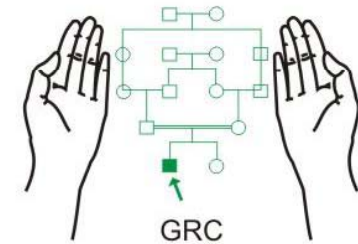


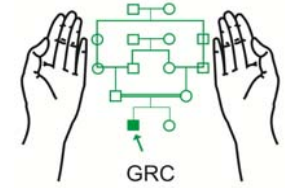
DEEP VEIN THROMBOSIS (DVT)

Maj Gen (R) Suhaib Ahmed, HI (M)
MBBS; MCPS; FCPS; PhD (London)

Genetics Resource Centre (GRC)

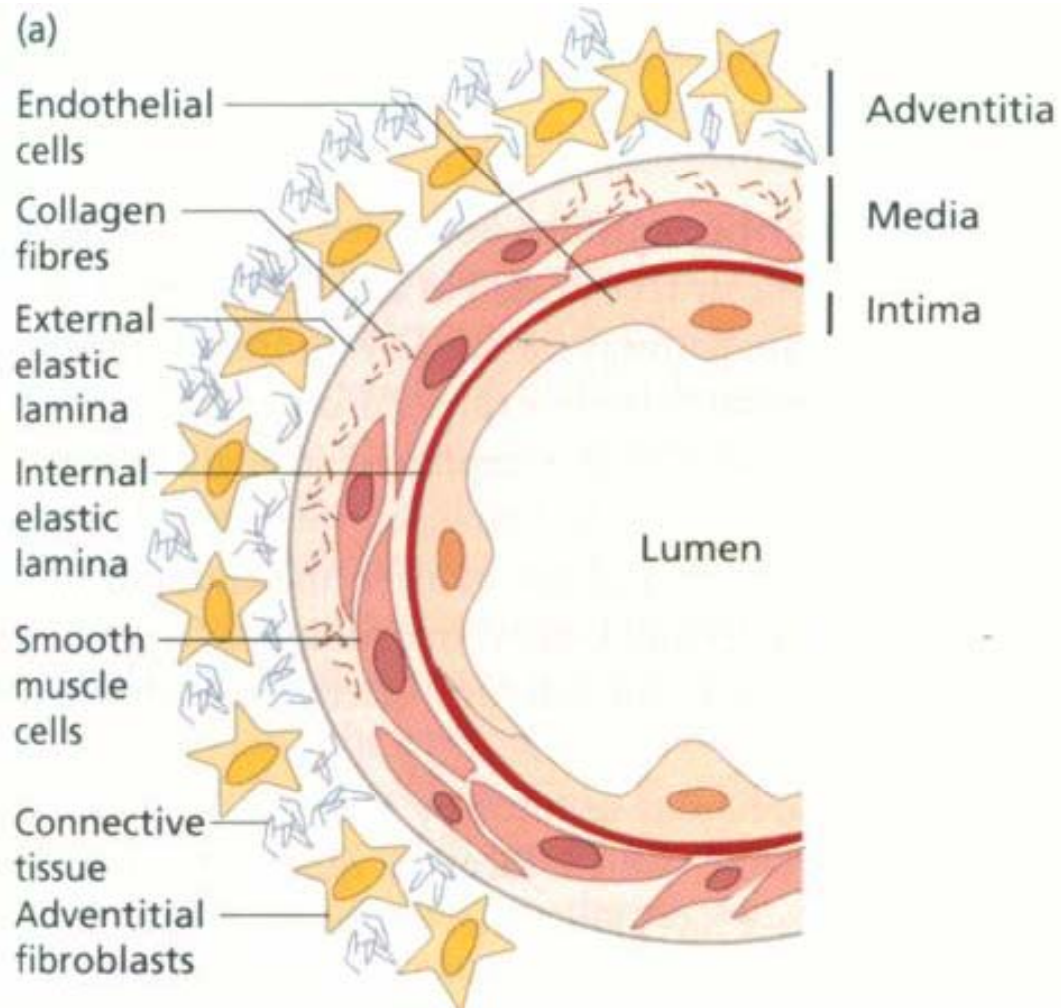
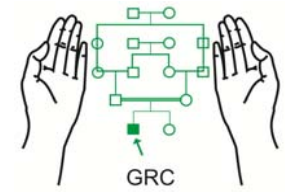


