

Effect of Whole Body Vibration versus Aerobic Exercise on Arterial Stiffness in Elderly

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Abstract:Background and Objective:The purpose of the study was to detect the effect of whole body vibration versus aerobic exercises on arterial stiffness in elderly. **Material & Methods:** Forty elderly patients was selected from both sexes and their age was ranged from 60 to 70 years and they was divided into two equal groups: **Group (A)** Twenty patients was selected from both sexes (equal in number) was performed whole body vibration (WBV) exercise &**Group (B)** Twenty patients was selected from both sexes (equal in number) was performed Aerobic exercise.The program was 3 times per week and for 8 weeks. Arterial stiffness was measured by brachial& ankle Pulse Wave Velocity (baPWV) 3 times throughout the program.**Results:** In Group (A) when posttreatment results compared with pretreatment results there was a significant decrease in Brachial PWV by 11.84% and Ankle PWV there was a significant decrease by percent of change was 7.7%. In Group (B) when posttreatment results compared with pretreatment results there was a significant decrease in Brachial PWV by 9.44% and Ankle PWV there was a significant decrease by percent of change was 8.6%.while Group A results versus Group B results there was NO significant difference in mean values of baPWV.**Conclusion:** There was a significant decrease in both groups in baPWV values. But when comparing result of Group (A) versus Group (B) there was NO significant difference in mean values of baPWVso both modalities hadsame decreasing effect on arterial stiffness.

Key word:Whole Body Vibration, Aerobic exercise, Arterial stiffness, Elderly.