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A RARE PRESENTATION OF ITP IN ADOLESCENT GIRL AS MENORRHAGIA

Paediatrics

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ABSTRACT

ITP is a diagnosis of exclusion, rare presentation of the same will make it difficult for the diagnosis. In such cases key to diagnosis is to rule out all the other causes of isolated thrombocytopenia. Bone marrow examination is necessary to correlate with diagnosis. In this case of ITP will discuss about a adolescent girl who presented with menorrhagia.

KEYWORDS

Introduction-

Idiopathic thrombocytopenic purpura(ITP), also referred to as primary immune thrombocytopenic purpura, is defined by low platelet count, normal bone marrow, and the absence of other causes of thrombocytopenia.

ITP in children is a clinically distinct disorder, it is more common than the adult disease (40% of patients with ITP are less than 10 years old), and both sexes are equally affected. The onset is typically abrupt with severe thrombocytopenia.

On laboratory evaluation, isolated thrombocytopenia is the essential abnormality. Marrow megakaryocytes are present in normal or sometimes increased and there are no abnormalities. A marrow examination may be necessary in asymptomatic patients with mild to moderate thrombocytopenia who do not require treatment. Antibodies to specific platelet membrane glycoproteins can be detected in most patients, but neither these assays, nor the measurements of antiplatelet antibody tests are important for diagnosis or management.

Idiopathic thrombocytopenic purpura occurs at all ages, in acute and chronic forms. Children mainly have the acute form, which usually follows a recent viral illness and generally resolves within six months. Chronic idiopathic thrombocytopenic purpura occurs more often in adults, often has an insidious onset and both forms are now thought to be due to an antiplatelet antibody, usually of the IgG class (platelet-associated IgG), which coats autologous platelets and leads to their phagocytosis and destruction by the reticuloendothelial system. In most patients, the spleen is the major site of the production of this platelet antibody and the destruction of the platelets. Many methods have been developed to detect this antiplatelet factor in the serum and on the platelets of patients with idiopathic thrombocytopenic purpura. Platelet-associated IgG levels appear significantly higher in patients with idiopathic thrombocytopenic purpura than in normal subjects, and in patients with nonimmune thrombocytopenia. Higher levels are also seen in children than in adults, and in acute cases than in chronic ones. Platelet-associated IgG levels also vary inversely with platelet count and platelet life span, can predict the disease course and response to therapy, and may predict neonatal consequences of maternal idiopathic thrombocytopenic purpura. Evidence of other alterations in immune status, as well as alterations in platelet function and HLA associations, remains controversial. Classic treatment with corticosteroids and splenectomy remains highly successful in most cases. More recent therapies include the use of immunosuppressants and alkaloid-coated platelets, plasma-exchange transfusion, and high-dose immunoglobulin. Overall, fewer than 5 percent of patients have severe hemorrhage or refractory or fatal disease.

Since ITP has no pathognomnic features, diagnosis requires the exclusion of other causes of thrombocytopenia. Myelodysplastic syndromes may present with predominant thrombocytopenia, which is common differential diagnostic problem in older patients. Congenital thrombocytopenias are not common but must be considered, especially in younger patients who have persistent thrombocytopenia unresponsive to treatment.

In this case of ITP, we are going to discuss about a adolescent girl which is a rare presentation of ITP, who had presented with isolated complaint of menorrhagia, no other associated signs and symptoms.

Case Report:

A 16 year old female patient came with complaints of bleeding per vagina since 15 days, generalised weakness since 4 days, back pain and lower limb pain, breathlessness and one episode of fever, moderate grade, 4 days back which was relieved after taking medication.

History of nausea is present, no history of skin rash, no other history of bleeding manifestation, No history of consumption of any drug. Menarche achieved at 15 years of age.

On examination: Active, Afebrile, conscious, co-operative, moderately built, moderately nourished, Pallor was present (moderate). HR-120/min, RR-19/min, Peripheral pulse-well felt, BP-106/55 mm of Hg(between 50%th to 90%th percentile).

Patient was investigated, Hb-4.3mg/dl and platelet count - 1,000cells/mm3. Peripheral smear showed Microcytic, Hypochromic, Anisopoikilocytosis and nucleated RBCs are seen. Reticulocyte count is 6.0. Renal Function test, Liver Function Test, PT/INR, aPTT, BT, CT, Iron studies, Thyroid profile, Folate levels were within normal limits. USG-Abdomen and pelvis showed thick endometrium with irregular hypoechoic area within, probably representing small fluid collection and slightly bulky ovaries with few small peripherally arranged follicles within.

On admission Inj.Tranexamic acid 500mg IV started to control vaginal bleed, which was later given orally as it prevents the breakdown of clots and stops bleeding.

For severe anaemia and severe thrombocytopenia PCV and RDP transfusion was done. oral progesterone 10 mg started TID for 3 days. Post transfusion Hb-6.2mg/dl and platelet count-1000cells/mm3. After repeat transfusion HB-7.7mg/dl and platelet count was still 2000cells/mm3. As there was no improvement even after 2 PCV and 4 RDP transfusions and symptoms still persisted so the patient was taken for bone marrow examination , which showed Megakaryocytic Thrombocytopenia and all other causes of thrombocytopenia were ruled out. And ITP is a diagnosis of exclusion after ruling out thrombocytopenia secondary to above mentioned causes. Treatment started with Inj.Dexamethasone at 0.8mg/kg/day for 3 days and then oral prednisolone started at 1mg/kg/day and patient started showing improvement and repeat CBC which was done after 3 days showed Hb-8.8mg/dl, and Platelet count 46000cells/mm3.

Conclusion:

ITP is a diagnosis of exclusion that should be considered in a patient

with thrombocytopenia and menorrhagia, the latter remaining a rare presenting symptom. However a complete clinical assessment and workup should be done to rule out other etiologies.

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