Introduction: The excess of visceral abdominal adipose tissue is one of the major concerns in obesity and its clinical treatment.

Objective: To apply the two-dimensional predictive equation proposed by Garaulet et al. to determine the abdominal fat distribution and to compare the results with the body composition obtained by multi-frequency bioelectrical impedance analysis (M-BIA).

Subjects/methods: We studied 230 women, who underwent anthropometry and M-BIA. The predictive equation was applied. Multivariate linear and partial correlation analyses were performed with control for BMI and % body fat, using SPSS 15.0 with statistical significance P < 0.05.

Results: Overall, women were considered as having subcutaneous distribution of abdominal fat. Truncal fat, regional fat and muscular mass were negatively associated with VA/SApredicted, while the visceral index obtained by M-BIA was positively correlated with VA/SApredicted.

Discussion/Conclusion: The predictive equation may be useful in the clinical practice to obtain an accurate, costless and safe classification of abdominal obesity.

Mots clés
Abdominal obesity, Visceral adipose tissue, Multi-frequency bioelectrical impedance analysis, Anthropometry. Truncal fat.