Reviewer's report

Title: Effects of vitamin D administration on cardiac natriuretic peptide levels in vitamin D deficient women

Version: 1 Date: 30 June 2008

Reviewer: Michael Holick

Reviewer's report:

Review: BMC – Effects of vitamin D administration on cardiac natriuretic peptide levels

Comments to the authors

The authors have conducted a study whereby they evaluated oral administration of vitamin D2 on parameters of blood pressure.

Suggestions

1. The observation is interesting. However, as noted by the authors, the normal reference range for 25(OH)D is 50-150 nmol/L. All of the subjects appear to be severely vitamin D deficient and 2,000 IU of vitamin D/d or its equivalency on a monthly basis did not raise the blood level to at least 50 nmol/L which is considered to be the absolute cut off for vitamin D deficiency. Most experts now agree that a blood level of > 75 nmol/L is a more desirable level. The results suggest that the baseline levels were < 50 nmol/L, but also at the end of the study, they remained < 50 nmol/L. For the women that may have been above 50 nmol/L, or more importantly > 75 nmol/L, was there a significant decrease in the natriuretic peptide levels?

2. Did the authors measure the serum calcium and PTH levels? This would be helpful, and it would be interesting to know whether the PTH levels decreased as a result of treating the patients with vitamin D.

3. What these data suggests is that even 2,000 IU of vitamin D2/d for three months was totally inadequate in correcting vitamin D deficiency.

4. The authors should use the more standard terminology for the active form of vitamin D being 1,25-dihydroxyvitamin D rather than talking about the bioactive vitamin D which may be confusing to the reader. The authors also use circulating levels of vitamin D when they mean 25-hydroxyvitamin D and this should be changed throughout the Manuscript.