Reviewer's report

Title: Female asylum seekers with musculoskeletal pain: the importance of diagnosis and treatment of hypovitaminosis D3

Version: 3 Date: 22 August 2005

Reviewer: Vin Tangpricha

Reviewer's report:

General

The conclusions made by this paper (reduction in number of emergency room visits and reduction in analgesic drugs) can not be made without a proper control group.

-------------------------------------------------------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. Was there approval from a human studies committee to conduct this prospective study?

2. There is no mention on what cut-off was used to determine vitamin D deficiency.

3. It is unclear how the 33 subjects were discovered. Did the authors review all the 25(OH)D levels to come up with the 33? If this is correct, then what was the prevalence of vitamin D deficiency in this population. A flow diagram would be helpful to understand what was the procedure to identify these patients.

4. How did the physician decide whether to give oral vitamin D or intramuscular injections? Was this to be decided by the physician?

5. What methods were recommended in the circular letters for treatment of vitamin D deficiency. There are only two methods used in this study population (300,00 IU monthly and oral cholecalciferol 800 IU).

6. The circular letter should be described in more detail.

7. Was there a control group to examine number of ER visits and analgesic drugs?

8. What was the other chronic medical illness suffered by the subjects as noted in the manuscript.

9. How did the authors determine whether a symptom resolved? Was there a pain questionairre or was this determined by a chart review? It is very difficult to rely on a chart review to accurately know if a symptom had improved.

10. Where there other medical illness that the subjects received analgesic medications? The subjects received over 3 different analgesics at baseline which improved to 1.6 different analgesics after treatment.
11. Are the changes in figures 2 and 3 statistically significant? What tests were used to determine significance?

12. Did treatment with vitamin D in the subjects result in higher 25(OH)D levels?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. 25OH vitamin D3 (thoughout the manscrupt) should be corrected to 25-hydroxyvitamin D (25(OH)D3(3 in subscripts))

2. Did the authors specifically measure 25(OH)D3 as stated in the manuscript? Most conventional assays measure 25(OH)D which includes both 25(OH)D2 and 25(OH)D3.

3. In the third paragraph of the introduction, the conversion factor for 25(OH)D is incorrect. 20 ng/ml (or mcg/L) is equivalent to 50 nmol/l. The SI unit is nmol/l.

4. The units for 25-hydroxvitamin D (25(OH)D) needs to be consistant throughout the paper. I would recommend either using the SI units nmol/l or ng/ml (instead of mcg/l).

5. The paragraphs should be indented

Discretionary Revisions (which the author can choose to ignore)

What next?: Reject because scientifically unsound

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests