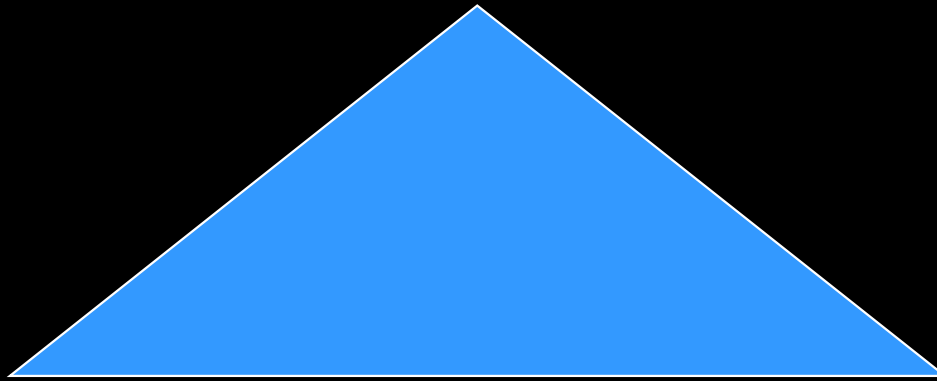


بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Ghanavat Majid
Assistant Professor of Medical University of Isfahan
Pediatric oncologist & Hematologist

