ترومبوسیتوپنی در کودکان

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SIGNS AND SYMPTOMS	
Platelet (x 10^3 /µL)	**Example of Bleeding Risk**
> 100	Asymptomatic
50 - 100	Post-operative bleeding & bruising
20 - 50	Petechiae, purpura, ecchymoses
5 - 20	Epistaxis or gingival bleeding
< 10	GI bleeding, heavy menstrual bleeding or intracranial hemorrhage

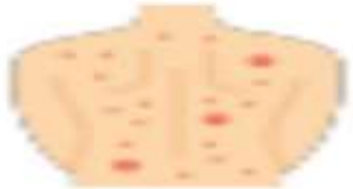
- Prodromal illness
- Recent live vaccination (MMR)
- Recent travel
- Dietary History
- Family Hx of bleeding disorders
- Review Medications list
- If newborn ask about maternal PLT count, medical history and medications

- ABCs and vital signs (stable or unstable)

- Purpura, petechiae, ecchymoses, mucocutaneous bleeding

- Altered consciousness, abnormal pupils, slurred speech Lymphadenopathy (malignancy)

- Hepatosplenomegaly
- Swollen joints or rash



DIFFERENTIAL DIAGNOSIS

Thrombocytopenia

PLT Destruction

Immune Mediated

- Immune Thrombocytopenia
- HIV, Hep C
- Neonatal alloimmune thrombocytopenia
- Lupus, Juvenile Idiopathic Arthritis
- Neonatal autoimmune thrombocytopenia

Consumptive

- Hemolytic Uremic Syndrome
- Disseminated Intravascular Coagulopathy

Decreased PLT Production

- Malignancy (leukemia, lymphoma)
- Medications (chemotherapy)
- Infectious (sepsis, viral)
- Nutritional deficiencies (B12, folate, iron)
- Inherited & Congenital (Wiskott-Aldrich Syndrome)

Splenic Sequestration

- Hypersplenism (infection, sickle cell, malignancy)
- Von Willebrand Disease

Major causes of thrombocytopenia in children

Destructive thrombocytopenias
Immune-mediated
Immune thrombocytopenia (ITP)
Drug-induced thrombocytopenia
Systemic autoimmune disorders and immune dysregulation syndromes (secondary ITP)
Systemic lupus erythematosus
Autoimmune lymphoproliferative syndrome
Antiphospholipid antibody syndrome
Common variable immunodeficiency
DiGeorge syndrome
Platelet activation and consumption
Microangiopathic disorders
Hemolytic-uremic syndrome
Thrombotic thrombocytopenic purpura
Disseminated intravascular coagulation
Major surgery or trauma
Kasabach-Merritt syndrome
Mechanical destruction
Extracorporeal therapies (eg, cardiopulmonary bypass)
Sequestration and trapping
Hypersplenism
Type 2B or platelet-type von Willebrand disease

Decreased platelet production
Infection (Epstein-Barr virus, cytomegalovirus, parvovirus, varicella, rickettsia, bacterial sepsis)
Nutritional deficiencies (folate, B12, iron)
Acquired bone marrow failure
Aplastic anemia
Myelodysplastic syndromes
Medications (eg, chemotherapy)
Radiation
Infiltrative bone marrow diseases
Leukemias
Lymphomas
Metastatic cancers
Infectious granulomas
Storage diseases
Genetic causes of impaired thrombopoiesis *
Wiskott-Aldrich syndrome/X-linked thrombocytopenia
Inherited bone marrow failure syndromes
Fanconi anemia
Dyskeratosis congenita
Shwachman-Diamond syndrome
Congenital amegakaryocytic thrombocytopenia
Thrombocytopenia with absent radii syndrome
Amegakaryocytic thrombocytopenia with radioulnar synostosis
Familial platelet disorder with predisposition to hematologic malignancy
Bernard-Soulier syndrome
MYH9-related disorders
Paris-Trousseau syndrome
X-linked thrombocytopenia with dyserythropoiesis

MYH9: nonmuscle myosin heavy chain gene.
* This is a partial list. For further details, refer to UpToDate topics on causes of thrombocytopenia in children and disorders of platelet function.

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