Reviewer's report

Title: A Systematic Review and Meta-Analysis of the Use of Oral Zinc in the Treatment of Hepatic Encephalopathy

Version: 2 Date: 5 May 2013

Reviewer: marzia lazzerini

Reviewer's report:

MINOR COMMENTS
Abstract/text
Database “The Cochrane Library”, it is better to substitute this with “CENTRAL “ both in abstract and text.

MAJOR COMMENTS
Part of the methods section is not adequately developed in the results section. See the five points below.

1) Measures of treatment effect and data analysis- Line 122-124 “The trials were explored to identify variations in the randomization process. The preferred design was a simple parallel group design, although other designs such as cluster randomized trials, crossover trials, and repeated measurements during the trial were also analyzed. “This sentence is really unclear.

2) Assessment of heterogeneity, line 130-131 “Whenever heterogeneity was detected, subgroup analysis was performed to assess the effect of potential sources of heterogeneity on the main results. “ This was not done. Heterogeneity is 50% in the Forest plot for the number connection test results, but where is sub-grouping reported?.

3) Assessment of reporting biases line 133 “ A funnel plot estimating the precision of trials (plot of logarithm of the RR against the sample size) was used to evaluate asymmetry and to detect potential publication bias. In addition, the standard normal deviate (SND), defined as the RR divided by its standard error, was regressed against the estimate’s precision (regression equation: SND = a + b # precision) to quantify the bias captured by the funnel plot. “ This is not reported in the result section, where are reporting bias reported?

4) Sensitivity analysis – line 140 “We analyzed the data using both fixed-effect and random-effect model meta-analyses. When both models produced similar estimates, the fixed-effect result is reported; otherwise, we report the results from both analyses. Outcomes were analyzed as reported in the trial, either per protocol or as an intention-to-treat analysis. “ results of the fixed-effect compared to random-effect model meta-analyses are not reported in the text.

5) Line 243 “The available trials had important methodological flaws “ this sentence is in contrast with what stated in results: line 166-168” Risk of bias
within studies. The risk of bias was unclear in all trials due to lack of information, and was not possible to assess if the trials were on high or low risk of bias.

Quality of written English: Acceptable

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

Declaration of competing interests:

None