P23 Tadalafil improves hemodynamic parameters and arterial stiffness in patients with grade I-II obesity without comorbidities


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ABSTRACT

Background: Obesity is a global health problem, it is associated with diabetes, hypertension, and cardiovascular diseases [1] and negative hemodynamic effects have been observed [2]. Tadalafil has shown an improvement in endothelial function [3] the aim of the present investigation was to evaluate its effects on hemodynamic parameters in patients with grade I-II obesity.

Objective: To evaluate the acute effect of tadalafil on hemodynamic and arterial stiffness parameters.

Methods: A double blind clinical trial, randomized, was carried out in patients with grade I-II obesity. Seventy patients were allocated to receive placebo or a single dose of 20 mg of tadalafil; hemodynamic (Omron HEM 9000, UNEXEF) and arterial stiffness (Omron VP1000) parameters were determined before and 24 hours after intervention. The values are expressed in mean ± SD. Wilcoxon rank test and U de Mann-Whitney were applied. p < 0.05 was considered as statistically significant.

Results: Both groups were comparable in the baseline. After the intervention a statistically significant changes were shown in the tadalafil group in the diastolic blood pressure (DBP), (.001); second systolic shoulder 2 (SYS2), (.003); augmentation index (Aix), (.049); and braquial-ankle pulse wave velocity (BAPWV), (.005). After that, changes between groups were analyzed and only DBP (−2.39, p = .017) and BAPWV (p = .028) were statistically significant. No changes were observed in flow mediated dilatation (FMD).

Conclusion: Tadalafil modifies DBP and BAPWV but it had not effect on FMD in the acute administration.

REFERENCES


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