

Learning unit: Hypnosedatives

Impact of the learning unit:

Sedatives are drugs used to induce sedation and hypnotics for treatment of insomnia. The border between hypnotics and sedatives is not completely sharp. Hypnosedatives are a heterogeneous group of substances (involving e.g. clomethiazole, benzodiazepines or so called Z-substances) with various mechanisms of action. The knowledge of these substances is considered to be the basic knowledge of each student of medicine.

Important terms

benzodiazepines
midazolam

„Z“ substances
zopiclone
zolpidem
zaleplon

antidepressant drugs used for treatment of insomnia
trazodone
agomelatine
mirtazapine

drugs affecting circadian rhythms
melatonin
ramelteon

H₁ antihistamines (I. generation)
promethazine

medicinal herbs as hypnosedatives

dependency on hypnosedatives

Learning outcomes

Student can describe substances of the individual groups and mechanisms of their action.

Student knows indications of hypnosedatives.

Student knows requirements for an „ideal“ hypnotic drug.

Student knows risks of long-term use of hypnosedatives.

Recommended study materials:

Rang & Dale's Pharmacology, 8th edition, 2016

Chapter 44: Anxiolytic and hypnotic drugs, pp. 536-545; Chapter 47: Antidepressant drugs, pp. 570-588

Study materials of the course aVLFA0822c and aVLFA0822p

Exam questions

Special pharmacology: Hypnosedatives, anxiolytics

„Essential“ drugs: diazepam, midazolam