Components of Haemostasis

- Blood vessel wall

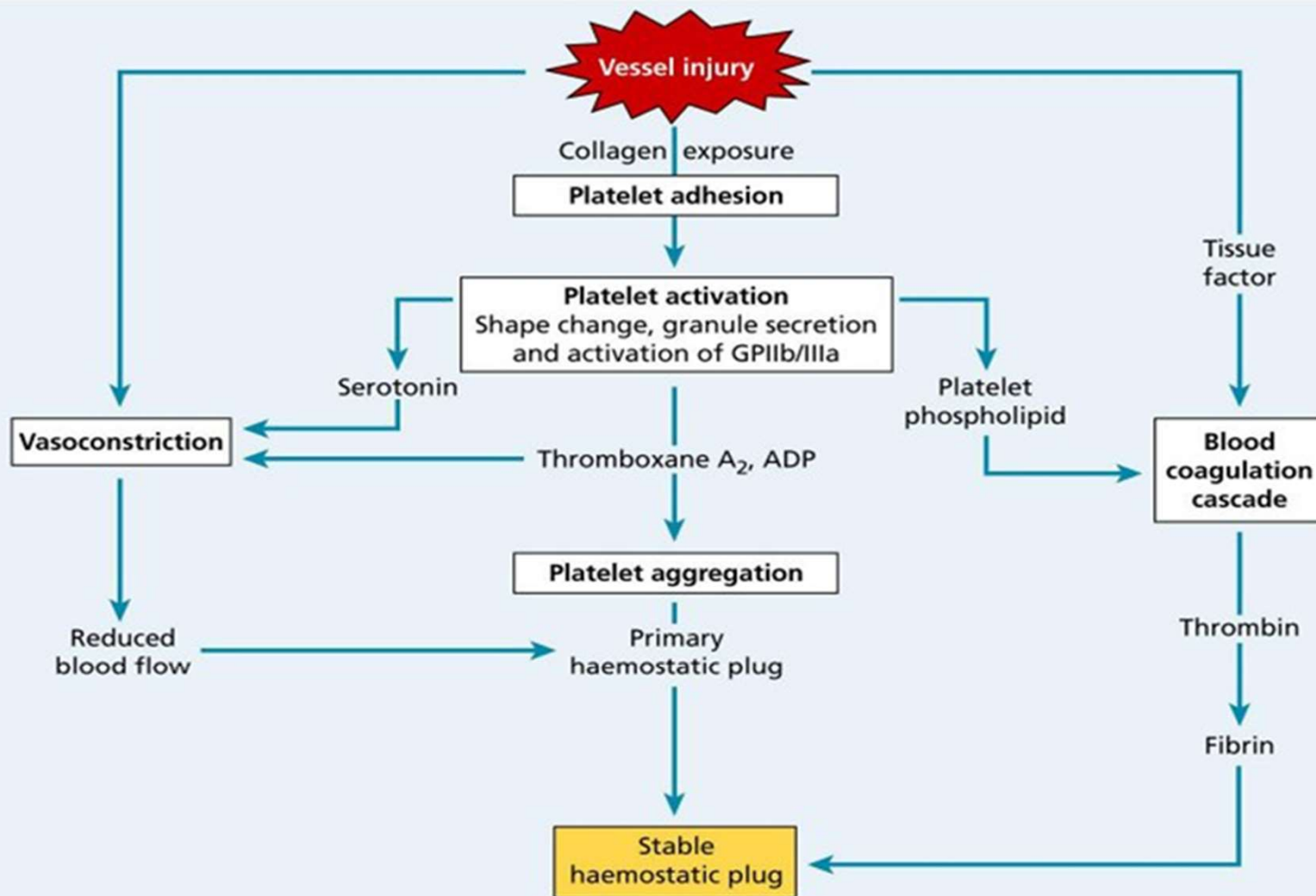


- Coagulation factors

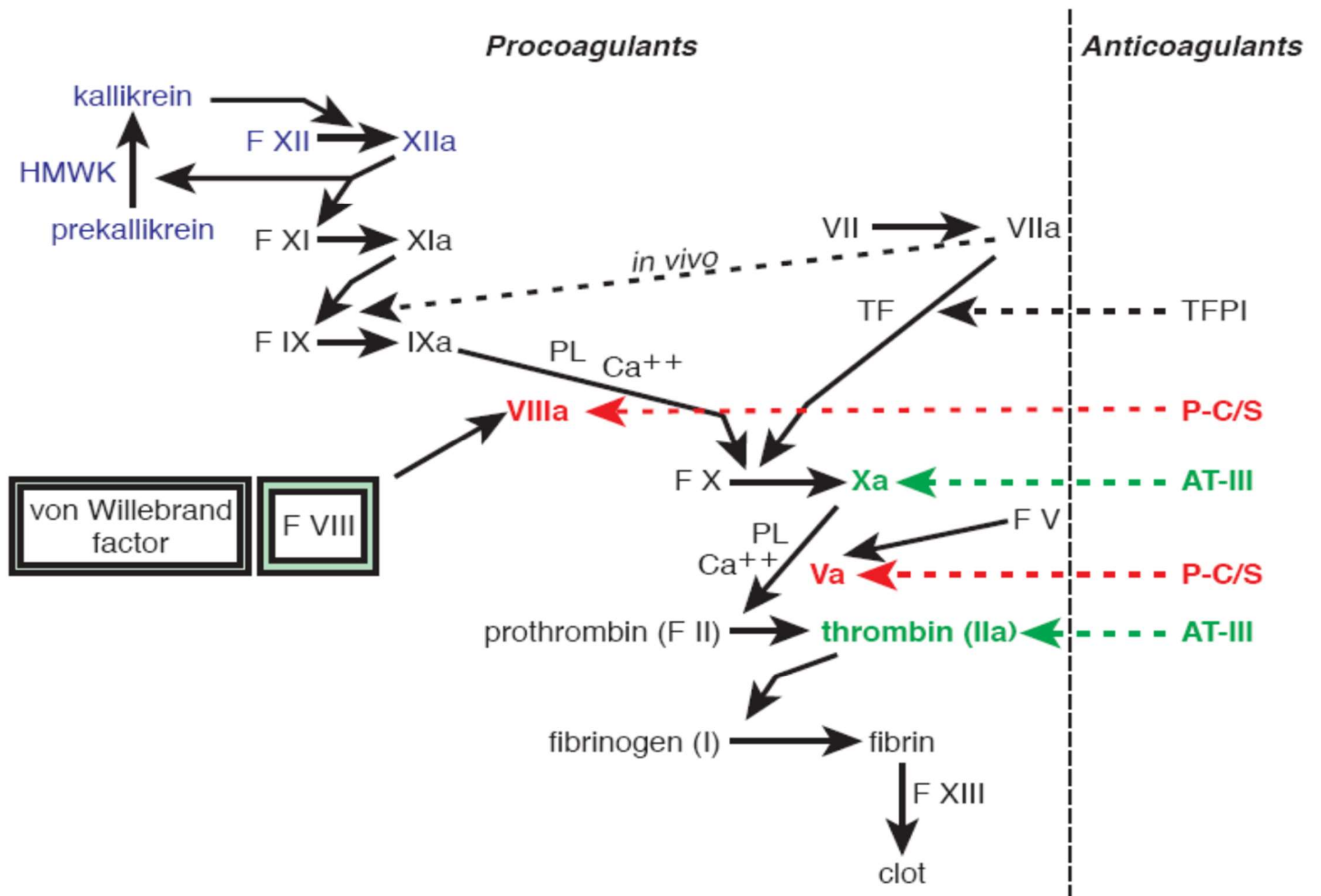
- Platelets

Primary Haemostasis


Secondary Haemostasis



From: *Essential Haematology*, 6th Edn. © A. V. Hoffbrand & P. A. H. Moss.
Published 2011 by Blackwell Publishing Ltd.



Practical Approach to a Child With Bleeding History:

- AGE OF ONSET
 - SEX, Family History
 - LOCATION | TYPE OF BLEEDING
 - DURATION OF BLEEDING
 - MEDICATIONS
 - ASSOCIATED SYMPTOMS
 - REVIEW OF SYSTEMS
- 

