

Trombosis dan Pemeriksaan Laboratorium



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Yogyakarta

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Deficiency of anticoagulant

Deficiency protein C

Deficiency of protein S

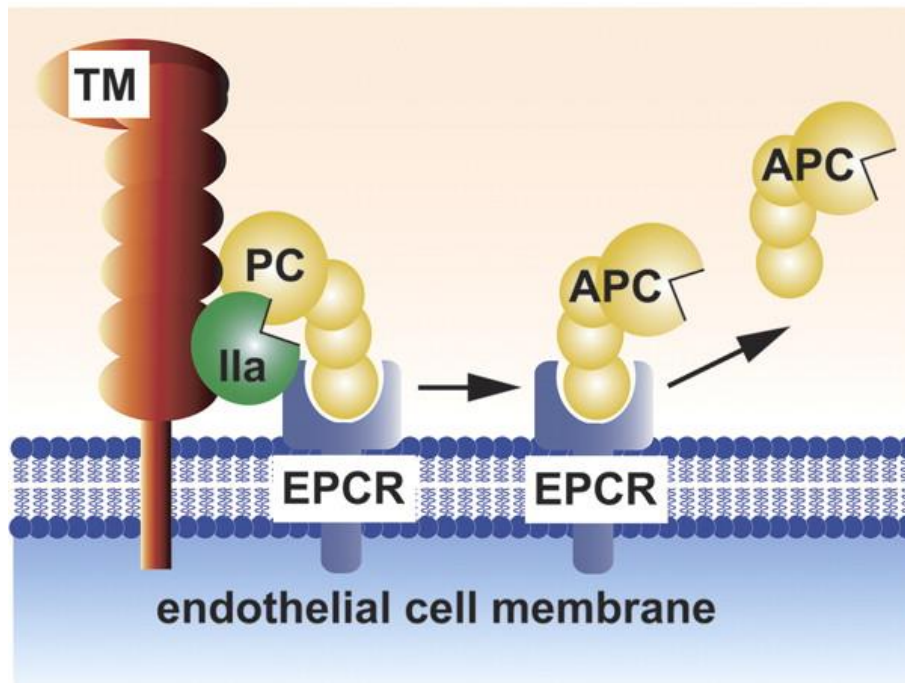
Deficiency of antithrombin



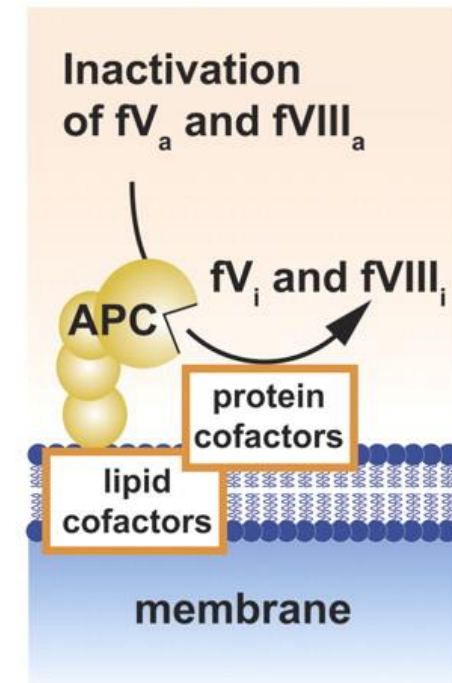
THROMBOSIS

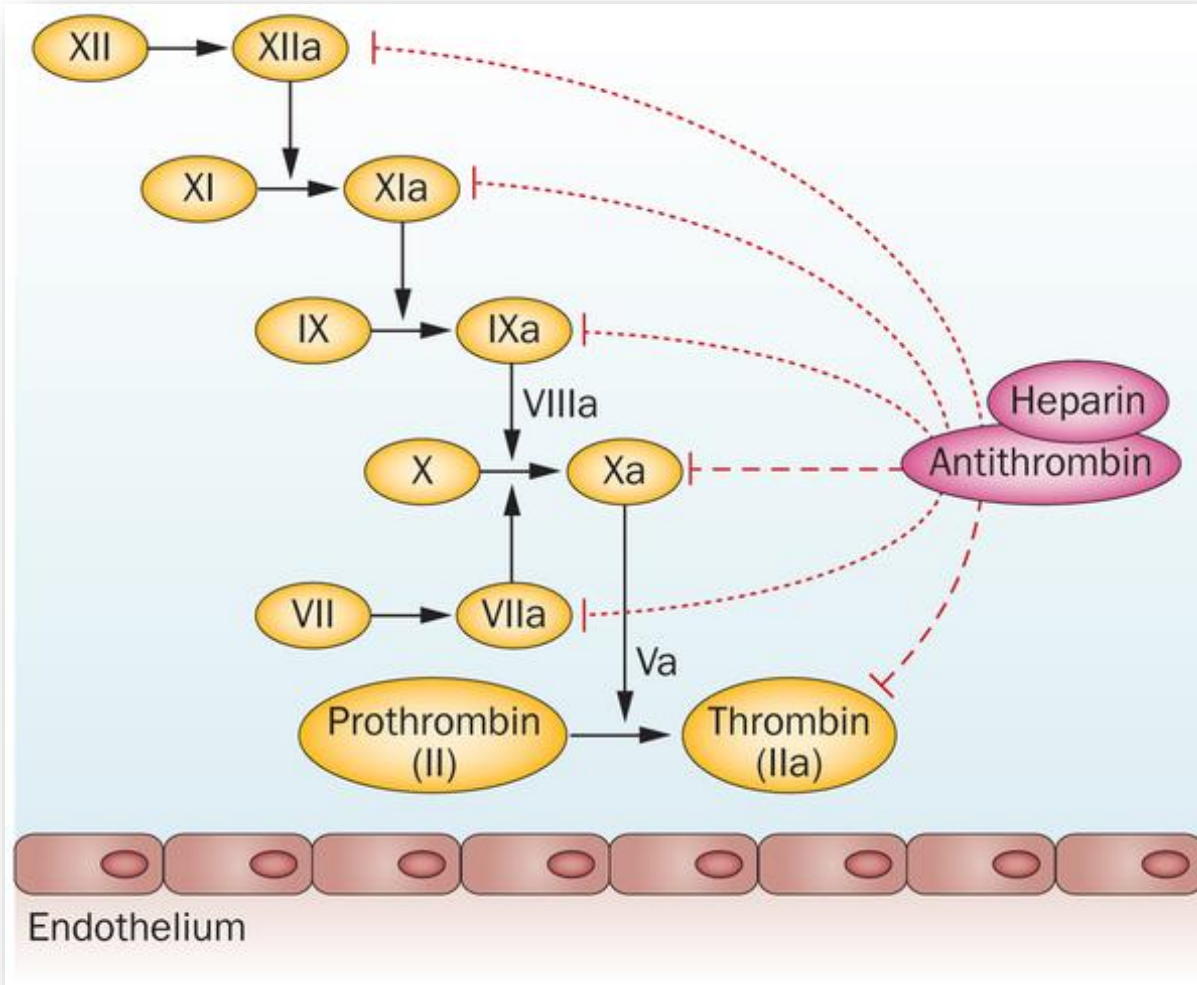
Anticoagulation activity of protein C and S

A Protein C Activation



B APC Anticoagulant Activity





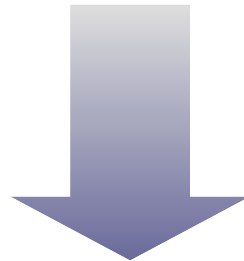
1 Bleeding

- **PT : normal**
- **APTT : normal**
- **TT : normal**
- **Platelet count : normal**



- **Disorder of platelet function**
- **Vascular disorder of haemostasis**
- **Mild coagulation disorder that is below the sensitivity of routine test**

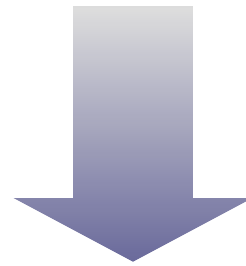
- PT : >
- APTT : normal
- TT : normal
- Platelet count : normal



- **The rare congenital F. VII deficiency**
- **At the start of oral anticoagulant therapy**



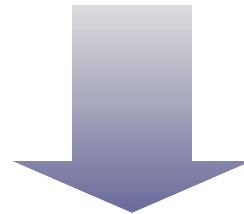
- **PT : >>**
- **APTT : >>**
- **TT : normal**
- **Platelet count : normal**



- **Lack of vitamin K**
- **Liver disease**
- **Rare congenital defects of extrinsic & intrinsic factors**
- **Administration of oral anticoagulant drugs**



