

VASOMOTOR MENOPAUSAL SYMPTOMS AND ADIPONECTIN LEVELS AMONG WOMEN WITH DIFFERENT MENOPAUSAL STATUS

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Background: Vasomotor menopausal symptoms (VMS), including hot flushes (HFs) and night sweats (NS), are among the most common and burdensome menopausal complaints, negatively affecting women's quality of life and functioning during the menopausal transition. VMS have been associated with higher levels of cardiovascular disease (CVD) risk indicators; however, the mechanisms underlying these relationships remain unclear. Adiponectin is the most abundant anti-inflammatory adipokine in the human body and exerts beneficial physiological effects. Higher adiponectin levels are associated with a reduced risk of CVD. The occurrence of VMS may be related to lower adiponectin levels, but studies addressing this issue are scarce and the findings remain inconsistent.

Objective: To examine the associations between adiponectin levels and the frequency and severity of vasomotor symptoms, taking selected covariates into account.

Subjects and methods: The frequency and severity of VMS were assessed using a questionnaire in 139 women in the peri- (n=70) and postmenopausal stages (n=69). Basic anthropometric measurements were performed, and serum levels of adiponectin, sex hormones, and cardiovascular disease risk indicators were determined. Statistical analyses were conducted using the general linear model (GLM) and ordinal logistic regression models in Statistica and SPSS software.

Results: More frequent and more severe HFs were observed among postmenopausal women. Perimenopausal women exhibited higher adiponectin levels regardless of HF and NS severity (p<0.001) and frequency (p<0.001). These associations remained significant after adjustment for age, educational level, body mass index, waist circumference, HOMA-IR, and estradiol levels.

Conclusions: The present findings may contribute to a better understanding of the relationships between adipokines, obesity, and vasomotor symptoms in women with different menopausal status.

Keywords: Vasomotor symptoms; Hot flushes; Night sweats; Menopausal status; Adiponectin.

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