Platelet

Coagulation



Petechiae, Purpura

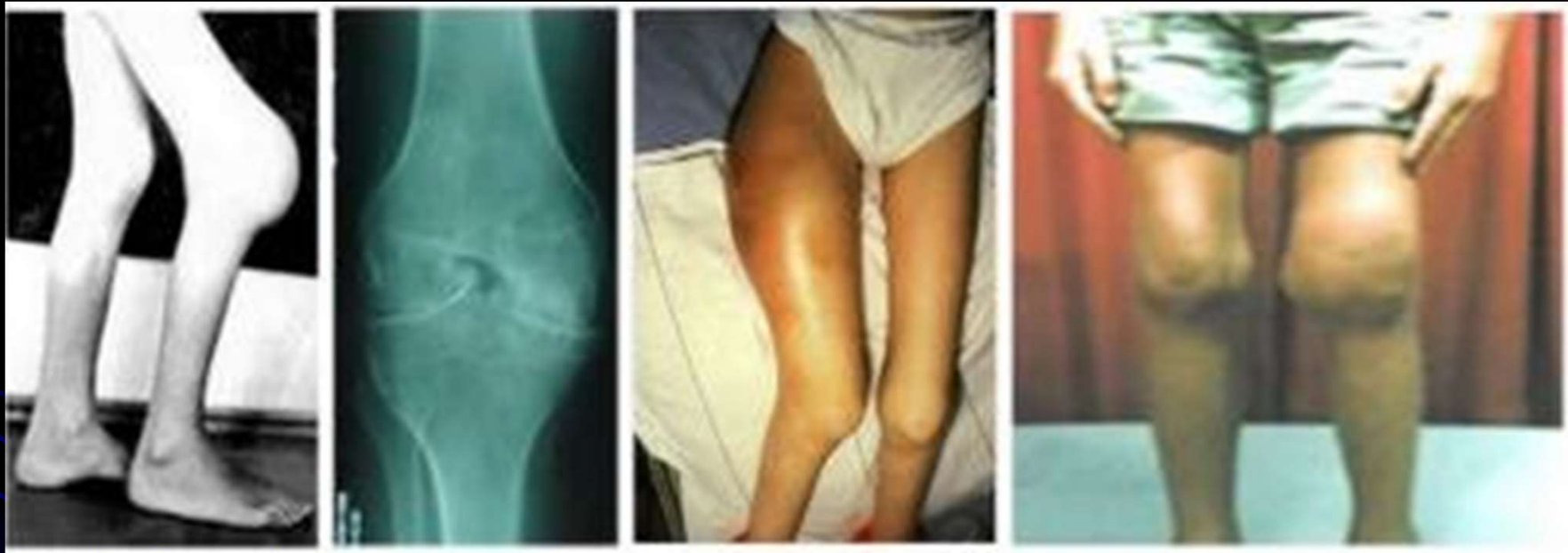


Hematoma, Joint bl.

