# Bleeding and Bruising: A Diagnostic Work-up

Table 1
**Differential Diagnosis of Bleeding and Bruising Disorders**

| *DISORDER* | *FINDINGS OR CLUES TO DIAGNOSIS* |
|---|---|
| **Bleeding** | |
| Platelet disorders (quantitative) | Bleeding, bruising, petechia, or purpura Consider idiopathic thrombocytopenic purpura, thrombotic thrombocytopenic purpura, malignancy, viral disease |
| Platelet disorders (functional) | Consider in a patient with a lifelong history of bleeding despite negative laboratory work-up Consider glycoprotein disorders (Bernard-Soulier syndrome, Glanzmann thrombasthenia), storage pool disease, von Willebrand's disease If platelets are abnormally shaped, consider May-Hegglin anomaly, Wiskott-Aldrich syndrome |
| Hemophilia type A or B (factor VIII or IX deficiency) or other factor deficiencies | Classically presents with joint or soft-tissue bleeding; family history of bleeding in men (skipped generations) |
| Factor inhibitors | Presentation similar to hemophilia, but onset is typically sudden with no patient or family history of bleeding |
| Hereditary hemorrhagic telangiectasia | Telangiectasias over lips, tongue, nasal cavity, and skin; epistaxis |
| Vasculitis or cryoglobulinemia | Neuropathy; pulmonary-renal involvement; purpura |
| Leukemia | Abnormal complete blood count or peripheral blood smear |
| Disseminated intravascular coagulation | Bleeding from multiple sites; prolonged prothrombin time and partial thromboplastin time |
| Vitamin K deficiency | More common causes include malabsorption (bacterial overgrowth, celiac disease, chronic pancreatitis, inflammatory bowel disease, short-gut syndrome), poor diet (alcoholism, total parenteral nutrition) or drugs that bind vitamin K (cholestyramine [Questran]). |
| **Bruising** | |

| *DISORDER* | *FINDINGS OR CLUES TO DIAGNOSIS* |
|---|---|
| Purpura simplex (easy bruising) | Typically found in women on the upper thighs and arms |
| Alcohol abuse | Social history |
| Abuse (including child abuse) | Atypical pattern of bruising or bleeding; bruises that pattern after objects; bruises in children who are not yet mobile; history that is inconsistent with the patient's injuries |
| Senile purpura | Dark ecchymosis in aged, thin skin; typically over extensor surfaces of forearms |
| Cushing's disease | Facial plethora; hirsutism; hyperglycemia; hypertension; poor wound healing; stria |
| Marfan's syndrome | Enlarged aortic root; eye involvement; mitral valve prolapse; scoliosis; pectus excavatum; stretch marks; tall and slim, with long limbs and digits |
| Vitamin C deficiency (scurvy) | Dietary history |
| Ehlers-Danlos syndrome or connective tissue diseases | Atrophic scarring or joint dislocations; hypermobile joints; skin hyperextensibility |

NOTE: *Disorders are categorized as predominantly bleeding or bruising and are in order of relative frequency*.