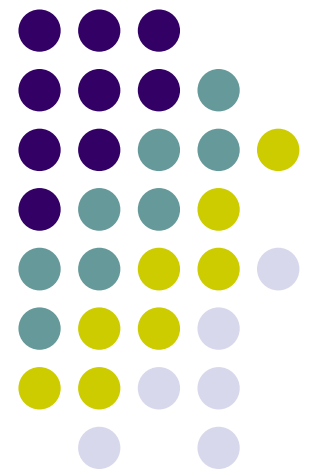
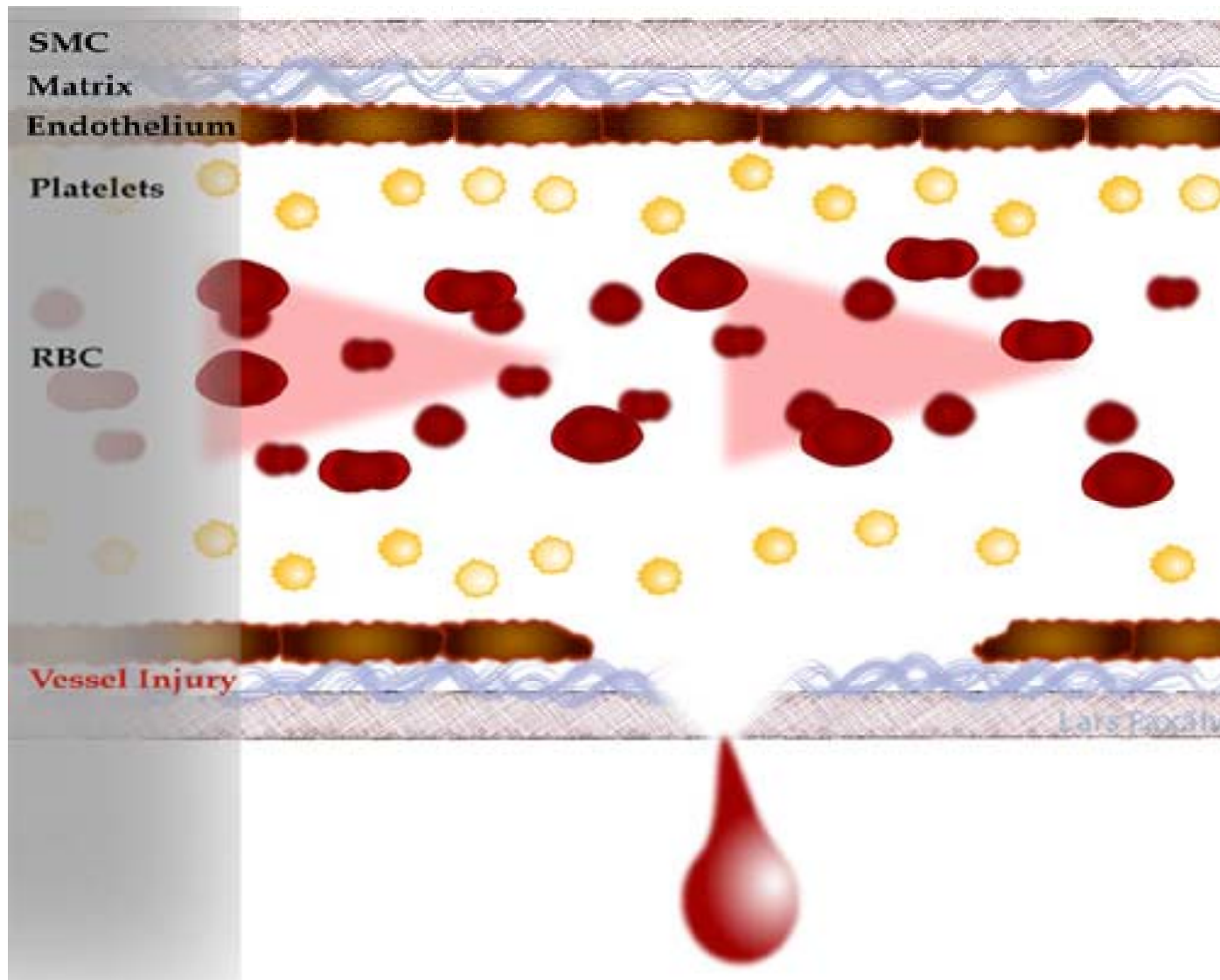


