



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 (Omrom VP1000) parameters were determined before and 24 hours after intervention. The values are expressed in mean \pm 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.

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