

Learning unit: Drugs affecting haemostasis

Relevant terms

anticoagulants

- interfering directly with the process of haemocoagulation
 - heparin and its derivatives
 - unfractionated heparin (UFH)
 - low molecular weight heparin (LMWH)
 - **dalteparin**
 - **enoxaparin**
 - **nadroparin**
 - protamine sulfate
 - HIT
 - aPTT
 - thrombin inhibitors
 - **dabigatran**
 - direct factor Xa inhibitors
 - **rivaroxaban**
 - **apixaban**
 - **edoxaban**
 - specific reversal agents for gatrans and xabans
- vitamin K antagonists
 - warfarin
 - INR

fibrinolytics / thrombolytics

- **alteplase**
- **reteplase**
- **tenecteplase**

antifibrinolytics

- tranexamic acid
- aminomethylbenzoic acid

antiplatelet agents

- COX inhibitors
 - ASA
 - indobufen
- PDE inhibitors

- drugs inhibiting the formation of fibrinogen bridges between platelets
 - antagonists of P2Y₁₂ purinergic receptor for ADP
 - thienopyridines
 - clopidogrel
 - prasugrel
 - non-thienopyridines
 - ticagrelor
 - cangrelor
 - antagonists of glycoprotein IIb / IIIa receptor for fibrinogen
 - eptifibatide

venoactive drugs

- sulodexide
- naftidrofuryl
- cilostazol
- pentoxifylline

haemostatics

- systemic
 - with vasoconstrictor effect
 - vasopressin derivatives (terlipressin, desmopressin)
 - without vasoconstrictor effect
 - etamsylate
- local
 - carboxycellulose
 - fibrin sealant
 - bi-component tissue adhesives (fibrinogen + aprotinin with thrombin)
 - gelatin, gelatin sponge

antianaemics

- iron
 - iron (II) salts - ferrous sulfate, fumarate, gluconate
 - iron (III) salts - ferric complexes
 - administration routes (oral, parenteral)
- vitamin B₁₂
- folic acid
- haemopoietic growth factors
 - erythropoietin
 - epoetin alfa, beta, zeta
 - darbepoetin

Learning outcomes

Student knows to name the various drug groups affecting haemostasis.

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

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

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

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

Study literature

Rang & Dale's Pharmacology 9th edition, 2020, Chapters 25 and 26

Study materials in the IS for subjects aVLFA0822c and aVLFA0822p

Exam questions

Special pharmacology: 57. Antiplatelet drugs, antianaemics, 58. Fibrinolytics and antifibrinolytics, haemostatics, 59. Anticoagulants

“Essential” drugs: 20. dabigatran, 29. enoxaparin, 56. clopidogrel, 96. rivaroxaban, 111. warfarin