□ JOINT BLEED & DEEPSEATED HEMATOMAS



Hemophilia Arthropathy and Muscle Bleeding



HEMANGIOMAS



Hemangiomas Kassalback-Merritt syndrome

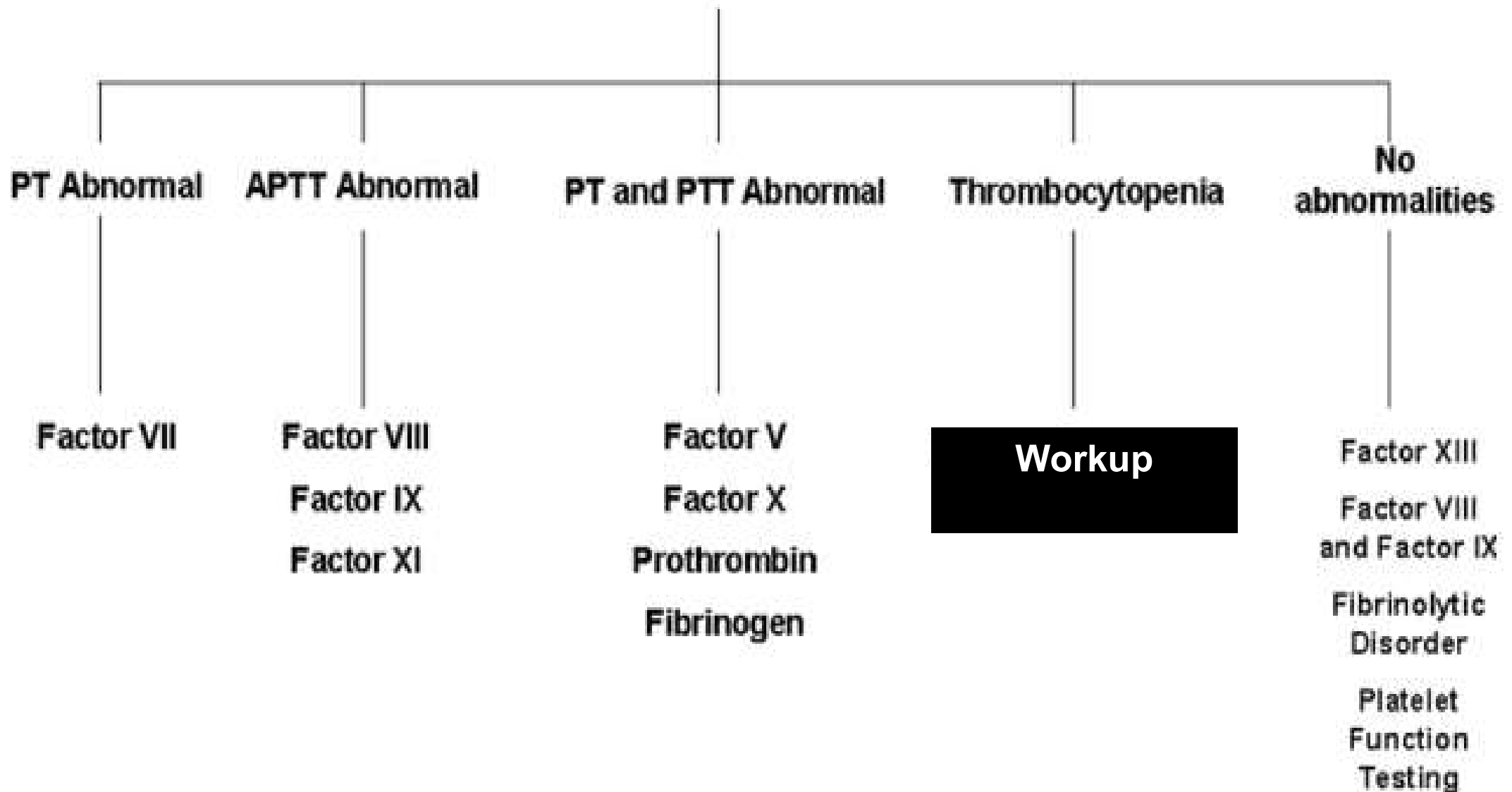


Screening Coagulogram

- Platelet count
- PT
- APTT
- Additional
 - Bleeding time
 - TT
 - S.Fibrinogen

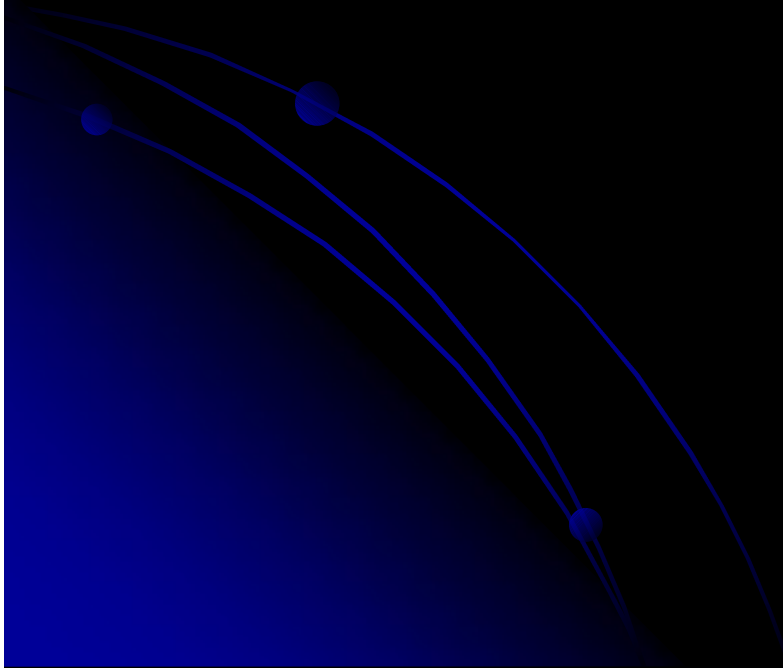
Interpretation

Complete Blood Count, Coagulation Screen



Bleeding time

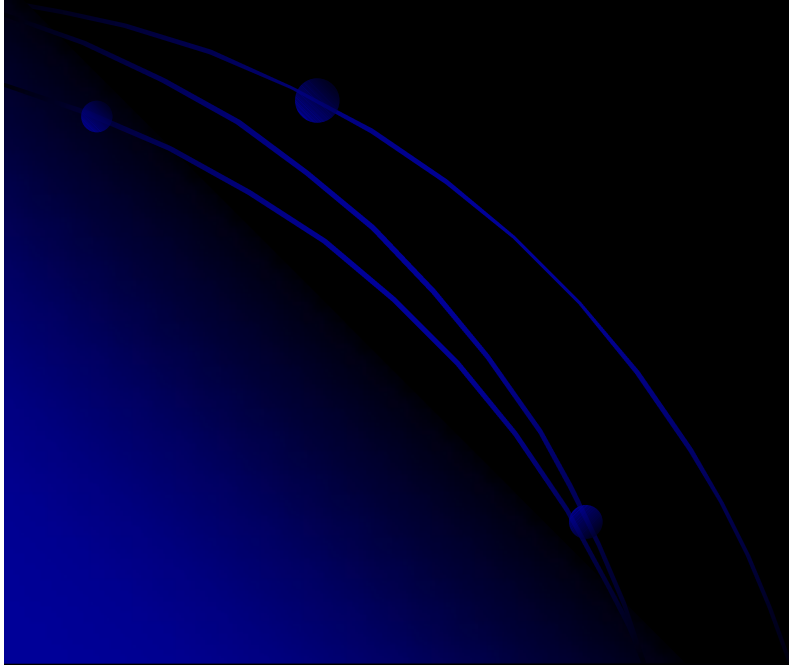
- A normal BT is 3 to 9 minutes
- The BT is an approximate measure of the relationship between platelet number and function, as originally demonstrated.