Spectrum of bleeding disorders: Experience at Armed Forces Institute of Pathology Rawalpindi

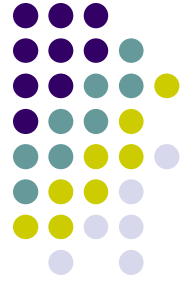
**Shawana Kamran, Suhaib Ahmed,
Kamran Nazir Ahmad, Jaleel Anwar**



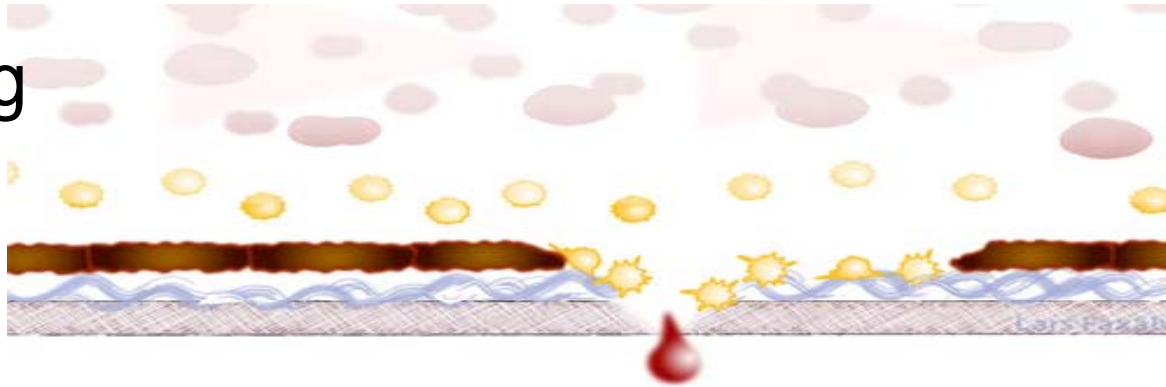
