Reviewer's report

Title: Growth patterns among HIV-exposed infants receiving nevirapine prophylaxis in Pune, India

Version: 3 Date: 25 May 2012

Reviewer: sharon nachman

Reviewer's report:

Thank you very much for allowing me to review the paper titled: Growth patterns among HIV-exposed infants receiving nevirapine prophylaxis in Pune, India, by Dr Ram and colleagues. This interesting paper looks at growth among the infants and children enrolled in SWEN, a well published study of extended postnatal nevirapine prophylaxis. In their recent paper, the SWEN team reviews and discusses the differences in growth between the HIV infected cohort (on utero, post natal and breast milk transmitted) and the uninfected cohort. They found that while all the enrolled infants start out pretty much the same, the HIV infected cohort has several distinct difference that actually allow for identification of HIV, just using growth (failure) parameters.

I understand that few of the infected babies were started on HAART during the first year of life, even though they were identified as HIV+. “Only 16 HIV-infected infants were on HAART during the follow-up period”, of the 93 who were infected. Do the authors think that their data would be different now as many of these babies are treated early on and cART is available in the public sector?

Despite the finding of a significant difference in hemoglobin of 10.1 in the moms of the babies identified as HIV+ to 10.8 in those babies who were not infected, I am not sure how critical or clinically relevant it is. Would the study team think that clinicians would use that as a guide with moms when discussing possible outcomes?

Clearly stunting was seen early in the infected cohort (but really only 28 infants were infected in utero and appearance of stunting at that age should be used as a reflection of that early infection). It is the stunting that occurs in a non-stunted baby after 1 month that should trigger an urgent HIV test.

In the discussion the authors comment that “SWEN exposure was associated with lower risk of wasting in HIV-exposed, uninfected infants”, underscoring that it was its use and prevention of HIV infection that really protected these infants from stunting. They go on to suggest that maternal factors such as education may be as important as CD4 or viral load. The authors correctly point out that Maternal education is not only a good measure of their knowledge of health-related issues, prenatal and postnatal infant care, infant feeding practices, and better sanitary habits, but it also impacts health-seeking behavior, income generating capacity, and ability to make autonomous decisions. Perhaps putting these two sections together in the discussion will help the clinician with their patients.
Do the authors think that the HIV+ moms who were sicker had inadequate milk for breastfeeding (not supply, but quality)? Especially if these moms had lower CD4, higher viral load and a higher likelihood of their babies getting infected? Overall this is an interesting snapshot of the SWEN era study (2002-2007), but its current clinical relevance today is not as clear.

there are no major compulsory revisions needed.

**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.

**Declaration of competing interests:**

'I declare that I have no competing interests'