CIRCULATING PROCOAGULANT MICROPARTICLES ARE NOT ASSOCIATED WITH CARDIOVASCULAR EVENTS AT MIDTERM FOLLOW-UP IN PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION

ACC Poster Contributions
Ernest N. Morial Convention Center, Hall F
Sunday, April 03, 2011, 3:30 p.m.-4:45 p.m.

Session Title: Clinical Electrophysiology – Atrial Fibrillation and Stroke
Session-Poster Board Number: 1056-419

Authors: Sylvie Lang, Stephane Ederhy, Ghislaine Dufaitre, Louise Boyer-Chatenet, Catherine Meuleman, Nabila Haddour, Fanny Douma, Emmanuelle Berthelot-Garcias, Emanuele Di Angelantonio, Franck Boccard, Jean Marie Freyssinet, Alain Tedgui, Ariel Cohen, Hopital Saint Antoine, Paris, France

Background: Circulating procoagulant microparticles (MPs) are increased in thrombotic states including atrial fibrillation (AF). Their role in predicting cardiovascular events has not been established in AF patients.

Methods: In 117 patients hospitalized for non valvular AF, the phosphatidylserine content of MPs was measured using a prothrombinase assay. Cardiovascular (CV) events (composite: stroke, death, heart failure or acute coronary syndrome, ACS) were recorded. The influence of MPs levels on the occurrence of a composite endpoint was studied.

Results: The mean follow-up was 2.4 ± 1.8 years. Median level of MPs, PMP and EMP were respectively 7.3 nmol/l (3.8-15.2), 5.5 nmol/l (2.2-9.8) and 0.10 nmol/l (0.02-0.20). The mean CHADS2 was 1.3 ± 1.3. At discharge, 81 patients (78%) were prescribed warfarin and 27 patients (23%) aspirin. The composite endpoint occurred in 27 patients (23%). The Kaplan-Meier curves did not show any difference between patients with MPs, EMP or PMP levels above or under the median values. In the multivariate analysis, no warfarin at discharge (HR 8.54, 95% CI 2.10-34.78, p=0.003), no aspirin at discharge (HR 11.92 95% CI 2.68-53.00), permanent AF (HR 9.17, 95% CI 2.17-38.84, p=0.003) and LA dilatation or LV dysfunction (HR 5.88, 95% CI 1.08-32.08, p=0.041) were the only predictors of CV events.

Conclusions: Circulating procoagulant microparticles are not associated with an increased risk of CV events in NVAF.

Figure. Survival free from cardiovascular events according to MPs level