Reviewer's report

Title: Recurrence of hepatitis C virus during agranulocytosis and spontaneous clearance after recovery from cytopenia

Version: 5 Date: 24 October 2007

Reviewer: Curtis L Cooper

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: Findings that shed new light on the possible pathogenesis of a disease or an adverse effect

Has the case been reported coherently?: Yes

Is the case report authentic?: No

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: No

Does the case report have diagnostic value?: No

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

Comments to authors:

General- Well written

Revisions necessary for publication

A strong case for acute HCV infection is not made. There is no identified risk factor for acute exposure. The liver enzymes may have been highly elevated during the period of illness for a number of alternate reasons not related to acute or chronic HCV.

It seems much more plausible that this patient was chronically infected with HCV. Without information related to recent and remote risk factors, I cannot say.

If we accept that this is an acute infection, then the observation that HCV RNA levels fluctuate in the initial six months is not new. It represents the interaction between the immune system attempting to clear the virus and various quasispecies attempting to assert their dominance and permanency within the host. IN the initial six months of infection, you would not conclude clearance
without subsequent laboratory investigation.

Although the usual HCV RNA variability is 0.5-1.0 log10, larger fluctuations are observed. This is often observed in the context of HIV infection and the initiation of cART. Alcohol, which was not mentioned in this report, also influences HCV RNA levels. The variation in immune status reported in this patient may have influenced the HCV RNA levels if this patient is chronically infected.

**What next?:** Revise and resubmit

**Quality of written English:** Acceptable