Author's response to reviews

Title: Comparison of plasma endothelin levels between osteoporotic, osteopenic and normal subjects: a research article.

Authors:
Hasan H Muratli (hasanmuratli@yahoo.com)
Levent Celebi (leventcelebi@superonline.com)
Onur Hapa (hapajan@hotmail.com)
Ali Bicimoglu (bicimoglu@hotmail.com)

Version: 6 Date: 16 August 2005

Author's response to reviews:

Peter Newmark,
The Editor-in-chief, BMC Musculoskeletal Disorders,
BioMed Central Ltd,
Middlesex House,
34-42 Cleveland Street,
London W1T 4LB, UK.

July, 05, 2005
Kindly Attention of Peter Newmark,
The Editor-in-chief, BMC Musculoskeletal Disorders,

We revised our manuscript entitled "Comparison of plasma endothelin levels between osteoporotic, osteopenic and normal subjects: a research article." according to reviewers' suggestions. The changes that we made and the answers to the reviewers' questions are explained in the following part of this letter.
The revised manuscript was read and approved by all authors.

Sincerely yours,

Hasan Hilmi Muratli
Levent Celebi
Onur Hapa
Ali Bicimoglu

Corresponding Author:
Hasan Hilmi Muratli
Address: 100.Yil Mahallesi. 32. Cadde. Kardelen Sitesi. A Blok Daire:1 Balgat/Ankara-TURKEY Telephone number: 90.312.2870158 E- mail: hasanmuratli@yahoo.com

Reviewer 1 (Miryoung L Lee)

Comment: The study design of this manuscript is cross-sectional. Thus, authors need to rewrite The study was performed prospectively on second paragraph, page 5.
Response: The statement was changed as "The study was performed cross-sectionally." on the second paragraph, page 5 of the revised manuscript.

Comment: Based on the results (section: levels according to gender) and figure 1, however, it looked like that they used two-way ANOVA incorporating two independent variables (osteoporotic status and sex), and found significant interaction effects between osteoporotic status and sex on the levels of plasma endothelin. Was there any significant sex difference on the levels of plasma endothelin independent of osteoporotic status? Please clarify the information.
Response: Recommended changes were made in the data analysis section. One way ANOVA was
changed as two-way ANOVA. And it was clarified that "Independent of osteoporotic status mean ET level was significantly higher in men (130.1+/−58.7 pg/ml) than women (91.5+/−50.2 pg/ml). (p<0.05)" in the levels according to gender part of result section.

Reviewer 2 (Peter Vestergaard)
Comment: The authors have responded sufficiently to most points raised. However I am still concerned by the levels of ET measured by the assay used.
Have the authors tried to do a re-run and a check of the assay, or perhaps a cross-calibration with another lab to ensure the quality of the measurements?
Response:
According to reviewer's suggestion we requested from the laboratory to re-run the assay and they accepted to do but the results of the second assay revealed almost similar results.

Reviewer 3 (R Swaminathan)
Comment: The authors have addressed some of the questions. However they now acknowledge that what they measured was a mixture of endothelins 1,2 and 3. The literature on endothelin and bone metabolism is mainly concerned about endothelin-1. The basis of their conclusions is therefore questionable and this manuscript is not acceptable.
Response:
Thank you for the reviewers' evaluation to our study. We agree with the reviewer that the literature on endothelin and bone metabolism is mainly concerned about endothelin-1. But it is not possible to say that ET-2 and ET-3 don't have any physiological role in the bone tissue. As a matter of fact that in several studies [1, 2] it was shown that although ET-1 is more potent, ET-2 and ET-3 have effects on bone vasculature as well.
So we don't agree with the reviewer that our study is scientifically unsound. If reviewer wants we can add few statements in the discussion about the abovementioned topic.
Comment
They have also not addressed my concern about taking blood pressure into account when doing corelations studies.
Response
After we read the reviewers' first comment we gave our patients' average blood pressure measurements in the first revised text. Because we included only participants who have normal systemic blood pressure measurements we didn't need to make correlation study between the blood pressure measurements and T score. However after we read the reviewer last comment we did this evaluation but we found out that there was no significant correlation (p>0.05-pearson correlation analysis). Therefore we did not add this findings to our second revised text. If reviewer recommend to add this findings to the results section we can add it.