

### Prevalence and prognostic significance of malnutrition among patients with acute coronary syndrome

A. Lizancos Castro, J.A. Parada Barcia, E. Abu-Assi, M. Cespon Fernandez, L. Diaz, F. Garcia, M. Cabeza, R. Dominguez, A. Galan, J. Torres, A. Iniguez Romo, S. Raposeiras Roubin

Hospital Universitario Alvaro Cunqueiro, Vigo, Spain

Funding Acknowledgement: Type of funding source: None

**Introduction:** Knowledge is scarce about the role of malnutrition in Acute Coronary Syndrome (ACS). Existing evidence suggests that it is likely to be present. We hypothesized that it is uncommon but associated with adverse outcomes. With this study we aim to report the prevalence, clinical associations, and prognostic consequences of malnutrition in ACS patients.

**Methods:** We applied the Controlling Nutritional Status (CONUT) score that is composed of the serum albumin concentration, total peripheral lymphocyte count and total cholesterol concentration. From the initial cohort of patients consecutively admitted with ACS (n=6,133), it was possible to calculate the CONUT score in 5,021 of them.

**Results:** Of the 5,021 patients enrolled, 566 patients were moderately or severely malnourished (11.3%) and 1,937 were mildly malnourished

(38.6%). During a mean follow-up of 3.3±2.2 years, 828 patients died (16.5%). The cumulative incidence of mortality was 2.4, 6.1 and 15.8 per 100 patient/year in patients with good nutrition, mild malnutrition and moderate/severe malnutrition, respectively. After adjusting by age, sex, diabetes, prior myocardial infarction, peripheral artery disease, history of heart failure, left ventricular ejection fraction, complete revascularization and therapy at discharge, malnutrition was independently associated with mortality (HR 1.47 (95% CI: 1.22–1.77) and 2.02 (95% CI: 1.60–2.54) for mild and moderate/severe malnutrition, respectively) (Figure 1).

**Conclusions:** Malnutrition is common among patients with ACS (49.9%) and is strongly associated with increased mortality.



Figure 1