

Thrombotic disease and its consequences are worldwide one of the leading causes of death. There are prescribed anticoagulants for treatment and prevention.

Currently these prescribed drugs – cumarins, unfractionated and fractioned heparins, which have many adverse effects are tried to be replaced.

This review is focused on summary informations about two new anticoagulants drug – direct inhibitor of Xa (rivaroxaban) and direct thrombin inhibitor (dabigatran), which could substitute currently used drugs in future.

These new substances were clinical tested, where proved safety and efficiency.

In these days their indication allow for patients after knee and hip joint replacement.

Advantages of rivaroxaban and dabigatran:

- per os application once a day
- predictable pharmacokinetics and therapeutic response
- low potential of drug interaction
- no needs of monitoring of coagulation

Disadvantages of rivaroxaban and dabigatran:

- limited experience yet
- significant financial cost
- unknown antidote

In the future these drug could be used for other indications.