BLOOD CLOTTING MECHANISM

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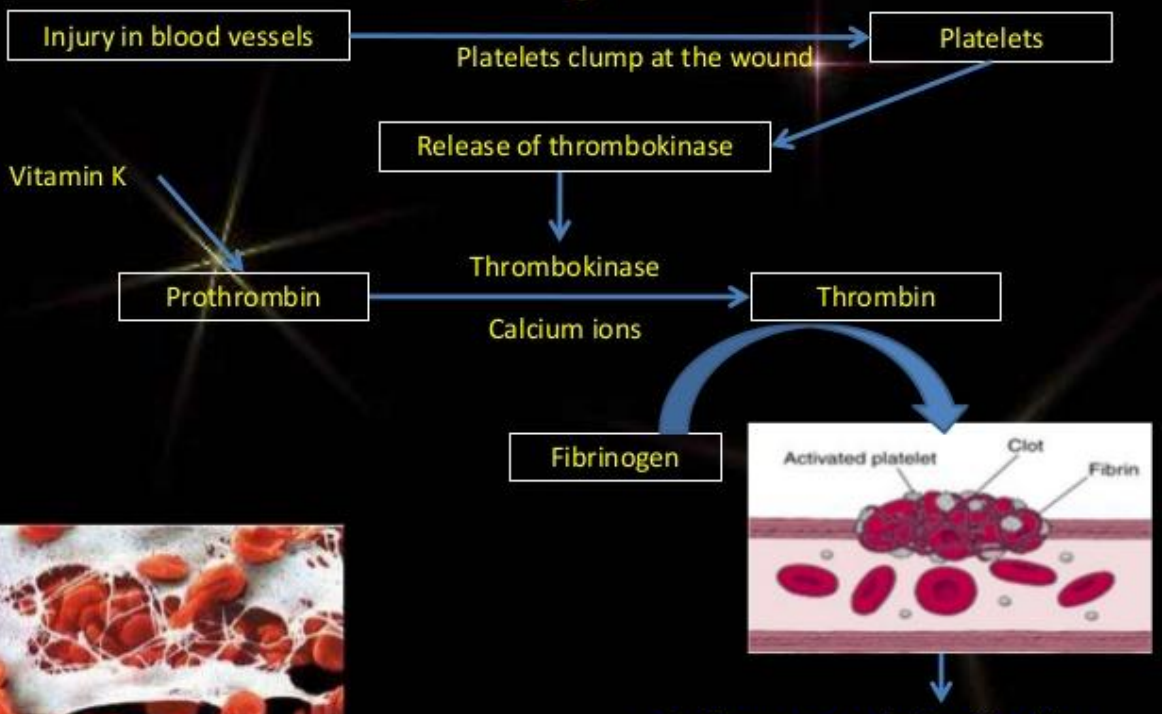

Describe the blood clotting mechanism

- When you get cut, blood vessels around the wound immediately constrict to reduce blood loss.
- The platelets in the blood exposed to air become sticky and clump together to plug the wound.
- Thrombokinase & other clotting factors are released by platelets.
- In the presence of calcium ions, thrombokinase converts prothrombin into thrombin. Prothrombin a plasma protein synthesized in the liver and requires vitamin K.
- Thrombin converts soluble plasma protein, fibrinogen into insoluble fibrin fibres which form a meshwork of threads over the wound.
- As the blood flows out, erythrocytes & platelets are trapped in the fibrin fibres and a blood clot forms. It dries to form scab
- When the wound heals, new skin is formed & the scab peels off.