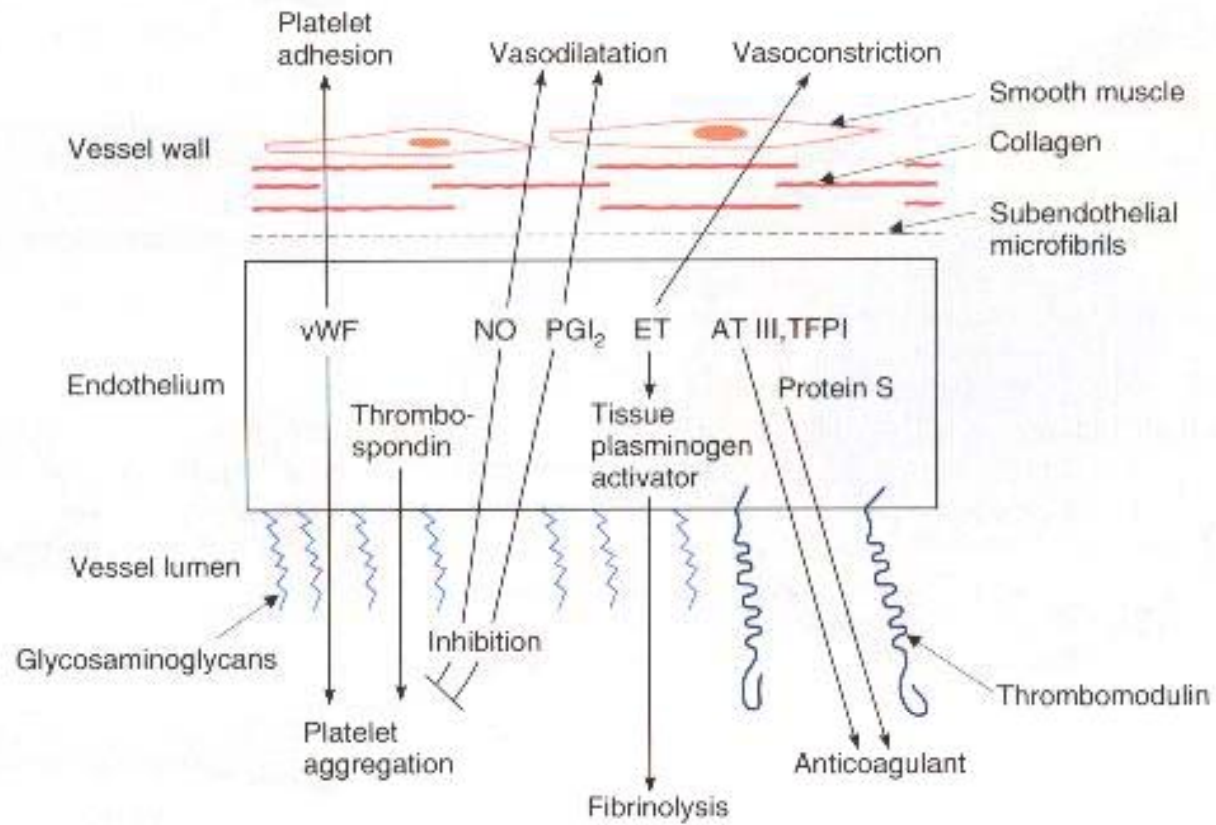
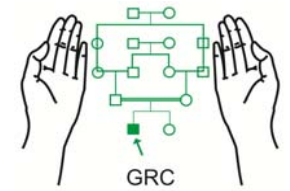
www.grcpk.com