Components of hemostasis



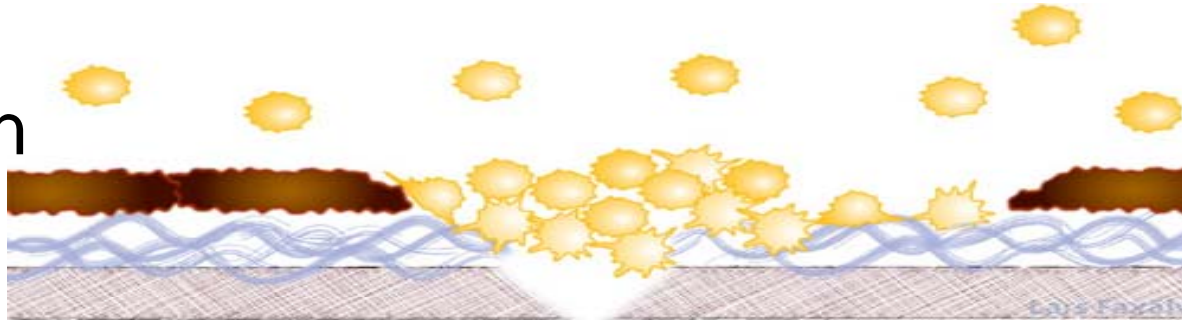
Phases of hemostasis



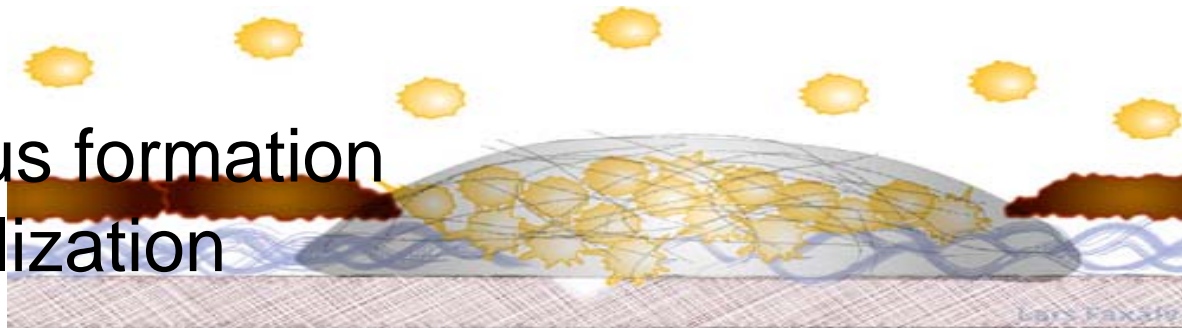
- Tethering



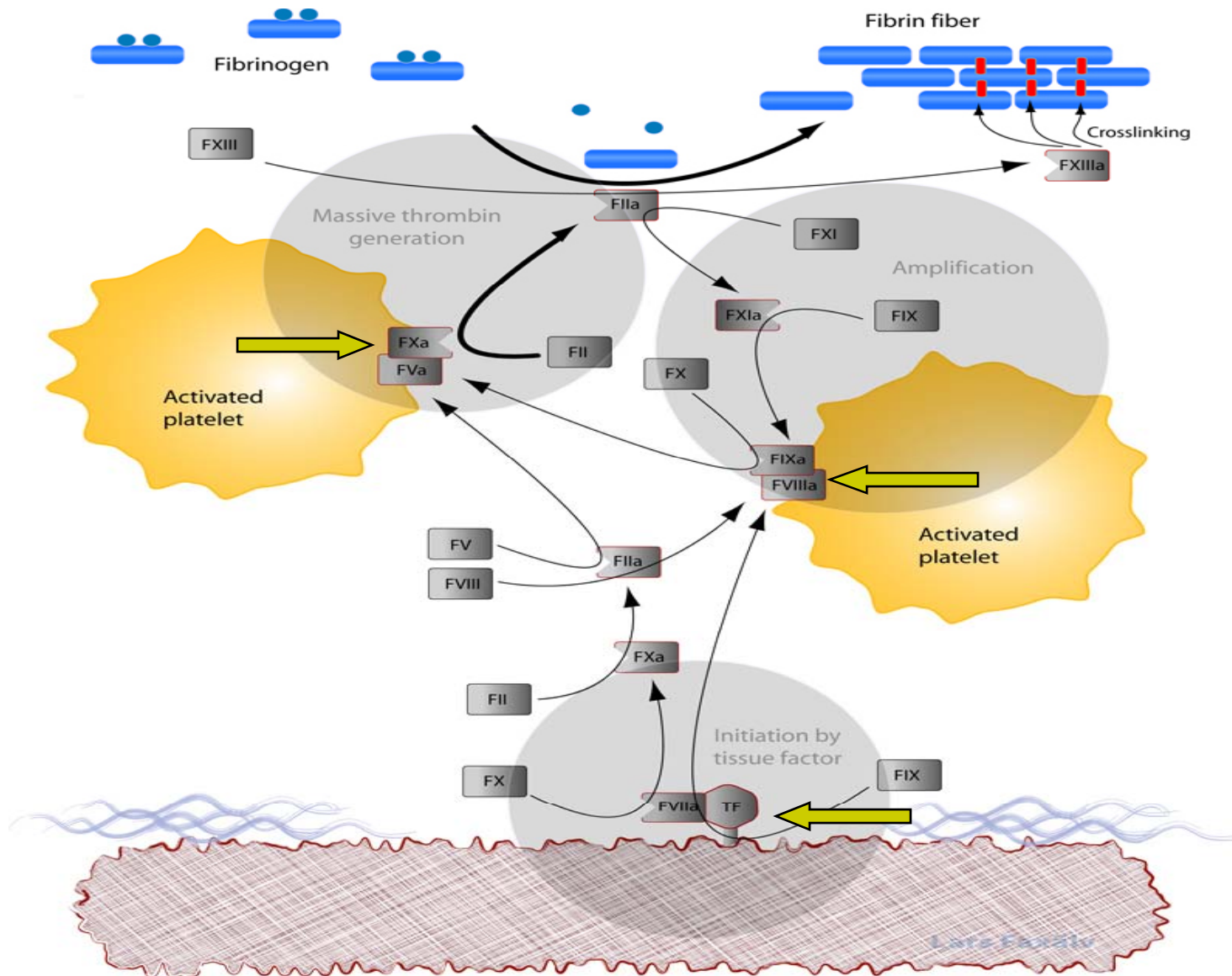
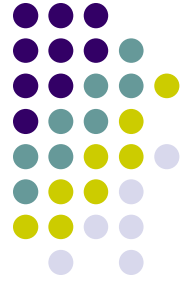
- Adhesion



