Reviewer's report

Title: Chronic hepatitis E virus infection in a leukemia patient: a case report

Version: 1 Date: 14 May 2012

Reviewer: harry HR dalton

Which of the following following best describes what type of case report this is?: Presentations, diagnoses and/or management of new and emerging diseases

If other, please specify:

This paper is of interest as it demonstrates that HEV genotype 3 can cause chronic infection in immunosuppressed patients with lymphoproliferative disorders, and that this diagnosis can easily be overlooked. Although this fact has been previously reported in a number of papers, in my view it is worth repeating.

There are some issues that require attention to improve the quality of the paper.

1. The introduction is inaccurate. The authors state that chronic infection is only found in immunosuppressed transplant patients. This is not true. It has been found in patients with HIV (Dalton HR, et al, Engl J Med. 2009;361(10):1025-27). It has also been found in patients with haematological malignancy (Peron JM, et al, Journal of gastroenterology and hepatology. 2006 Jul;21(7):1223-4. & Tavitian S Journal of Clinical Virology 49 (2010) 141–144). The introduction should be amended and these references should be included.

2. The discussion is inadequate. The authors need to set in context the case they have described. This should include a discussion of the previous cases of acute and chronic HEV3 in patients with haematological malignancy that have already been described in the literature (see above).

3. The authors need define what they mean by chronic infection (PCR +ve for > 6 months).

4. I think the patient described developed chronic HEV infection as, at the time of initial infection, he was taking rituximab. When he stopped the rituximab he cleared the virus. The first step in treating patients with chronic HEV infection is to reduce (or stop, if possible) immunosuppressive agents (Kamar N et al, Hepatitis E Lancet 2012). In this case it was stopped for another reason. These points need to be included in the discussion.

5. I think this paper would be improved by a figure which documents serial ALT, HEV viral load and rituximab therapy over time. The time-line should be before, during and after infection with HEV.

6. Line 93 "Henceforth, there was a slow increase of transaminases" this is inaccurate. In fact there was a modest, fluctuating transaminitis with the ALT ranging from 61-408.
This is the typical pattern seen in chronic HEV infection (Kamar et al Lancet 2012). Minor abnormalities of ALT are easily overlooked. The discussion should also be amended with this point in mind.

**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?:** Yes

**Does the case report have explanatory value?:** Yes

**Does the case report have diagnostic value?:** Yes

**Will the case report make a difference to clinical practice?:** Yes

**Is the anonymity of the patient protected?:** No

**Comments to authors:**

No further comments

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

**Declaration of competing interests:**

'I declare that I have no competing interests'