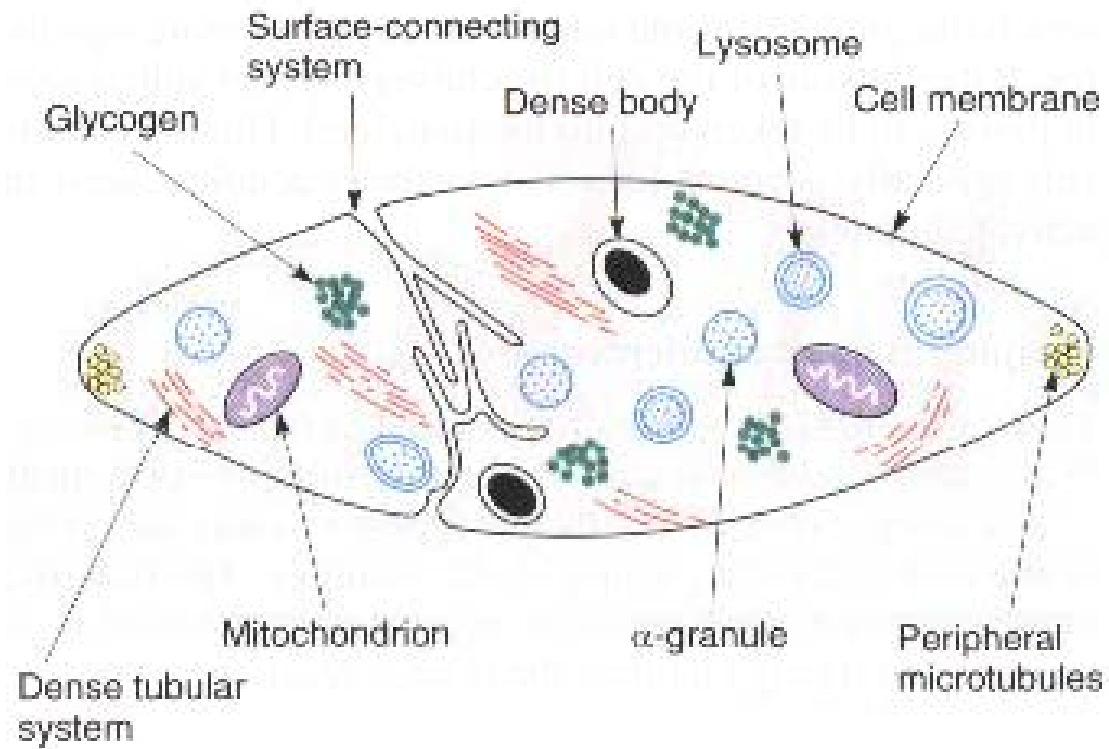
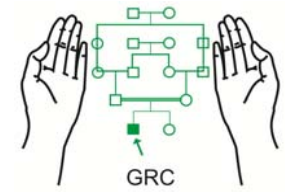


