Author's response to reviews

Title: Pilot Case-Control Investigation of Risk Factors for Hip Fractures in the Urban Indian Population

Authors:

Ruchira M Jha BA, MD (ruchirajha@gmail.com)
Ambrish Mithal MD, DM (ambrishmithal@rediffmail.com)
Nidhi Malhotra MD (docnidhi1@live.com)
Edward M Brown MD (embrown@rics.bwh.harvard.edu)

Version: 3 Date: 18 October 2009

Author's response to reviews:

Dear Editors

Please find below the responses to the comments which have been incorporated accordingly in the manuscript.

Minor Comments:

- I feel that the discussion MUST include some consideration about the choice of control subjects (hospital staff and visitors). Although practically attractive, I do wonder if these controls could lead to a potential source of bias. For example, if a control subject is WORKING, they may well be fitter than an equivalent-aged case who is chronically sick? Equally, workers in hospitals may have better wages with opportunity to improve their diets compared with others? Finally, healthcare workers may be better educated about diet/exercise?

ANS - The control group comprised mainly of visitors. The percentage of controls contributed by hospital staff was minimal since the retirement age here is 60 years. Mean age of controls was 66 years(male) and 63 years (female). In general, in these hospitals, workers are unlikely to have better wages/economic opportunities than patients/visitors.

- Cigarette smoking is frequently associated with hip fracture in other epidemiological studies but does not appear to have been considered here?

ANS - There were only 3 smokers in the group of 200, all were men. Smoking as a risk factor, therefore, could not be assessed.

- Agility was measured by movement out of a chair. Although not absolutely clear, by nature of the study design, I think that this was done AFTER the hip fracture among the cases. I do not think that this can be the best way to assess
such a factor as one would clearly expect mobility to be reduced by the fracture itself? Similarly, but of less importance, is the assessment of weight loss in the preceding year: it is more likely that a patient will lose weight when they fracture a hip and are admitted to hospital.

ANS --The history taken (both for agility and weight loss) was related to the period before the hip fracture.

- The issues about tea/caffeine drinks is potentially important. Certainly, future studies must incorporate the milk content of the tea. Are there any ‘surrogate’ data about what proportion of Indian population generally take milk in their tea? these could help to inform the study reader..?

ANS -There is no surrogate data available on this but adding milk to tea is practiced by the majority of population in India.