

Category	Disorder	Disease Descriptor	Laboratory Findings	Clinical Symptoms
Primary Hemostasis	Thrombocytopenia	Low circulating platelet count.	<ul style="list-style-type: none">• Platelet count < 150,000/μL.• Possible pseudothrombocytopenia from EDTA clumping.	<ul style="list-style-type: none">• Petechiae and purpura.• Mucocutaneous bleeding.
Primary Hemostasis	Immune Thrombocytopenia (ITP)	Immune-mediated platelet destruction.	<ul style="list-style-type: none">• Low platelet count.• Increased Mean Platelet Volume (MPV).	<ul style="list-style-type: none">• Epistaxis and gingival bleeding.• Menorrhagia.
Primary Hemostasis	von Willebrand Disease (vWD)	Defective platelet-vessel wall adhesion.	<ul style="list-style-type: none">• Decreased vWF:Ag (antigen) in Type 1 and 3.• Low Ristocetin cofactor activity.• Normal or prolonged aPTT.	<ul style="list-style-type: none">• Heavy menstrual bleeding.• Bleeding after dental or surgical procedures.
Primary Hemostasis	Bernard-Soulier Syndrome	GpIb receptor deficiency/dysfunction.	<ul style="list-style-type: none">• Large platelets on peripheral smear.• Non-response to Ristocetin in aggregation studies.	<ul style="list-style-type: none">• Variable mucosal bleeding tendency.• Prolonged bleeding from cuts.
Primary Hemostasis	Glanzmann Thrombasthenia	GpIIb/IIIa aggregation receptor deficiency.	<ul style="list-style-type: none">• Normal platelet count.• No aggregation with any agonist except Ristocetin.	<ul style="list-style-type: none">• Severe mucocutaneous bleeding.• Epistaxis and menorrhagia.
Secondary Hemostasis	Hemophilia A & B	Inherited coagulation factor deficiency.	<ul style="list-style-type: none">• Prolonged aPTT that corrects with mixing study.• Low activity of Factor VIII (A) or Factor IX (B).	<ul style="list-style-type: none">• Hemarthrosis (bleeding into joints).• Deep tissue muscle hematomas.
Secondary Hemostasis	Factor XIII Deficiency	Defective fibrin clot stabilization.	<ul style="list-style-type: none">• Normal PT and aPTT screening tests.• Decreased Factor XIII activity.	<ul style="list-style-type: none">• Delayed wound hemorrhage (clot forms but fails).• Umbilical stump bleeding in neonates.
Secondary Hemostasis	Vitamin K Deficiency	Impaired clotting factor synthesis.	<ul style="list-style-type: none">• Prolonged PT/INR and aPTT.• Low Factors II, VII, IX, and X.	<ul style="list-style-type: none">• Spontaneous bruising.• Deep tissue or mucosal hemorrhage.
Secondary Hemostasis	Liver Disease	Decreased synthesis of multiple factors.	<ul style="list-style-type: none">• Prolonged PT/INR and aPTT.• Thrombocytopenia if splenomegaly is present.	<ul style="list-style-type: none">• Oozing from puncture sites.• Severe internal hemorrhaging.
Thrombotic Disorders	Factor V Leiden	Activated Protein C resistance.	<ul style="list-style-type: none">• Resistance of Factor V to Protein C inactivation.• Detected by modified APC-PT assay.	<ul style="list-style-type: none">• Recurrent Venous Thromboembolism (VTE).• Deep Vein Thrombosis (DVT).
Thrombotic Disorders	Antiphospholipid Syndrome	Autoantibodies causing pathological clotting.	<ul style="list-style-type: none">• Prolonged aPTT that does not correct with mixing.• Positive DRVVT test.	<ul style="list-style-type: none">• Recurrent arterial/venous thrombosis.• Repeated miscarriages.
Thrombotic Disorders	Disseminated Intravascular Coagulation (DIC)	Systemic activation and consumption.	<ul style="list-style-type: none">• Prolonged PT/aPTT, Low fibrinogen.• High D-dimer and schistocytes on smear.	<ul style="list-style-type: none">• Simultaneous bleeding and clotting.• Organ failure and hypovolemic shock.
Thrombotic Disorders	HIT Syndrome	Heparin-PF4 antibody-mediated activation.	<ul style="list-style-type: none">• 50% decline in platelet count during therapy.• Positive Heparin-PF4 antibody assay.	<ul style="list-style-type: none">• Paradoxical thrombosis 5–10 days after heparin.• Skin necrosis at injection sites.
Thrombotic Disorders	TTP / HUS	Platelet-rich microthrombi in vasculature.	<ul style="list-style-type: none">• Thrombocytopenia and schistocytes.• Normal PT/aPTT and fibrinogen.	<ul style="list-style-type: none">• Neurologic symptoms (altered mental status).• Fever and renal dysfunction.