Reviewer's report

Title: Lanthanum induced abnormal liver function tests in 2 patients on dialysis: a case series

Version: 3 Date: 1 December 2008

Reviewer: Paul Warwicker

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?: 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?: Yes

Comments to authors:

The authors report two case histories where patients developed abnormal LFTS, which seem to be temporally related to initiation of lanthanum, and which resolved on withdrawal of the drug.

I feel this is certainly worthy of publishing - reports of possible side effects arising from relatively new medications are of general interest, but the paper needs some revision as listed below:

1. Calling 2 cases a series is a bit cheeky
2. I am not sure that causality has been conclusively established, but I would agree that there are grounds for suspicion. I would have liked to have seen a series of LFTs establishing stability and normality before and after exposure. This
would best be illustrated as a graph of the LFTs (for say 6-12 months before and 6 months after)

3. In case 2 - please include information on how fluid overloaded the patient was - how far did dry weight fall during the admission (the authors themselves state how fluid status can affect LFTs)

4. Given that accumulation is unlikely to explain an acute, reversible decline in LFTs (rather a chronic picture would be expected), and these look like idiosyncratic reactions - could the authors speculate on a possible mechanism (Are other examples of trivalent cations causing abnormalities of LFTs?)

5. The discussion section could be more focused, and the points condensed together.

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

**Declaration of competing interests:**

I declare that I have no competing interests