Learning unit: Adverse effects of drugs

Impact of the learning unit:

Pharmacotherapy is associated with the risk of adverse effects. Knowing their mechanisms of induction, physicians can anticipate, identify, treat, and sometimes also prevent them.

Relevant terms

acute toxicity	
adverse effects	s type
А	
В	
	allergy (hypersensitivity)
	idiosyncratic reaction
С	
	chronic toxicity
D	
	teratogenicity
	embryotoxicity
	carcinogenicity
	mutagenicity
E	
	rebound effect
serious adverse event	
unexpected adverse event	
pharmacovigilance	

Learning outcomes

Student can differ between side and adverse effects. Student is able to characterize the types of adverse effects according to their mechanism of induction, give examples and their treatment or prevention. Student explains the basis of drug allergy and idiosyncratic reaction and gives examples. Student explains the terms teratogenicity, carcinogenicity, and mutagenicity. Student can explain, from which stage of drug research and development this safety information comes from and how is the drug safety profile investigated. Student defines pharmacovigilance and can explain the meaning of "serious" and "unsuspected" adverse event.

Information sources

Rang & Dale's Pharmacology, 8th edition, 2016, chapter 11, pp. 137-139, chapter 57, pp. 692-702

Study materials for courses aVLFA0721p and aVLFA0721c.

Exam questions

General pharmacology: 22. Adverse drug reactions (types, categories, examples)