

Title of the learning unit: Drugs affecting diuresis

Impact of the learning unit:

Gaining knowledge of how diuresis can be pharmacologically affected, what pharmacotherapeutic goals and what side effects can be expected. Student knows the indications and contraindications, advantages and disadvantages of the use of this drug group in the pharmacotherapy of cardiovascular and other diseases.

Important terms

diuretics

thiazide diuretics (decreased diuretic effect in renal insufficiency)

hydrochlorothiazide

chlortalidone

indapamide

metipamide

loop diuretics

furosemide

potassium-sparing diuretics

amiloride

aldosterone receptor antagonists

spironolactone

carboanhydrase inhibitors

acetazolamide

glaucoma, acid-base disorders

osmotic diuretics

mannitol

hypokalaemia, hyperkalaemia, disorders of the acid-base balance

Learning outcomes

Student describes the transport mechanisms of tubular resorption in the kidneys and the mechanisms of action by which individual groups of diuretics affect the diuresis.

Student knows the basic pharmacological profile (mechanism of action, side effects, indications and contraindications) of diuretics.

Student knows the combination potential of diuretics within the group of antihypertensive drugs.

Study literature

Rang & Dale's Pharmacology E - Book, Humphrey Rang 8th edition, 2016, chapter 22, pages 361-364.

Study materials for courses aVLFA0822p and aVLFA0822c.

Exam questions

Special pharmacology: Antihypertensives – diuretics and aldosterone antagonists

Essential drugs: hydrochlorothiazide/indapamide, furosemide, spironolactone