Reviewer's report

Title: Elevated lipase levels in patients with Hantavirus-induced Nephropathia epidemica - should we think about acute pancreatitis?

Version: 4  Date: 2 May 2015

Reviewer: Tobias Manigold

Reviewer's report:

This is an interesting report, evaluating the significance of elevated lipase in a relatively big cohort of patients with PUUV infection, which is still quite rare in Germany. As such the report is valuable in order to avoid misinterpretations of elevated lipase levels in PUUV infection.

I would emphasize a view points which the authors can choose to refer to in a revised vision (discretionary revisions):

- in their introduction the authors should mention that reports on sensitivity of lipase testing for the diagnosis of pancreatitis vary from approx 60-100%.

- also, renal impairment is known as a contributor to elevated lipase levels due to impaired clearance, the authors should mention this in the introduction an discussion; however as the 7 patients with >3xULN lipase did not show markedly impaired clearance as compared to the other lipase-pos patients, impaired clearance may not be the reason for elevated lipase.

- it would be quite helpful if alternative biomarkers such as amylase or elastase in stool have been determined in some of the patients. Although amylase is probably less sensitive than lipase it would still be interesting whether some of the patients were "double positive". A solely elevated lipase could rise the clinician's confidence that noc pancreatitis is taking place.

- lipase is also found in the Colon. Thus, although intestinal PUUV infection does not seem to correlate with abdominal symptoms, it may explain elevated lipase levels.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.