Correlation of Dysmetabolic Risk Factors with Different Anthropometric Measurements

Dear Sir;

We read the interesting and well-designed article of “Correlation of dysmetabolic risk factors with different anthropometric measurements” by Chiou et al. [1]. The study focused on the biochemical data, results of radioimmunoassay, and mechanical studies with 3-D dimensional detection of the body surface to investigate metabolic syndrome in Taiwan. In some parts of their article, they reported the prevalence of dyslipidemia. It seems that there are some contradictions in these parts. In the abstract, they stated that hypercholesterolemia was found in 14.6% of subjects, but in the discussion and results sections, the reported prevalence of high cholesterol was 49.9%. Although in the discussion, the reported prevalence of high low-density lipoprotein (LDL) was 38.3%, in the abstract and results parts, they stated that it was found among 36.9% of participants.

In the discussion part, they stated that “Men had a higher prevalence in all metabolic abnormalities except for low LDL, which had higher prevalence among women.”, but they did not mention low LDL as a metabolic abnormality anywhere in the article. If we assume that by the recent sentence, they meant “low HDL” or even “high LDL” (instead of low LDL), none of these two can be revealed from the results part. According to their findings, we can come to this conclusion that all metabolic abnormalities were higher among men. For these reasons, we suggest revising the existed contrasts of the article about the prevalence of lipid abnormalities by the authors.

Reference


Answer to the comment:

Dear Itaru Kojima and Ammar Hassanzadeh Keshteli;

At first, I want thanks to Ammar Hassanzadeh Keshteli and Ali Chehrei for their detailed reading our manuscript. Due to a lot of data there, sometimes, I was not put all the data in manuscript. I try to explain as possible!

In Results section:
Total cholesterol was normal in 50.1% of subjects. Total cholesterol in the 200 to 244 mg/dL range appeared in 35.3% of subjects; 11% of subjects had total cholesterol greater than or equal to 245 mg/dL. Percentage of men and women with total cholesterol greater or equal to 245 mg/dL were almost the same (15.3% vs. 14.0%).

The Question is definition of normal Total cholesterol. If you define <200 mg/dl, there will be 49.9% of high cholesterol.

If you define level of the total cholesterol needed to be treated >245 mg/dL, then as the abstract: hypercholesterolemia was 14.6%.

Abstract, Elevated low-density lipoprotein (≥130 mg/dL) affected 36.9% of the subjects

Results: Elevated low-density lipoprotein (LDL>130 mg/dL) levels were found in 36.9% of subjects. Among them, 43.4% of the men and 31.8% of the women had LDL levels above the normal range.

Discussion: A high prevalence of dyslipidemia was found in this study, including hypercholesterolemia in 49.9% of subjects, hypertriglyceridemia in 26.7%, abnormally low HDL in 10.7%, and elevated LDL in 38.3%.

Yes, Discussion portion LDL should be 36.9%.
(Thank you for your correction!)
In results:
Percentage of men and women with total cholesterol greater or equal to 245 mg/dL were almost the same (15.3% vs. 14.0%). Elevated low-density lipoprotein (LDL>130 mg/dL) levels were found in 36.9% of subjects. Among them, 43.4% of the men and 31.8% of the women had LDL levels above the normal range. Low high-density lipoprotein (HDL<40 mg/dL) levels were found in 10.7% of subjects. Among them, 15.7% of men and 6.6% of women had HDL levels below the normal range.

In the discussion, we should say ‘‘man had a higher prevalence in all metabolic abnormalities except low HDL.

Best regards
Jen-Der Lin, MD