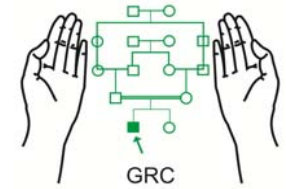
Haemostatic System

- Blood Vessel
- Platelets
- Coagulation System
- Fibrinolytic System

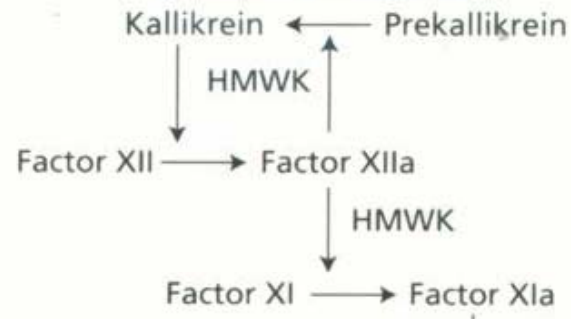




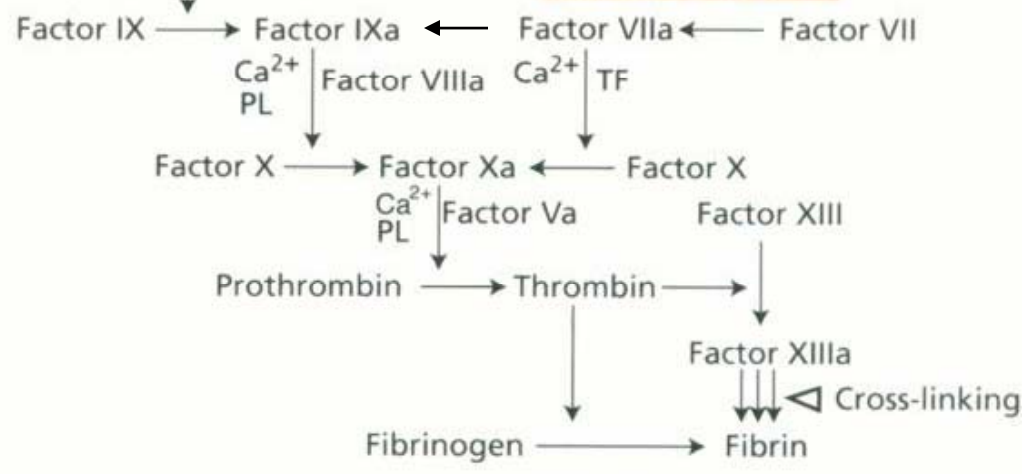


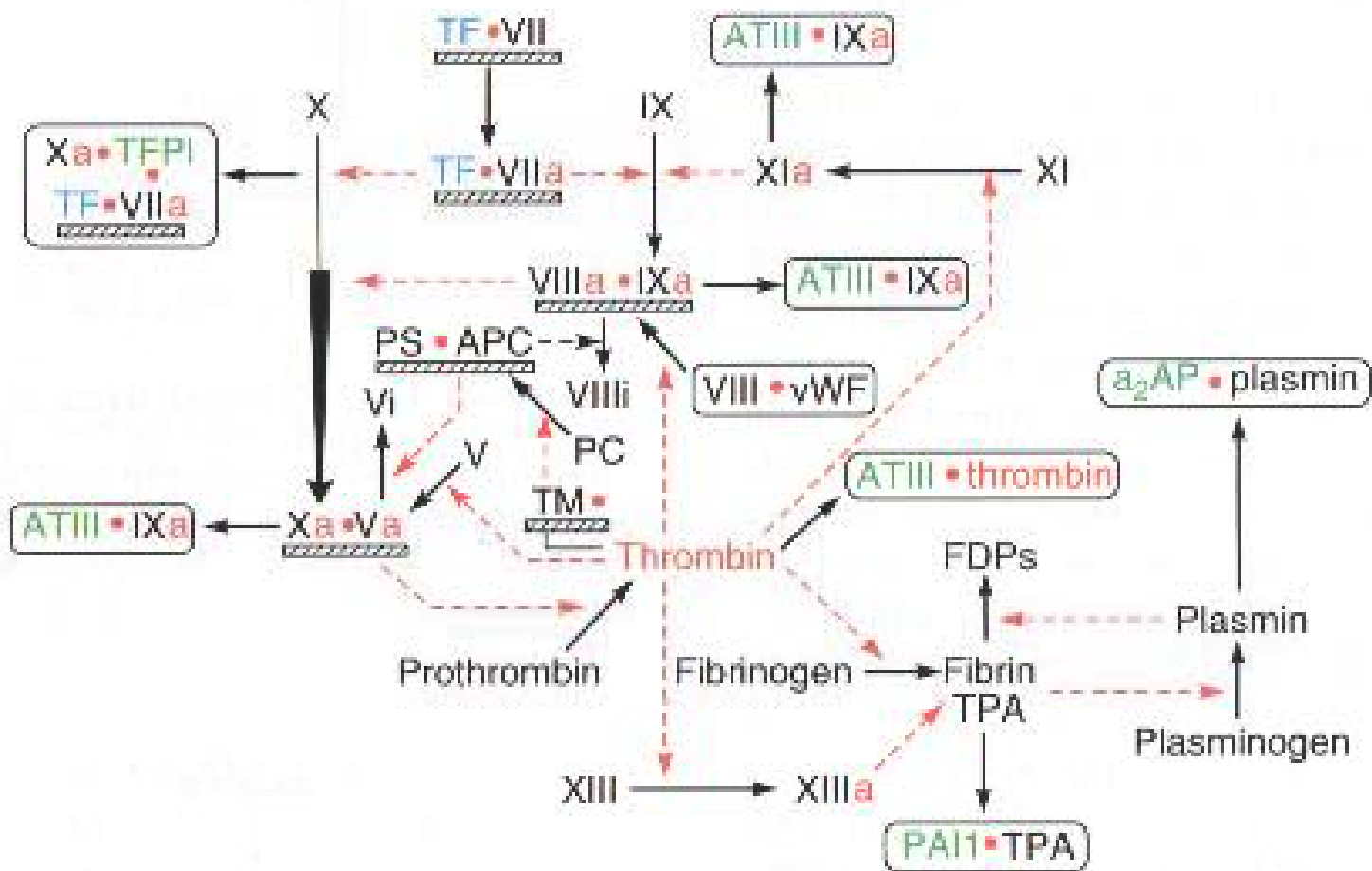
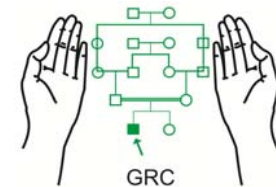