- Thrombus formation and stabilization



Interaction among various hemostatic components



Clinical features of hemostatic defects

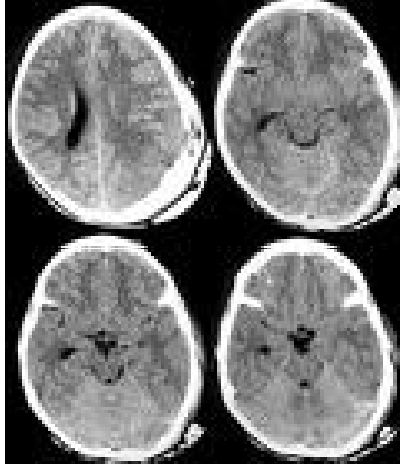
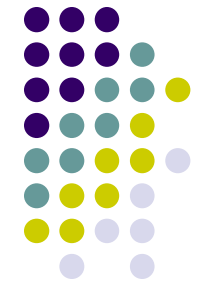


Findings	Coagulation defect	Platelet/vessel defect
Onset of bleeding	Delayed after trauma	Spontaneous or immediately after trauma
Mucosal bleeding	Rare	Common
Petechiae	Rare	Characteristic
Deep hematomas	Characteristic	Rare
Ecchymoses	Large and solitary	Small and multiple
Hemarthrosis	Characteristic	Rare
Bleeding from superficial cuts and scratches	Minimal	Persistent, often profuse
Sex of patient	80-90% male	Equal

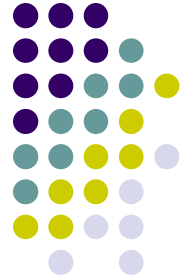
Clinical features of platelets/vessel defects



Clinical features of coagulation protein defects

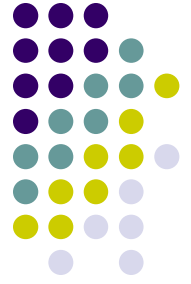


Objective



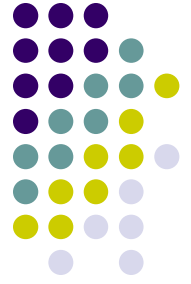
- To determine the frequency of bleeding disorders diagnosed at Armed Forces Institute of Pathology, Rawalpindi

Study design



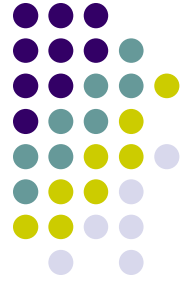
- Descriptive study

Setting and duration



- Department of Hematology Armed Forces Institute of Pathology Rawalpindi from January 2005 to June 2008

Subjects and sampling technique



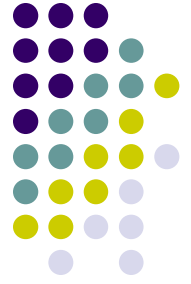
- A total of 1823 patients of bleeding diathesis sent for coagulation profile were included in the study
- Non probability purposive sampling



Materials and methods

- Hess's test was done to investigate the vascular defects.
- Bleeding Time was done to test platelet function defects.
- The 'clotting screen' and mixing studies were done to detect coagulation protein defects.
- Clot solubility test was also performed for factor XIII deficiency.

