

PubMed

U.S. National Library of Medicine
National Institutes of Health



Display Settings: Abstract

Hypertens Res. 2010 Jun;33(6):627-32. Epub 2010 Apr 9.

Effects of continuous vs. interval exercise training on blood pressure and arterial stiffness in treated hypertension.

Guimarães GV, Ciolac EG, Carvalho VO, D'Avila VM, Bortolotto LA, Bocchi EA.

Faculdade de Medicina, Heart Institute InCor, Hospital das Clínicas, Universidade de São Paulo, São Paulo, Brazil. gvguima@usp.br

Comment in:

Hypertens Res. 2010 Jun;33(6):544-5.

Abstract

Exercise is an effective intervention for treating hypertension and arterial stiffness, but little is known about which exercise modality is the most effective in reducing arterial stiffness and blood pressure in hypertensive subjects. Our purpose was to evaluate the effect of continuous vs. interval exercise training on arterial stiffness and blood pressure in hypertensive patients. Sixty-five patients with hypertension were randomized to 16 weeks of continuous exercise training (n=26), interval training (n=26) or a sedentary routine (n=13). The training was conducted in two 40-min sessions a week. Assessment of arterial stiffness by carotid-femoral pulse wave velocity (PWV) measurement and 24-h ambulatory blood pressure monitoring (ABPM) were performed before and after the 16 weeks of training. At the end of the study, ABPM blood pressure had declined significantly only in the subjects with higher basal values and was independent of training modality. PWV had declined significantly only after interval training from 9.44±0.91 to 8.90±0.96 m s⁻¹, P=0.009 (continuous from 10.15±1.66 to 9.98±1.81 m s⁻¹, P=ns; control from 10.23±1.82 to 10.53±1.97 m s⁻¹, P=ns). Continuous and interval exercise training were beneficial for blood pressure control, but only interval training reduced arterial stiffness in treated hypertensive subjects.

PMID: 20379194 [PubMed - in process]

Publication Types

LinkOut - more resources