Review of: "A case of Ceftriaxone-induced immune thrombocytopenia: A diagnostic and therapeutic dilemma"

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At first, I would like to congratulate the authors for the contribution to medical literature with this case report. Drug-induced thrombocytopenia (DITP) is rare and every single data is important.

The first point to review is the listed keywords. "Drug-induced thrombocytopenia" and "Platelet antibodies" are not listed at MeSH.

In the Abstract and in the Case Report please correct*Eschericia coli*, as it should be written in italic.

The Introduction is well written and supported by good references. I would suggest in the last sentence to replace the term "usually known" when you correlate Ceftriaxone to drug-induced hemolytic anemia. Although it is more frequent than DITP, it is still a very rare event.

In the case report, it is said that she had normal blood count at the beginning, but thrombocytopenia less than 150X1000U/L was already present before Ceftriaxone exposure. How the authors could explain? The infection itself could justify this initial low platelet count? If so, consider to put this at the discussion.

As hematologist, I had some doubt about her past of blood transfusion and consequent secondary hemochromatosis. Do you have any more information to add about this?

The CT of the abdomen found hepatic steatosis, but there is now description of the spleen. Probably there was no abnormality, but considering splenomegaly could also result in thrombocytopenia it would be interesting to describe it.

Beyond infection that could be responsible for the initial thrombocytopenia, other factors as bone marrow transient failure or disseminated intravascular coagulation were remembered. I suggest besides mentioning normal values of reticulocytes and coagulation exams to be more explicitly and cite the values and references.

I also suggest at figure 1 to put alongside the platelet level the new drugs time of use during hospitalization (Ceftriaxone, Prednisone, low weigh heparin). This change could make clear and easier to correlate thrombocytopenia to Ceftriaxone.

In the Discussion, it is said in the third paragraph that DITP usually occurs 5-7 days from drug exposure, different from the introduction when 7-10 days is written. Bakchoul et al.[1] says 5-10 days, which summarizes the two. Could you adjust?

It is a pity that the confirmation requires the presence of drug-dependent platelet reactive antibodies in the serum, a difficult exam to process in many centers all over the world. George JN[2] developed a scale for evaluation of published

reports on drug-induced thrombocytopenia, which could be also discussed.

We could infer in the discussion that the patient had not achieved a normal platelet count 2 weeks after the event due to renal acute failure and liver disfunction during the hospitalization. Is there any normal platelet count prior or post from this patient? If so, consider to include in the case report to reinforce the diagnostic of DITP.

When you compare to ITP, the world Purpura could be eliminated as the new used nomenclature since 2009 is only Immune Thrombocytopenia for ITP. It would be interesting if you reaffirm that ITP was discharged as a hypothesis for this case report as the patient has platelet decrease levels besides taking corticosteroids. That also support the suggestion to put the drugs in figure 1.

Finally, it is very important when you remember how frequent Ceftriaxone is used in practical medicine in our days and that makes this case report so interesting.

Thank you!

References

1. ^Tamam Bakchoul, Irene Marini. (2018). *Drug-associated thrombocytopenia.* doi:10.1182/asheducation-2018.1.576.
2. ^James N. George, Richard H. Aster. (2009). *Drug-induced thrombocytopenia: pathogenesis, evaluation, and management.* doi:10.1182/asheducation-2009.1.153.