



P108 Relation Between Abdominal Aorta and Carotid Artery Responses to Sympathetic Stimulation using Duplex Ultrasound

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ABSTRACT

Background: Sympathetic stimulation in central arteries, such as the carotid artery, lead to vasodilation in healthy subjects and vasoconstriction in those with cardiovascular disease. Moreover, this response has independent prognostic value for future events. Whether the aorta demonstrates similar responsiveness is unknown. This is relevant, since this may help to better predict outcomes and progression in abdominal aortic aneurysm (AAA).

Objective: The aim of this explorative study is to investigate the correlation between the magnitude of the abdominal aorta and the carotid artery diameter and blood flow responses during the sympathetic stimulation (using the Cold Pressor Test (CPT)) between healthy young, healthy older and individuals with AAA.

Method: In this explorative study 60 subjects will be included divided into a healthy young group, healthy older group and an AAA group. All subjects will undergo the CPT, while using duplex ultrasound to simultaneously examine the diameter and blood velocity of the abdominal aorta and carotid artery.

Results: We aim to present our first results of the correlation between the abdominal aorta and carotid artery parameters at the conference.

Conclusion: When confirming a correlation between the magnitude of the abdominal aorta and the carotid artery diameter during the CPT, assessment of carotid artery reactivity to CPT may represent a simple, surrogate measure of central (i.e. aorta) endothelial function. This may help in predicting AAA progression and improve decision-making for treatment.

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