Reviewer’s report

Title: Aplastic anaemia associated with interferon alpha-2 alpha in a patient with chronic hepatitis C virus infection: a case report

Version: 1 Date: 11 May 2010

Reviewer: Domingo Balderramo

Which of the following best describes what type of case report this is?: Unreported or unusual side effects or adverse interactions involving medications

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: No

Is the anonymity of the patient protected?: Yes

Comments to authors:

General comments:
The authors present a case of AA related temporally with PEG-ING therapy in a patient with chronic HCV infection. There are few cases of AA related to INF therapy in the literature, and PEG-INF has not been related to this complication. Description and management of the clinical presentation are mention very clear.

Specific Comments:
Title: should include “… associated to pegylated interferon …”

Introduction:
- hepatitis-associated aplastic anaemia may be induced by hepatitis B virus and hepatitis C virus (HCV), and also by other viruses, such as human immunodeficiency virus, Epstein-Barr virus, transfusion-transmitted virus and echovirus (Gonzalez-Casas R et al. Anemia in chronic liver disease, World J Gastroenterol 2009 October 7; 15(37): 4653-4658). The sentence that mention no association of HCV with HAA should be change.

Case Presentation.
- Was the patient in contact with benzene or pesticides?
- “Thyroid function and all biochemistry…” What is included in “all biochemistry”? A more clear description (renal function, sodium, calcium, etc) of the test performed should be state.
- Values of platelets, haemoglobin, and WBC previous to PEG-INF treatment should be included. Liver biopsy and/or abdominal ultrasound pre-treatment should be mention if they were available.
- Haematologic values previous to BMT are relatively normal except platelet count. Was the patient receiving blood or platelet transfusion at this moment? Was this the final indication of BMT?
- Since AA is a probable complication of PEG-INF therapy, evolution after BMT should be mention.
- Antiobiotic, antiviral (ganciclovir), and antifungal agent were administered during the period of aplasia?. This should be mention as part of general management of the patient.

Discussion.
- The case presentation is an AA related temporally with PEG-ING therapy in a patient with chronic HCV infection. Description of HAA should not be mention (page 7) (from “ As a syndrome..” to “… HAA are immuno-mediated [8]”.
- Characteristics of the anemia related to ribavirin should be mention in brief.
- The authors mention an alteration of drug metabolic detoxification pathways associated to PEG-INF. As the patients did not receive other medications after starting PEG-INF therapy, alteration of detoxification pathways is not really important. PEG-INF by itself may be the cause of an immune-mediated damage of haematopoietic cells (drug-induced AA).

References:
- The article of Gonzalez Casas et al. Alimnt Pharmacol Ther 2009; 30: 436. should be included in the references.

Quality of written English: Needs some language corrections before being published

Declaration of competing interests:
I declare that I have no competing interests' below.