Pharmacology E - Book, Humphrey Rang 8th edition, 2016 - chapter 17. Local hormones 1: histamine and the biologically active lipids, Histamine, pp. 212-213; chapter 26. Anti-inflammatory and immunosuppressant drugs, Antagonists of histamine, pp. 331-333

Study materials in IS aVLFA0822p and aVLFA0822c.

Exam questions

Special pharmacology: H_1 antihistamines
Essential drugs: bisulepine/cetirizine, moxastine, betahistine