Obesity in Afro-Caribbean patients with coronary artery disease

Lydia Foucan
University of Antilles and French Guyana, France

The association between cardiovascular risk factors (CVRFs) and the severity of coronary lesions is unclear. We studied the relation between cardiovascular risk factors and the severity of CAD estimated by coronary angiography (multivessel disease and myocardial jeopardy (MJ) score) in an Afro-Caribbean population.

We retrospectively examined medical records of Afro-Caribbean patients with pathological coronary angiography during last 3 years. Logistic regressions were performed firstly to find any CVRFs involved in more severe anatomic lesions and secondly to detect CVRFs influencing disease prognostic as measured by MJ score.

Our study included 420 Afro-Caribbean patients, predominantly male, aged of 64.7 years, with hypertension (75.9%), diabetes (47.8%) and dyslipidemia (37.8%). Diabetes, obesity and personal cardiovascular history were significantly associated with the extent of coronary lesions. First logistic regression showed that diabetes (OR=1.57; CI95% [1.04-2.38]) and personal history (OR=1.71; CI95% [1.13-2.58]) were more present in bi or tri vessel CAD cases, obesity was more prevalent in one vessel disease and isolated non significant stenosis (OR=0.48; CI95% [0.29-0.78]). The second logistic regression displayed for diabetes (OR=1.63; CI95% (1.08–2.46) and hypertension (OR=2.26; CI95% (1.09–4.67) as factors independently associated with highest MJ score (MJ ≥ 8). A paradoxical and inverse association between BMI and angiographic severity was noted. Our study confirmed that diabetes plays a central role in CAD severity and prognosis. Interestingly enough, obesity which was a protective factor for the more severe lesions plaid no role in the severity of MJ score and subsequently in disease prognosis.

Biography

Lydia Foucan, MD, PhD is the head of the Public Health Department at the University Hospital of Guadeloupe. She also works in a research group (Clinical Epidemiology and Medicine) for which the main thematic of research is “the cardio metabolic risk”. She was honored, in January 2012, by the Council of the City of Philadelphia. The other contributors of the present study are C Armand and L Larifla.

lfoucan@yahoo.fr