- **PT : normal**
- **APTT : >>**
- **TT : normal**
- **Platelet count : normal**



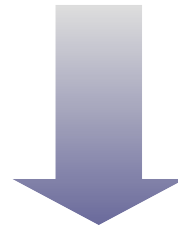
- **Congenital deficiencies or defects of the intrinsic pathway**
- **von Willebrand disease, when it is usually associated with a prolonged bleeding time**
- **In the presence of circulating inhibitors**
- **Heparin treatment or contamination**

- PT : >>
- APTT : >>
- TT : >>
- Platelet count : normal



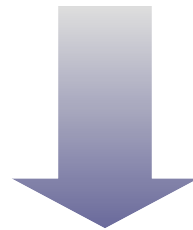
- In the presence of heparin
- In hypo- and dys-fibrinogenemias
- In some cases of liver disease
- In systemic hyperfibrinolysis

- **PT : normal**
- **APTT : normal**
- **TT : normal**
- **Platelet count : low**



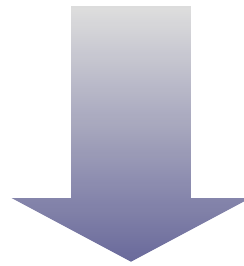
- **ITP**
- **Peripheral platelet destructions**

- PT : >>
- APTT : >>
- TT : normal
- Platelet count : low



- **After massive transfusion with stored blood which contain adequate of fibrinogen but does not contain F. VIII or V or platelets**
- **Some cases of chronic liver disease (Cirrhosis)**

- PT : >>
- APTT : >>
- TT : >>
- Platelet count : low



- Acute Disseminated Intravascular Coagulation (DIC)
- Some cases of acute liver disease with DIC



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THANK YOU