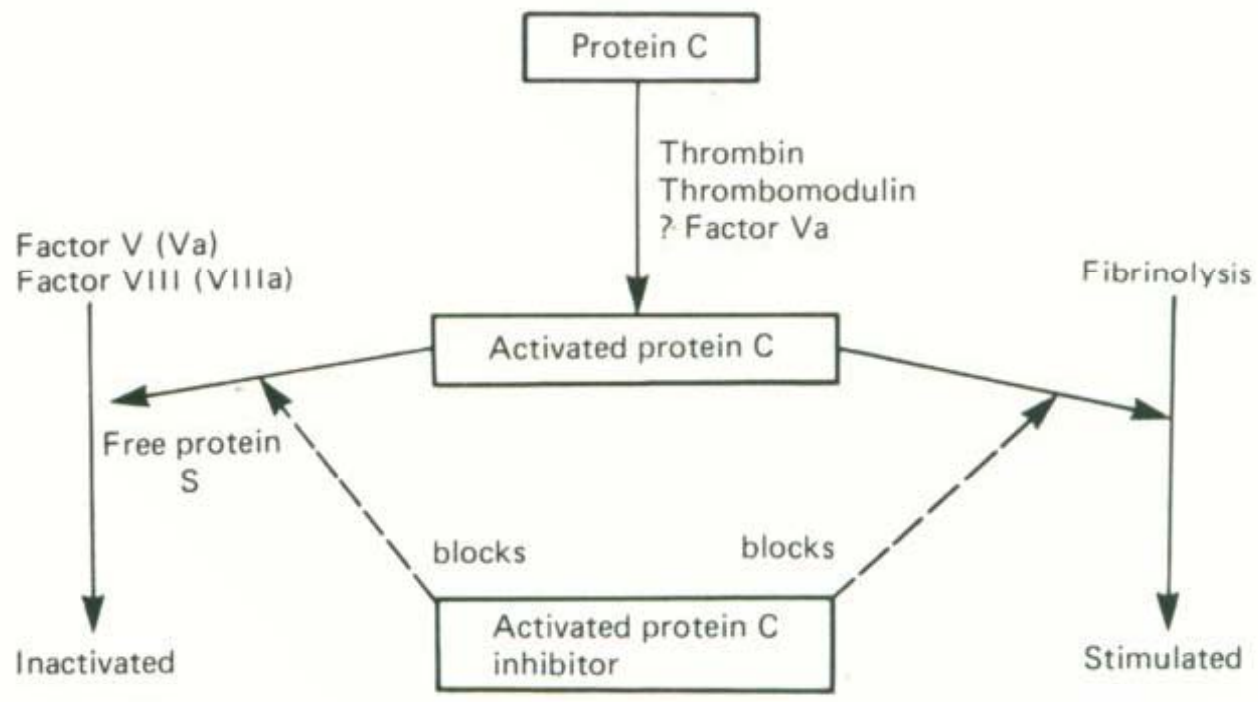
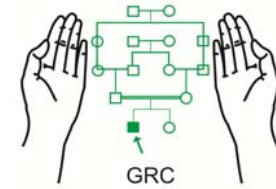
Intrinsic pathway