Bleeding time

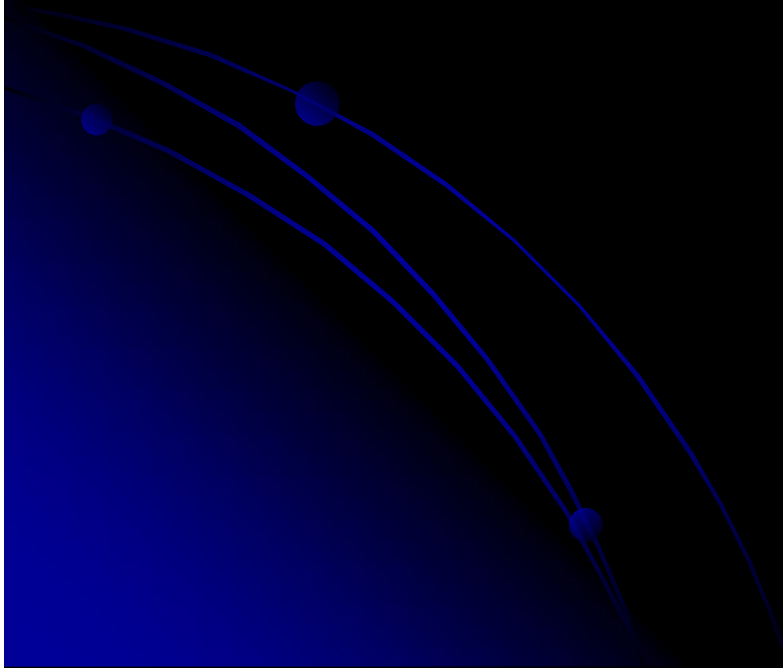
prolonged with Impaired
platelet Function
platelet counts

Reduced below integrity $\wedge \cdot - \cdot \cdot \cdot \cdot \cdot$
Impaired vascular



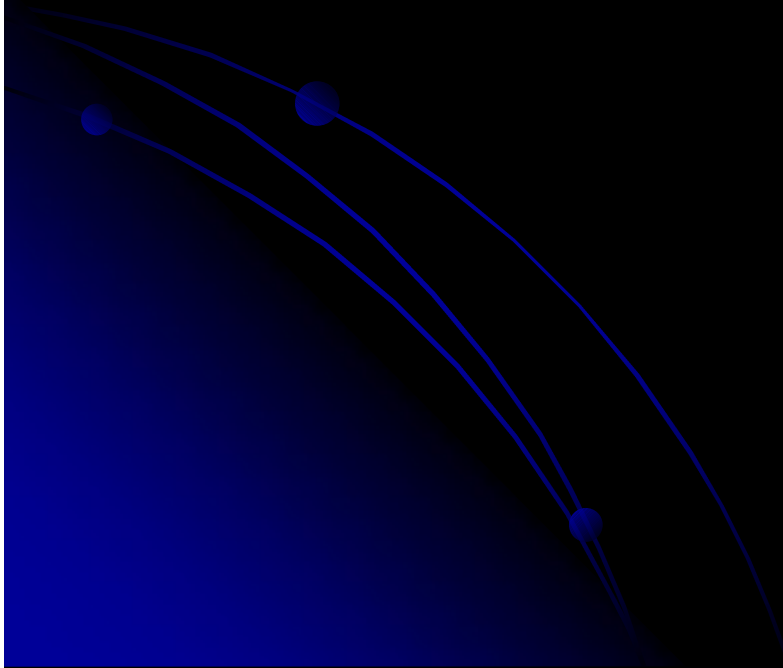
Thrombin time

Thrombin time The TT measures the thrombin-induced conversion of fibrinogen to fibrin.



