

Gender differences in Body Adiposity and Endothelial Dysfunction in Overweight and Obese Individuals with Suboptimal Vitamin D Status

Marcelo Chiara Bertolami¹ 

Instituto Dante Pazzanese de Cardiologia,¹ São Paulo, SP – Brazil

Editorial referring to the article: Body Adiposity and Endothelial Dysfunction Assessed By Laser Speckle Contrast Imaging in Obese and Overweight Individuals With Suboptimal Vitamin D Status: Sex Differences

The article by Faria et al.¹ explored anthropometric indices, vascular and autonomic function in obese and overweight individuals with suboptimal vitamin D status.

Obesity has a significant impact on human health through multiple mechanisms.² One potential mechanism involves the association between obesity and low vitamin D levels.³ The authors used advanced techniques to evaluate endothelial function in an overweight and obese population with suboptimal vitamin D levels.

All individuals underwent biochemical assessment, blood pressure measurement, anthropometric evaluation, body composition analysis by bioimpedance, assessment of microvascular reactivity, central hemodynamic measurements, and heart rate variability analysis.

The authors found impaired endothelial function in individuals with the lowest vitamin D levels. They also

described noteworthy gender differences, with men exhibiting increased fat mass regardless of body fat distribution. In contrast, women presented a metabolically unfavorable profile characterized by dysfunctional visceral adipose tissue, adverse biochemical markers, and impaired endothelial function.

The authors compared their findings with previous reports in the literature, highlighting several differences across studies.

Low vitamin D levels may represent one of the multiple mechanisms implicated in obesity-related health complications.

Further studies are warranted to determine whether normalization of vitamin D levels in obese individuals may improve these parameters and ultimately reduce obesity-related complications.

Keywords

Gender Identity; Adiposity; Overweight; Obesity

Mailing Address: Marcelo Chiara Bertolami •

Avenida Sabiá, 667, ap. 141. Postal code: 04515-001. Moema, São Paulo, SP – Brazil

E-mail: bertolami@uol.com.br

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