Reviewer's report

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

Version: 5 Date: 6 November 2007

Reviewer: Emanuele Durante Mangoni

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: An unexpected event in the course of observing or treating a patient

Has the case been reported coherently?: No

Is the case report authentic?: Yes

Is this case worth reporting?: No

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

The authors of this paper have mistakenly interpreted a common clinical finding, i.e. the wide natural fluctuations of HCV-RNA levels during acute hepatitis C. For reference, please see among several other papers: J Virol. 2005 May;79(10):6023-34.

The authors attribute the reappearance of HCV-RNA to a previous granulocytopenia, but granulocytes have no role in controlling HCV replication or contributing to its clearance. HCV clearance in the acute phase of hepatitis C is immune-mediated and depends on strong and multispecific activation of CD4+ and CD8+ T lymphocytes that can be detected both among PBMC and intra-hepatic lymphocytes. Granulocytes have no role.

For these reasons I believe this paper cannot be accepted for publication.

This case also highlights a possible mistake in diagnosis, since acute hep C can be characterised by abdominal pain, jaundice and increase of lipase and amylase levels; this patient was subjected to ERCP without any reasonable
reason, but this is not the responsibility of the authors, who saw the patient afterwards.

**What next?**: Reject

**Quality of written English**: Acceptable