COMMENTS AND RESPONSES

Minimum Waist and Visceral Fat Values for Identifying Japanese Americans at Risk for the Metabolic Syndrome

Response to Oda

We appreciate Dr. Oda's (1) interest in our article (2) and his agreement with our concerns about the methodology used to define cut points for abnormal waist circumference at 90 cm for women and 85 cm for men in Japanese patients. Our report demonstrates that compared with these recommendations, a higher waist circumference cut point in men and a lower cut point in younger women better identifies presence of nonadipose metabolic syndrome components in Japanese Americans (2). Our study reports results of a cross-sectional study of optimal waist circumference cut points for classifying presence of nonadipose metabolic syndrome components. We believe this approach to be a better method to assess metabolic syndrome features than the longitudinal analyses cited by Oda, since it directly examines, in accordance with the original concept of the metabolic syndrome, whether its components cluster more frequently than expected by chance. Longitudinal prediction of outcomes to identify features of the metabolic syndrome is susceptible to bias due to differential survival, loss to follow-up, and other limitations and furthermore does not directly address the clustering of features that would suggest a common physiologic mechanism for multiple metabolic abnormalities. In particular, the article Oda cites by Sone et al. (3) may be even less well suited to address this question given that it describes a longitudinal analyses in diabetic subjects only, a population in which a high prevalence of metabolic disorders exists.

We disagree with Dr. Oda's suggestion that waist circumference be replaced by C-reactive protein as a new criterion for the metabolic syndrome for several reasons. We feel that the controversy over appropriate waist circumference cut points in Japanese is now a moot issue given the results of our study (2). Many metabolic syndrome optional features (such as C-reactive protein) are highly intercorrelated with key features of the syndrome, so a strong case must be made for one of these to supplant an existing criterion. Oda has not, in our opinon, successfully made this case. Lastly, it seems preferable to include the causes (if known) of the metabolic syndrome in the definition. Because central obesity gives rise to many downstream features of the metabolic syndrome, including C-reactive protein level, it behaves like a cause. By this reasoning, central obesity deserves to be included in the definition, assuming that it can be measured accurately and easily.

We also take issue with Dr. Oda's proposed optimal cut point for C-reactive protein for the metabolic syndrome of 0.7 mg/dl based on a Japanese study of 179 men and 166 women (4). Only 13 women in this cohort had metabolic syndrome, no criteria were presented to establish the optimal cut point (such as Youden's Index), waist circumference was not measured, and the article proposes a cutoff of 0.65 mg/dl as the optimal value, as opposed to the higher value recommended by Dr. Oda in his letter. Surely, more study is required in larger populations with better attention paid to consistent reporting of recommendations before C-reactive protein merits further consideration as an integral feature of the metabolic syndrome.

TOMOSHIGE HAYASHI, MD, PHD[1]
EDWARD J. BOYKO, MD, MPH[2,3]
MARGUERITE J. MCNEELY, MD[3]
DONNA L. LEONETTI, PHD, MPH[4]
STEVEN E. KAHN, MB, CHB[3]
WILFRED Y. FUJIMOTO, MD[3]

From the [1]Department of Preventive Medicine and Environmental Health, Osaka City University Graduate School of Medicine, Osaka, Japan; the [2]Epidemiologic Research and Information Center, Veterans Affairs Puget Sound Health Care System, Seattle, Washington; the [3]Department of Medicine, University of Washington, Seattle, Washington; and the [4]Department of Anthropology, University of Washington, Seattle, Washington.

Address correspondence to Edward J. Boyko, MD, MPH., 1100 Olive Way, Suite 1400, Seattle, WA 98101. E-mail: eboyko@u.washington.edu.

DOI: 10.2337/dc07-0207

© 2007 by the American Diabetes Association.

References

1. Oda E: Minimum waist and visceral fat values for identifying Japanese Americans at risk for the metabolic syndrome: response to Hayashi et al. (Letter). *Diabetes Care* 30:e40, 2007. DOI: 10.2337/dc07-0068
2. Hayashi T, Boyko EJ, McNeely MJ, Leonetti DL, Kahn SE, Fujimoto WY: Minimum waist and visceral fat values for identifying Japanese Americans at risk for the metabolic syndrome. *Diabetes Care* 30:120–127, 2007
3. Sone H, Tanaka S, Ishibashi S, Yamasaki Y, Oikawa S, Ito H, Saito Y, Ohashi Y, Akanuma Y, Yamada N, Japan Diabetes Complications Study (JDCS) Group: The new worldwide definition of metabolic syndrome is not a better diagnostic predictor of cardiovascular disease in Japanese diabetic patients than the existing definitions: additional analysis from the Japan Diabetes Complications Study. *Diabetes Care* 29:145–147 2006
4. Oda E, Oohara K, Abe A, Veeraveedu PT, Watanabe K, Kato K, Aizawa Y: The optimal cut-off point of C-reactive protein as an optional component of metabolic syndrome in Japan. *Circ J* 70:384–388, 2006

Downloaded from http://diabetesjournals.org/care/article-pdf/30/5/e41/596873/zdc00507000e41.pdf by guest on 30 November 2022