Author's response to reviews

Title: Iron absorption and oxidant stress during erythropoietin therapy in very low birth weight premature infants: a cohort study

Authors:

James K Friel (frielj@ms.umanitoba.ca)
Aziz Khalid (kaziz@mun.ca)
Andrews L Wayne (wandrews@mun.ca)
Serfass E Robert (reserfas@utmb.edu)

Version: 2 Date: 26 May 2005

Author's response to reviews:

May 36, 2005
Dear Bio Med Central Editorial Team;
Thank you for your letter of May 5, 2005 re: "Iron Absorption and Oxidant Stress during Erythropoietin Therapy in Very Low Birth Weight Premature Infants: a cohort study." We have addressed each comment made by the two reviewers and have indicated where revisions occurred. We have also gone through the manuscript formatting check list to ensure that the revised manuscript conforms to all points.

Reviewer #1
1. Data comparing the iron absorption and oxidative stress before and after EPO is now combined into one Table. The difference between the feeding procedures is stated in the results (Para 2) and discussion only as requested and placed in results.
2. Data for infant weights revised (thank you!) is excluded from the new table; hemoglobin concentrations inserted into text (both Para 1).
3. Incorporation in weeks 2 and 4 recalculated using arithmetic rather than geometric means.
4. Discussion: more speculation added in regards to different feeding groups with clarification as to original hypothesis as requested (Para 1).
5. Discuss the possibility that during treatment with EPO, iron absorption increases; included as requested (Para 1, oxidant stress).
6. Feces statement removed from text as we did not report that data.
7. Abbreviations corrected as requested.
8. Khalid Aziz is an MB as educated in England

Reviewer 2
1. The primary outcome variable upon which power analyses was based was iron incorporation. From the literature we expected absorption in the F group to be 10 % with an SD of 5 %. In the HM fed group we expected absorption of 30% with an SD of 5 based on our earlier work and the literature on iron absorption in HM. Thus with an expected difference of 20 %, a power of 0.8 and an alpha of 0.05 we would need 5 subjects in each group. (Now clarified in the methods, last Para).
2. We acknowledge that 4/mg/kg/day iron is a standard dose and have removed the word "elevated" when referring to the iron supplement throughout the text.
3. Statement "evidence on which to base clear guidelines" removed. The focus of the study was iron absorption and oxidant stress.
4. A recent study on long-term neurodevelopment outcome included (thank you).
5. References connected as requested. Pollak spelling corrected.
6. Absorption of iron and incorporation of iron into RBCs clarified in introduction (Para 3).
7. Methods section shortened as requested including formula preparation and isotopic analysis.
8. We considered adding control values for adult and healthy preterm infants to the Table; however we left this data in text so as to keep Table 1 clearer.
If any further revisions are required please advise. Thank you to the editors and reviewers for their suggestions. We are pleased with the outcome.