

ABSTRACT

THESIS: Aortic Stiffness and Age-Related Hearing Loss in Sedentary Older Adults

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PAGES: 57

Purpose: The purpose of this study was to examine the differences in arterial stiffness among older adults with normal hearing and hearing loss. **Methods:** Two separate visits were scheduled. Visit 1 was conducted at BSU Audiology Clinic to determine hearing status via audiometric tests and Visit 2 was conducted at the BSU Clinical Exercise Physiology Laboratory to assess for aortic stiffness, brachial blood pressure, body composition, and blood chemistry. **Results:** No differences were found in arterial stiffness between normal hearing and hearing loss groups (6.7 ± 1.0 vs. 6.9 ± 1.1 m/s, $P > 0.05$) while preliminary findings show increases in central pulse pressure within the hearing loss group compared with normal hearing (42.5 ± 7.8 vs. 32.9 ± 3.1 mmHg, $P < 0.05$). **Conclusion:** Age-related hearing loss did not appear to have a higher arterial stiffness compared to those with normal hearing. Additionally, findings of increased central blood pressures and a relation to age-related hearing loss were presented.