

## Complete Information on Blood coagulation disorders

Blood coagulation is part of an important host defense mechanism termed hemostasis. Upon vessel injury, platelets adhere to macromolecules in the subendothelial tissues and then aggregate to form the primary hemostatic plug. Coagulation is highly conserved throughout biology; in all mammals, coagulation involves both a cellular (platelet) and a protein (coagulation factor) component. The platelets stimulate local activation of plasma coagulation factors, leading to generation of a fibrin clot that reinforces the platelet aggregate. Coagulation is initiated almost instantly after an injury to the blood vessel damages the endothelium.

Platelets immediately form a hemostatic plug at the site of injury; this is called primary hemostasis. Secondary hemostasis occurs simultaneously proteins in the blood plasma, called coagulation factors, respond in a complex cascade to form fibrin strands which strengthen the platelet plug. Platelet conditions may be inborn or acquired. Some inborn platelet pathologies are Glanzmann's thrombasthenia, Bernard-Soulier syndrome (abnormal glycoprotein Ib-IX-V complex), gray platelet syndrome and delta storage pool deficiency. Most are rare conditions. Most inborn platelet pathologies predispose to hemorrhage.

The best-known coagulation factor illness are the hemophilias. The three main types are hemophilia A hemophilia B and hemophilia C. In liver failure there is insufficient production of coagulation factors by the liver; this may increase bleeding risk. Thrombosis is the pathological development of blood clots, and embolism is said to occur when a blood clot migrates to another part of the body, interfering with organ function there. Mutations in factor XII have been associated with an asymptomatic prolongation in the clotting time and possibly a tendency to thrombophlebitis.

Other mutations have been linked with a rare form of hereditary angioedema (type III). Angioedema VIII clotting factor has been cloned through genetic engineering, eliminating the possibility that the blood may contain viruses such as hepatitis and human immunodeficiency virus (HIV). Hemophilia A occurs in about one out of 10,000 males. Anticoagulant drugs help prevent the formation of harmful clots in the blood vessels by reducing the blood's ability to clump together. Medications called fibrinolytic agents are sometimes used to dissolve clots and include streptokinase, urokinase, and tissue plasminogen activator.

### About the Author

Juliet Cohen writes articles for [health care blog](#). She also writes articles for [hairstyles gallery](#).

Source: <http://www.articletrader.com>