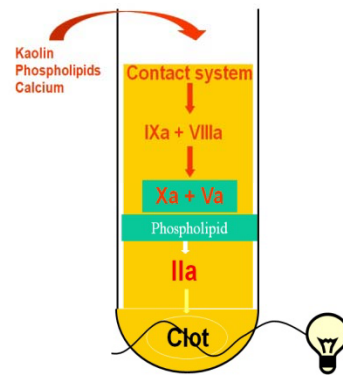
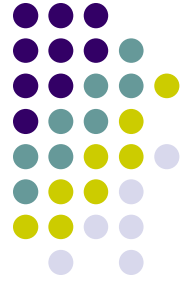
Tests for platelet/vessel defects

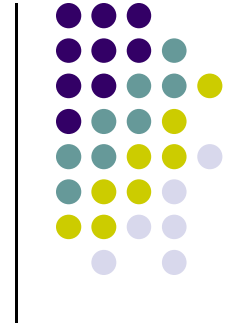


- Bleeding Time by Ivy's Method
- Hess's test



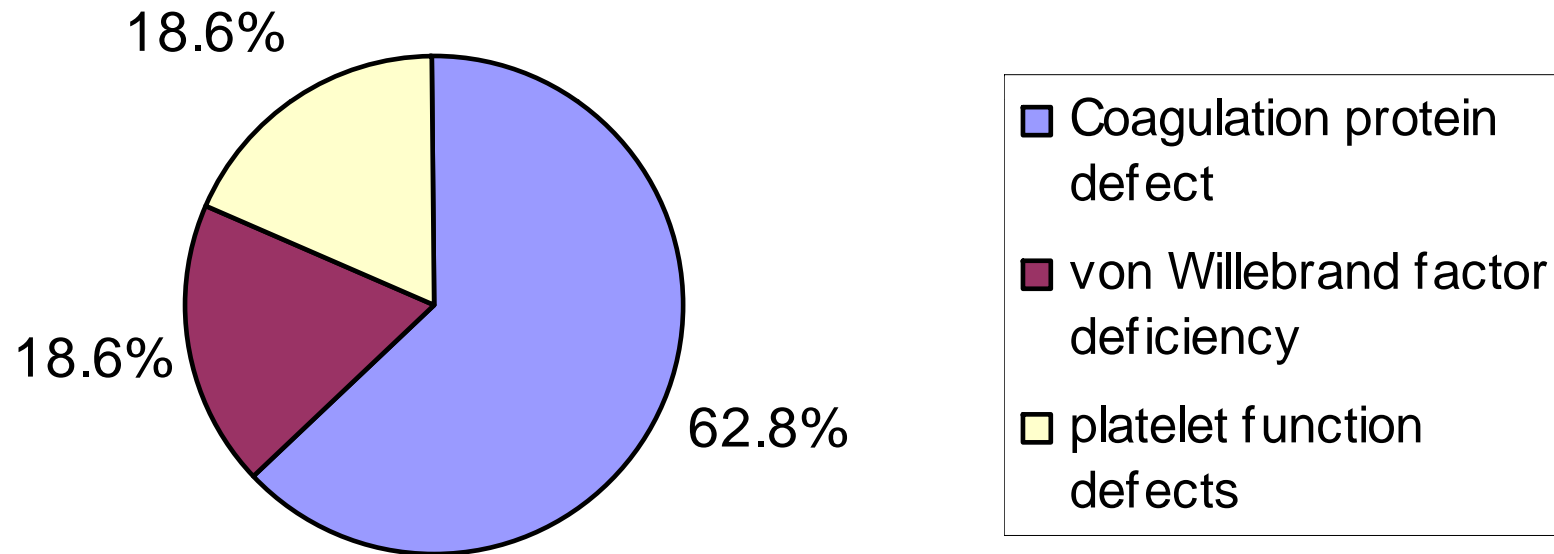
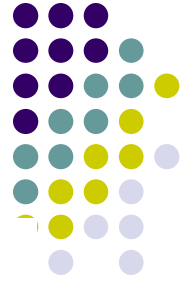
Clotting screen