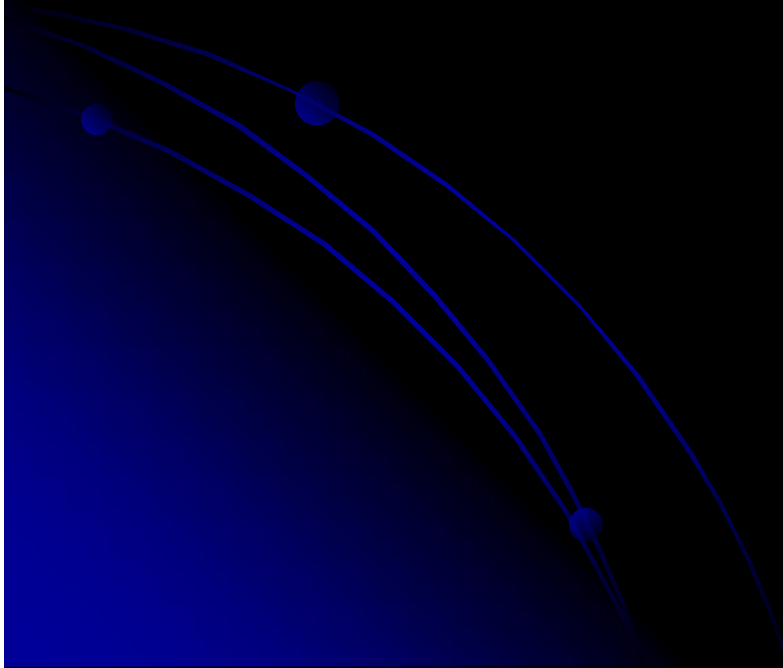
Thrombin time

Useful test to diagnose when both the PT and PTT are prolonged.



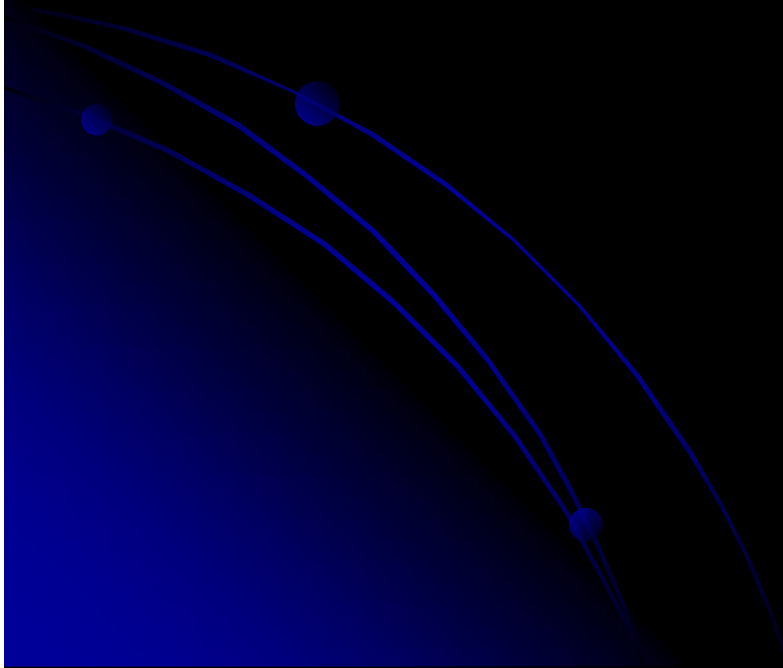
FXIII deficiency & Increased fibrinolysis

In a patient with a significant bleeding history, if All screening tests and von Willebrand panel are normal Consider FXIII, PAI activity, alpha α_2 antiplasmin.



