

Letter to the Editor

Frequency of apolipoprotein E alleles in Iranian populations

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Dear Editor:

Thank you for your efforts in the dissemination of science and technology in our country. Also many thanks to the authors of the article "Association of apolipoprotein E polymorphism with susceptibility to multiple sclerosis" (Hadavi *et al.*, 2004) for their valuable study. In that article, the frequency of apolipoprotein E (apoE) E2/E3 genotype and that of the apoE2 allele in control group have been reported respectively as 66.7% and approximately 48%, while the maximum reported frequency of apoE2 allele in the world is about 12% and the most frequent allele in all populations is apoE3 (Mahley and Rall, 2000).

In addition, in the Iranian population including the population of Tehran, the frequency of the apoE2/E3 genotype and that of the apoE2 allele in control subjects have been reported as 5.4% and 2.7% respectively (Raygani *et al.*, 2005).

In the population of Fars province (in southern Iran) we have found the frequency of apoE2/E3 genotype and that of the apoE2 allele to be 11.6% and 6.3% respectively (unpublished data). With all of the above-mentioned data, we believe the frequency of apoE genotypes in the article by Hadavi *et al.* may need to be reviewed again.

References

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- Raygani A, Zahrai M, Raygani AA, Doosti M, Javadi E, Rezaei M, Pourmotabbed T (2005). Association between apolipoprotein E polymorphism and Alzheimer's disease in Tehran, Iran. *Neurosci lett.* 375: 1-6.

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To whom it may concern

Thank you very much for your opinion on our article under the title: "Association of Apolipoprotein E Polymorphism with Susceptibility to Multiple Sclerosis" published in Iranian Journal of Biotechnology, Vol. 2, No. 1, pp: 49-54 January 2004.

As you probably know this article as well as two others which have been published in Iranian Journal of Medical Science 2004; 29(2): 67-71, by title: Polymorphisms in Apolipoprotein E Region and Severity of Multiple Sclerosis 2005; 18(4): 297-301, by title: An Investigation of Human Apolipoprotein E Polymorphisms in Multiple Sclerosis in Iran, are the results of Master Science thesis work.

As you can see in these articles our goal was not a population study on frequencies of apoE alleles in Tehran or Iran. We compare the finding results between two groups: A small MS group with matched controls. The selected control group in this study were not only from Tehran rather they should be matched ethnically to our MS group.

As you can see in our published manuscript in Med J Islam Rep Iran, we have classified our MS and control population in four ethnic groups (Table II) and compared our results with other reports from the world in Table III. As you can see the results were different in the countries. Also as we mentioned in the article, data from Turkey, Iraq, ... that are neighboring countries to Iran and Asian MS patients were not available to compare.

More studies such as Raygani *et al.* and yours, with larger sample size are needed in developing countries to complete the pattern of apoE allele frequency. Again, thank you very much for your consideration.

With best regards,

Valeh Hadavi, M.Sc. on Human Genetics