Reply to Özsöylu Ş.,
Idiopathic thrombocytopenic purpura (ITP) in childhood.
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To The Editor,

I sincerely thank the reader for going through my article [1] and raising his doubts. In fact, this review was written basically for general pediatricians about the practical management of acute immune thrombocytopenic purpura in children keeping in view the recommendations of American Society of Hematology (ASH) [2]. So the purpose of writing this paper was not to go into the details of the definition and disease process and, also, not to discuss investigations which were not cost effective. The recommendations of ASH [2] resembled to those of British Committee for Standards in Haematology (BCHS) [3] with a few differences.

I used the definition according to ASH [2]. So acute immune thrombocytopenic purpura (ITP) and acute idiopathic thrombocytopenic purpura are interchangeable terms [2]. The ASH defined ITP as [2] isolated thrombocytopenia with no clinically apparent associated conditions or other causes of thrombocytopenia (e.g., HIV infection, systemic lupus erythematosus, lymphoproliferative disorders, myelodysplasia, agammaglobulinemia or hypogammaglobulinemia, drug-induced thrombocytopenia, alloimmune thrombocytopenia, congenital hereditary nonimmune thrombocytopenia) . Patients with isolated abnormalities on serologic tests (e.g., antinuclear or antiphospholipid antibodies) but without a clinically evident disorder such as systemic lupus erythematosus were not excluded because positive serologic tests are frequently encountered in patients with typical ITP [2], so the mere presence of isolated positive coombs test or other positive serologic tests has no significance in the diagnosis and that is the reason I did not mention such investigations.

AS far as the antible platelet antibodies are concerned It is true that a positive antigen-specific assay provides confirmatory evidence for the diagnosis in patients suspected of having immune thrombocytopenia while a negative test does not rule it out [4] platelet bound autoantibodies can be detected

With a sensitivity of 49–66% and a specificity of 78–93% when patients suspected of having ITP are compared with healthy individuals or patients with nonimmune thrombocytopenia [5]

The frequency of positive assays and the degree of positivity increases with disease severity [6] and the presence or absence of autoantibodies has prognostic significance [7]. Interlaboratory standardization of platelet antibody assays, however, has been difficult to achieve [8].

Measurement of antibodies in plasma or serum has been less reliable. There have been no prospective studies using platelet antibody determinations to make or to exclude the diagnosis of ITP and act accordingly. Hence, the diagnosis of ITP does not rest on the results of platelet antibody testing, although a positive direct assay may provide useful confirmatory evidence, particularly in patients who have immune thrombocytopenia in the setting of another disease [4]. The detection of antible platelet antibodies does not discriminate between acute, chronic, and secondary causes of immune-mediated platelet destruction. For these reasons, antible platelet antibody testing is not currently recommended for the initial diagnosis of ITP [9].

ASH [2] recommends IVIG as first line of drug if any is to be used while BCHS [3] reserves it for emergency treatment of patients who do not remit or respond to steroids and who have active bleeding.

Tarantino MD et al. 2007 [10] updated the management guidelines published by ASH and BSCH and found very little change in overall management of acute ITP.

It is recommended that the bone marrow be examined before steroid therapy is given [2,3] A brief course of high-dose prednisone is an inexpensive about more than three times cheaper than IV IG acute ITP (11) but the only drawback is the procedure of bone marrow biopsy for marrow examination which is painful and is more acceptable when performed under general anaesthesia [3] But Geddis AE [9] et al. 2007 concluded in their study that bone marrow examination is not needed prior to initiation of therapy in children who present with isolated
thrombocytopenia who, upon careful evaluation do not have clinical or hematologic features that are atypical of ITP. So I agree with reader’s opinion about that methylprednisolone is better choice if cost is concerned.

As far the platelet transfusions in acute ITP is concerned, the only indication is life threatening bleeding (e.g. ICH which is luckily very rare) but in combination with iv methylprednisolone and or IV IG [2,3]. Plasmapheresis is not indicated in life threatening conditions [1,2] and not available in most centers.

There is no doubt that the reader not only focused platelet count but also antiplatelet antibody response in his study [12] but my sentence in the article [1] “In brief, to date, virtually all of the randomized clinical trials conducted in children with ITP have focused on platelet counts as the sole outcome measure” was just to put emphasize that the response outcome measured was not the clinical improvement but it was just improvement in platelet count. But even the said study [12] did not measure the clinical outcome.

References