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Volume 65, Issue 10S**Vascular Medicine****THE IMPACT OF CELLULAR ADHESION MOLECULES ON MORTALITY IN PATIENTS WITH STABLE ATHEROSCLEROSIS**

Poster Contributions

Poster Hall B1

Saturday, March 14, 2015, 10:00 a.m.-10:45 a.m.

Session Title: New Findings in Vascular Inflammation and Endothelial Function

Abstract Category: 45. Vascular Medicine: Non Coronary Arterial Disease

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Background: The intercellular adhesion molecule-1 (ICAM-1) and the vascular cell adhesion molecule-1 (VCAM-1) have been described to be associated with atherosclerotic plaque instability. However, the effect of ICAM-1 and VCAM-1 on mortality in patients with stable atherosclerosis has not been investigated yet.

Methods: We prospectively enrolled 1065 patients with asymptomatic carotid atherosclerosis as evaluated by duplex Doppler sonography. The primary endpoints were all-cause and cardiovascular mortality.

Results: Patients were followed for a median of 6.2 years. Within this period, 275 patients died, 62.2% of these due to cardiovascular causes. Kaplan Meier analysis demonstrated a significant increase of all-cause/ cardiovascular mortality ($p < 0.001$, for both) with increasing levels of ICAM-1. We further detected a significant association between elevated ICAM-1 levels and all-cause mortality (adj.HR: 3.49, 95%CI 2.14-5.68, $p < 0.001$) when comparing the fourth with the first quartile (figure 1a). Similar results in the Kaplan Meier analysis were seen for increasing levels of VCAM-1 and all-cause/ cardiovascular mortality ($p < 0.001$ for both). Furthermore, we identified an association between elevated VCAM-1 levels and all-cause mortality adj. HR: 2.35, 95%CI 1.42-3.89, $p = 0.001$) (figure 1b).

Conclusion: The cellular adhesion molecules ICAM-1 and VCAM-1 were associated with all-cause and cardiovascular mortality in patients with stable atherosclerotic disease.

