

Prolonged elevations in haemostatic and rheological responses following Psychological stress in low socioeconomic status men and women

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Summary

Low socioeconomic status (SES) and psychological stress are associated with increased risk of coronary heart disease, and both may influence haemostatic responses. Von Willebrand factor (vWF), Factor VIII, plasma viscosity, haematocrit, blood viscosity, tissue plasminogen activator (t-PA) and fibrin D-dimer were measured at rest and following stressful tasks in 238 middle-aged British civil servants. SES was defined by grade of employment. Lower SES was associated with higher resting vWF; Factor VIII and plasma viscosity. Psychological stress stimulated increases in haemo-

static and rheological factors. Initial stress responses did not vary with SES, but Factor VIII, plasma viscosity and blood viscosity remained more elevated 45 minutes post-stress in lower SES participants. High blood pressure stress reactivity was also associated with greater haemostatic responses. We conclude that lower SES is characterised by more prolonged elevations in procoagulant responses following psychological stress, and that these processes might contribute to increased cardiac risk.

Key-words: Socioeconomic status, haemostatic factors, psychological stress, behaviour.

A prospective survey of the characteristics, treatments and outcomes of patients with acute coronary syndromes in Europe and the Mediterranean basin

The Euro Heart Survey of Acute Coronary Syndromes (Euro Heart Survey ACS)

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Aims: To better delineate the characteristics, treatments, and outcomes of patients with acute coronary syndromes (ACS) in representative countries across Europe and the Mediterranean basin, and to examine adherence to current guidelines.

Methods and Results: We performed a prospective survey (103 hospitals, 25 countries) of 10 484 patients with a discharge diagnosis of acute coronary syndromes. The initial diagnosis was ST elevation ACS in 42.3%, non-ST elevation ACS in 51.2%, and undetermined electrocardiogram ACS in 6.5%. The discharge diagnosis was Q wave myocardial infarction in 32.8%, non-Q wave myocardial infarction in 25.3%, and unstable angina in 41.9%. The use of aspirin, beta-blockers, angiotensin converting enzyme inhibitors, and heparins for patients with ST elevation ACS were 93.0%, 77.8%, 62.1%, and 86.8%, respectively, with corresponding rates of 88.5%, 76.6%, 55.%, and 83.9% for non-ST elevation ACS patients. Coronary angiography, percutaneous coronary interventions, and coronary bypass

surgery were performed in 56.3%, 40.4%, and 3.4% of ST elevation ACS patients, respectively, with corresponding rates of 52.0%, 25.4%, and 5.4% for non-ST elevation ACS patients. Among patients with ST elevation ACS, 55.8% received reperfusion treatment; 35.1% fibrinolytic therapy and 20.7% primary percutaneous coronary interventions. The in-hospital mortality of patients with ST elevation ACS was 7.0%, for non-ST elevation ACS 2.4%, and for undetermined electrocardiogram ACS 11.8%. At 30 days, mortality was 8.4%, 3.5%, and 13.3%, respectively.

Conclusions: This survey demonstrates the discordance between existing guidelines for ACS and current practice across a broad region in Europe and the Mediterranean basin and more extensively reflects the outcomes of ACS in real practice in this region.

Key-words: Acute coronary syndromes, acute myocardial infarction, unstable angina, prognosis, management, medication, percutaneous coronary intervention.