Haemocoagulation versus anticoagulation

TFPI:

- Even physiologically, coagulation and anticoagulation processes are constantly taking place in the body (e.g. micro- and macro-traumas, which we do not notice at all).
- Hemocoagulation and anticoagulation must be in reasonable balance. It cannot be said that coagulation is more important and vice versa (however, when studying, there is often less strength left for anticoagulation).
- An imbalance in one direction or the other can quickly be fatal (bleeding, thrombosis/embolism, ischemic events – heart attack, stroke).

Comparison of basic pro- and anticoagulant mechanisms

Coagulation	Anticoagulation
COAGULATION FACTORS ▪ Plasma proteins ▪ Ca^{2+} ▪ Phospholipids	ANTICOAGULATION FACTORS ▪ endothelial surface: ▪ heparan sulfate proteoglycan (HSPG) ▪ antithrombin III ▪ thrombomodulin ▪ protein C and S ▪ tissue factor pathway inhibitor (TFPI=Tissue Factor Pathway Inhibitor)
TRIGGER ▪ Damaged endothelium ▪ Slowed blood flow ▪ Tissue thromboplastin	INHIBITORS ▪ Intact endothelium ▪ Conserved blood flow

The table looks too trivial. But there are a lot of serious pathophysiological mechanisms in it, so it pays to know and develop it.

Links

Related articles

- Hemocoagulation
- Hemocoagulation versus anticoagulation
- Blood coagulation test
- Anticoagulants
  - Warfarin
  - Heparin