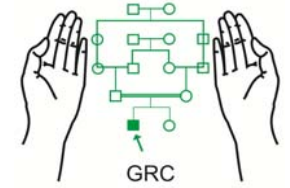


Extrinsic pathway



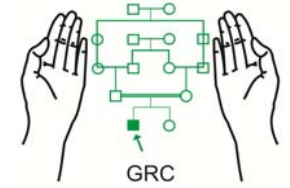






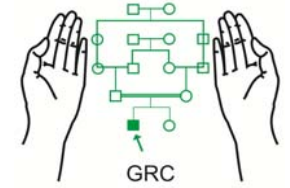
Thrombophilia

- Acquired
- Inherited (genetic)



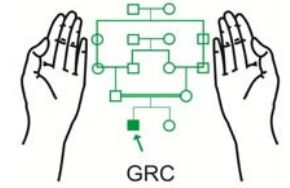
Acquired Thrombophilia

- Increasing age
- Pregnancy & post partum period
- Immobility
- Post operative period
- Oral contraceptives & hormone replacement therapy



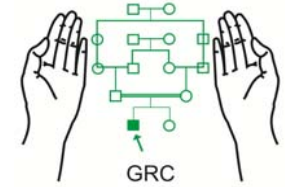
Acquired Thrombophilia

- Anti-phospholipid syndrome
- Myeloproliferative disorders
- Cancer (Acute Promyelocytic Leukaemia)
- Paroxysmal Nocturnal Haemoglobinuria (PNH)
- Thrombotic Thrombocytopenic Purpura (TTP)
- Sickle Cell Disease
- Intravenous drug abuse



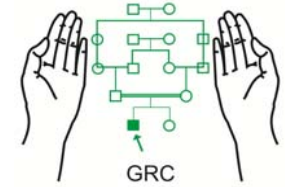
Inherited Thrombophilia

- Protein C deficiency
- Protein S deficiency
- Antithrombin deficiency
- APC resistance (Factor V Leiden)
- Prothrombin gene mutation
- Hyperhomocysteinaemia
- Elevated Factor VIII



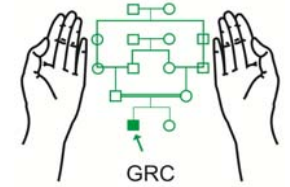
DVT: Presentation

- Calf vein thrombosis : Painful swollen legs
- Hepatic vein thrombosis (Budd-Chiari Syndrome): Pain ascities and splenomegaly
- Sagittal sinus thrombosis: Headache & neurological symptoms
- Skin necrosis
- Pulmonary embolism



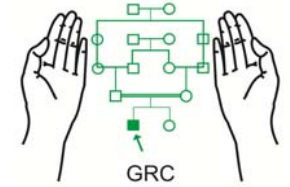
DVT: Diagnosis

- Clinical suspicion (scoring)
- D-dimer test:
 - Positive with normal Ptothrombin time
- Imaging techniques
 - Ultrasound (doppler)
 - Phlebography
 - Perfusion ventilation lung scan
 - CT
 - Pulmonary angiography
- Specific Lab tests



DVT: Specific Lab Tests

- Patient should be off anticoagulant therapy
- Coagulation profile
- Lupus anticoagulant
- Anti-cardiolipin antibodies
- Proc C Global Test
- Assay for Protein C, S & Antithrombin
- Factor V Leiden (PCR)
- Prothrombin Gene mutation (PCR)
- Homocystein level
- Investigation for MPD and PNH



DVT: Management

- Thrombolytic therapy
 - Streptokinase (SK)
 - Tissue plasminogen activator (tPA)
- Anticoagulation
 - Heparin
 - Low molecular weight heparin
 - Oral anticoagulants
- Treatment of the underlying disorder