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Alpha Defensins and traditional cardiovascular risk factors: is it more of the same or beyond?

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Background: There is extensive and growing evidence that inflammation is a key player in all stages of atherosclerosis. It is now believed that most coronary artery disease risk markers have a pro-inflammatory component. Neutrophil peptides defensins are essential elements of the innate immunity and are presented in atherosclerotic plaques in humans.We recently showed high alpha-defensin score to be strongly related to coronary atherosclerosis severity in patients with ACS (unpublished data).
In the present study, we sought to assess the relationship between alpha-defensin and classic cardiovascular risk factors.
Methods: Defensin was Immunohistochemically quantified in skin biopsies taken from 338 ACS patients (age 55±12) immediately prior to coronary angiography. We concurrently obtained established cardiovascular risk factors, including age, gender, blood pressure, smoking habits, serum lipids, diabetes status, BMI and family history. We also examined blood levels of novel markers of inflammation including wrCRP, hsCRP, fibrinogen, Hb1c and 2microglubolin. Finally, a comprehensive questionnaire for infectious/inflammatory status, puberty onset and socioeconomic background was conducted.
Results: Does alpha-defensin have any additional/additive value in coronary disease risk prediction beyond already known CV risk factors?!!
We are currently doing a statistical multivariate analysis in order to address the study questions mentioned above. The complete results will be presented at the congress.