LEC.13

The Platelet Role In Hemostasis

In hemostasis, platelets play three main roles:

1. They maintain the endothelial surface. Loss of circulating platelets quickly results in morphologic changes in the endothelial cells of the capillaries. These changes cause intravascular material to leak into the capillary bed.
2. They initially arrest bleeding in severed blood vessels.
3. They provide phospholipid, which acts as the catalytic surface for initiation of the coagulation process.

Role of blood vessels in haemostasis :

Blood vessels play a vital role in the control of hemostasis, thrombosis, and inflammation. Endothelial cells, which form the lining of all blood vessels, are particularly important in this process because of their intimate association with flowing blood. Endothelial cells have the unique capability to express and intricate thromboregulatory molecules, which can be classified as early or late with respect to an endothelial cell stimulus. In addition, pro-inflammatory leukocyte adhesion molecules are expressed upon endothelial cell perturbation .