Reviewer's report

Title: Pakistanis living in Oslo have lower serum 1,25-dihydroxyvitamin D levels but higher serum ionized calcium levels compared with ethnic Norwegians. The Oslo Health Study.

Version: 1 Date: 12 June 2007

Reviewer: Timothy Green

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GDespite lower 25 (OH) vitamin D and higher PTH concentrations Pakistani immigrants to Norway have similar bone turnover and BMD compared to ethnic Norwegians. One possibility is that Pakistani’s have higher 1-alpha-hydroxylase activity in response to PTH. The author’s objectives are to determine whether Pakistanis in Oslo have higher calcitriol and altered ionised calcium concentrations compared with ethnic Norwegians. The finding was unexpected that the Pakistanis had lower calcitriol yet higher calcium concentrations

I offer the following comments

1. In the introduction can the authors tell us how the present paper adds to references 7 and 11? Men, wider age range, sample size

2. Were the Pakistanis and the ethnic Norwegians sampled at the same time of the year? Was month of collection controlled for in the analysis?

3. Dietary calcium is know to mediate the relationship between vitamin D and PTH, was this measured and controlled for?

4. What impact could non-fasting have on calcitriol or PTH? i.e. calcium intake

5. If points 2 and 3 and 4 cannot be addressed in the methods than this limitation should be discussed

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

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