

**Effects of monthly feedback of VFA measured by dual BIA method in Japanese patients
with obesity: a randomized controlled study**

T. Moriyasu^{1,2}, K. Hosoda¹, S. Tanaka-Mizuno³, M. Konda⁴, K. Ueshima⁴, M. Ida⁵, and K. Nin¹

¹ Human Health Science, Graduate School of Medicine, Kyoto University, Kyoto, Japan

² Department of Nursing, School of Health Sciences, Bukkyo University, Kyoto, Japan

³ Department of Biostatistics, Shiga University of Medical Science, Otsu, Japan

⁴ Department of EBM Research Institute for Advancement of Clinical and Translational Science,
Kyoto University Hospital, Kyoto, Japan

⁵ Department of Diabetes, Endocrinology, and Nutrition, Kyoto University Graduate School of
Medicine, Kyoto, Japan

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Address for Correspondence

T. Moriyasu, Human Health Science, Graduate School of Medicine, Kyoto University,

53 Shogoin, Kawahara-cho, Sakyo-ku, Kyoto 606-8507, Japan;

E-mail: moriyasu@bukkyo-u.ac.jp

Abstract

Objective

To investigate the effects of monthly feedback of changes in visceral fat area (VFA) as measured by dual bioelectrical impedance analysis (dual BIA) method and the importance of VFA in individuals with obesity.

Methods

Thirty-eight Japanese patients with obesity underwent VFA measurements. The feedback group was given feedback on VFA measurements each month for 4 months. The control group underwent VFA measurements at the beginning and end of the study but was not informed of the results. All the study participants completed eating behavior and weight efficacy lifestyle (WEL) questionnaires.

Results

Mean age was 53.9 (14.3) years; mean body mass index (BMI) was 30.6 (4.3) kg/m². At the four-month follow-up, there was no significant difference in VFA reduction between the control and feedback groups (−4.4% vs. −3.0%; 95% CI, −3.8 to 5.5). In post-hoc analysis using the overall group irrespective of allocation, changes of eating style were significantly associated with a reduction in VFA at 4 months ($p = 0.034$).

Conclusions

Monthly feedback on changes in VFA does not reduce VFA. More frequent feedback may be required. In post-hoc analysis, changes of eating style were associated with a reduction in VFA.

Conflicts of interest statement

The authors declare that there are no conflicts of interests.

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