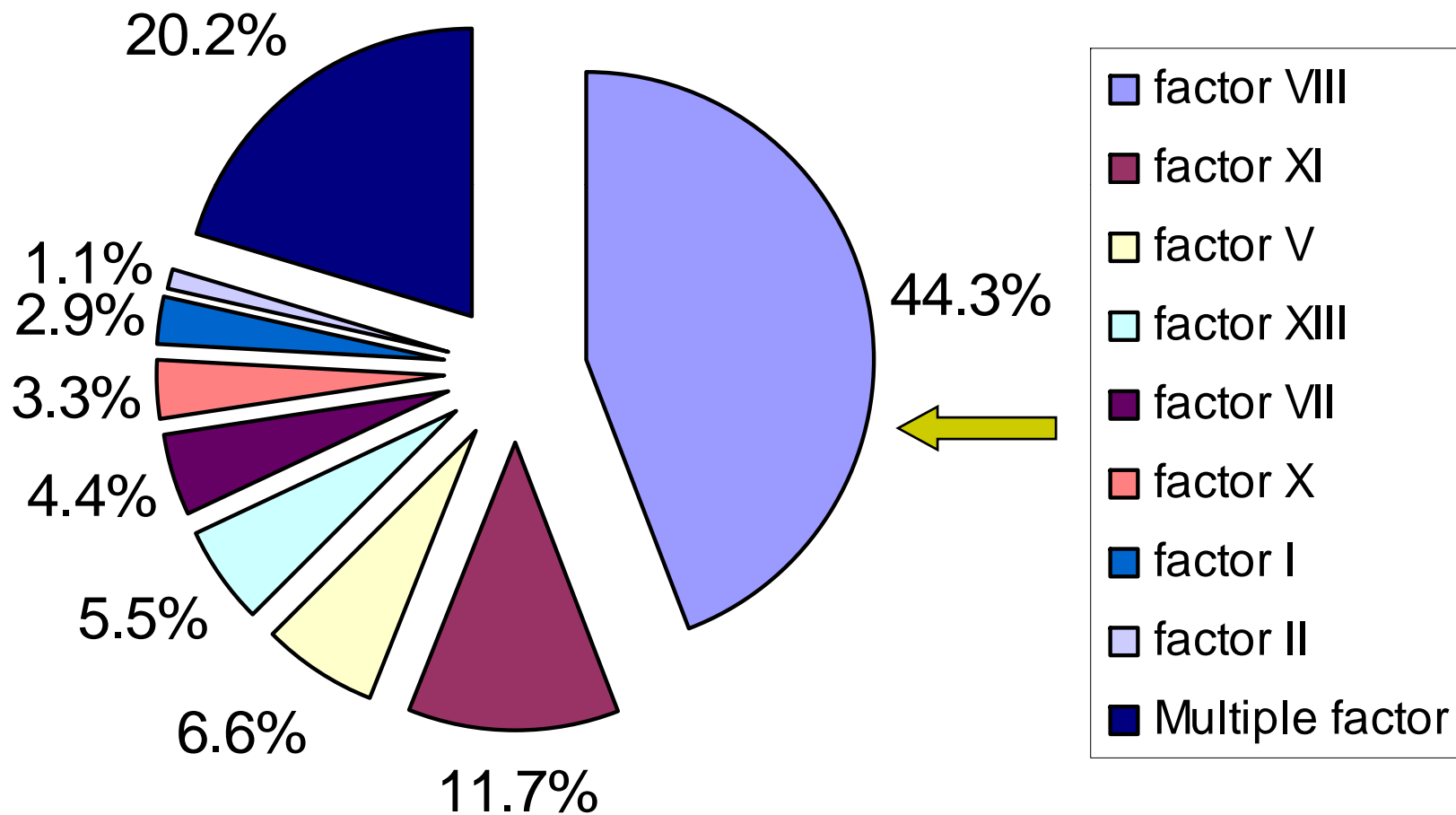


RESULTS

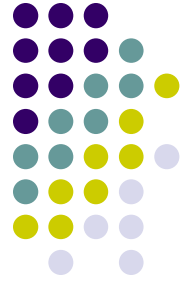
Frequency of bleeding disorders



Frequency of coagulation protein defects



Conclusion



Coagulation protein defects are the most frequent bleeding disorders with Factor VIII deficiency being the commonest. Platelet function defects and vWF deficiency also comprise a significant proportion of the bleeding disorders.



Thank you