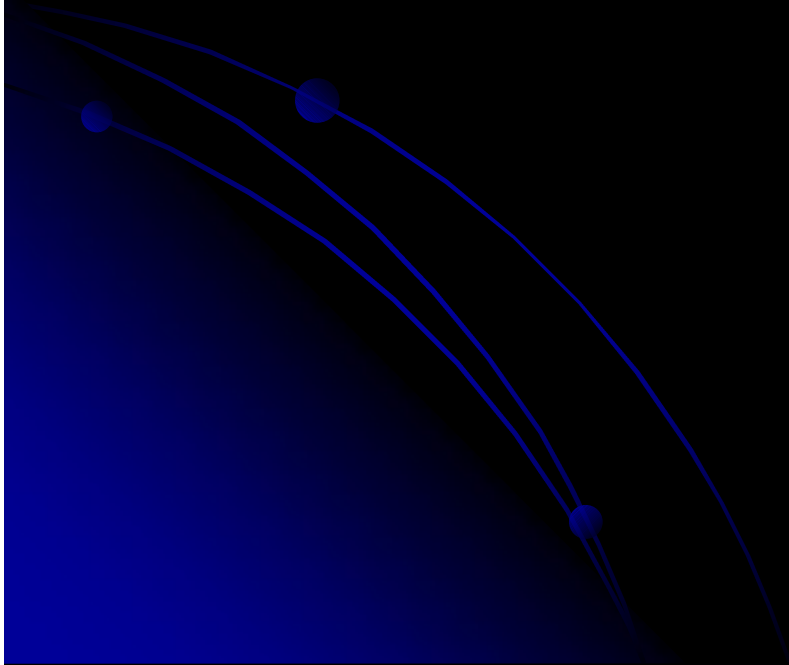
FXIII deficiency

Urea Clot lysis Assay : Useful screen for FXIII deficiency
FXIII Assay.



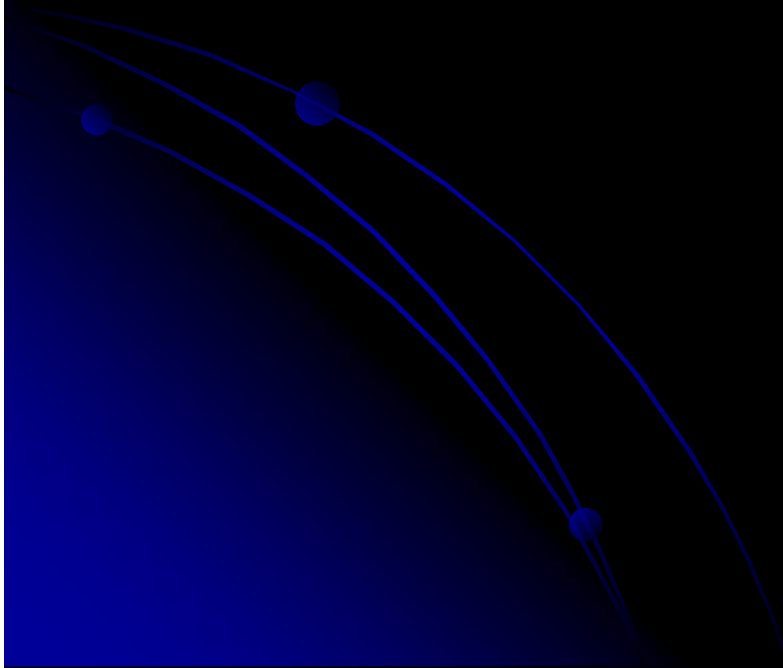
Euglobulin Clot Lysis Time

shortened in conditions characterized by increased Fibrinolysis (antiplasmin deficiency, plasminogen activator inhibitor deficiency).



Mixing studies

- Mixing studies(performed to evaluate a prolonged PT or PTT) Continued.
- Prolongation indicates presence of a coagulation inhibitor.



Thank You For Your Attention

