Letters to the Editor

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Response to Letter by Kotani et al

Response:

We thank Dr Kotani and colleagues for their interest in our article "Leptin: adiponectin ratio is an independent predictor of intima-media thickness of the common carotid artery".[1]

We much appreciate their contribution to investigate the possible role of the leptin:adiponectin ratio in different asymptomatic populations, and we believe that their findings in old asymptomatic females add new information.

Indeed Kotani et al observed also in females a significant correlation of the leptin:adiponectin ratio with IMT and additionally, when leptin or adiponectin alone were considered, no significant correlation to IMT was observed, in agreement with our findings in males.[1]

In both studies, multiple regression analysis showed that age is the main predictor of IMT also in healthy subjects; however, whereas in males we observed that fasting glycemia and leptin: adiponectin ratio were also independent predictors of IMT, Kotani et al observed a significant role only for systolic blood pressure in females.

These discrepancies may be explained by several factors, including, as suggested by Kotani and collegues, age and gender. Indeed, it is well established that the reproductive changes through life, like menopause in females and partial hypogonadism in males, and the related hormonal variations are associated with increased cardiovascular risk and are also codeterminants of leptin and, to a lesser extent, adiponectin circulating levels.

In addition, we would like to suggest also ethnicity results in different leptin values in Asians versus whites.[2,3] Finally, we cannot exclude that the relative small numbers of subjects investigated in both studies could explain in part the differences observed. Nevertheless, in these 2 different healthy populations, the leptin:adiponectin ratio correlates with several anthropometric, metabolic and clinical parameters better than each single adipokine.

Therefore, we agree with Kotani et al that future studies in larger healthy populations are warranted to better define the possible clinical applications of the leptin:adiponectin ratio.

Disclosures

None.

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(*Stroke*. 2008;39:e34.)

***Stroke* is available at http://stroke.ahajournals.org** **DOI: 10.1161/STROKEAHA.107.507103**