



## Acute and Stable Ischemic Heart Disease

**DIETARY CONSUMPTION OF OLIVE OIL AND CARDIOVASCULAR OUTCOME IN PATIENTS WITH CORONARY ARTERY DISEASE**

Poster Contributions  
Poster Hall, Hall C  
Saturday, March 18, 2017, 9:45 a.m.-10:30 a.m.

Session Title: From Diet to Drugs: Mechanistic Insight Into Ischemic Heart Disease  
Abstract Category: 1. Acute and Stable Ischemic Heart Disease: Basic  
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**Background:** Higher adherence to Mediterranean diet has been associated with favorable cardiovascular effects. Different dietary patterns may affect the prognosis of patients with coronary artery disease (CAD) after percutaneous coronary intervention (PCI).

**Methods:** We followed up prospectively (median time: 40 months), 220 subjects with stable CAD 1 month after successful PCI. Several demographic and clinical characteristics were collected. All subjects were tested with a validated semi quantitative food frequency questionnaire. Principal components analysis was used in order to evaluate the relationship between dietary habits and the prognosis of CAD. The primary end point was the composite of death from cardiovascular causes, nonfatal myocardial infarction, nonfatal stroke or hospitalization for cardiovascular cause.

**Results:** During the follow-up period 66 subjects presented the primary composite endpoint. There was no difference in age ( $p=0.54$ ), serum creatinine levels ( $p=0.50$ ), body mass index ( $p=0.84$ ), diabetes mellitus ( $p=0.33$ ) and hypertension ( $p=0.54$ ), between the subjects who presented the primary end point compared to subjects free of cardiovascular events. Interestingly, subjects who presented the primary end point compared to those free of cardiovascular events were more often active smokers (28% vs. 15%,  $p=0.03$ ), had higher prevalence of 3 vessel CAD (3VD) ( $p=0.03$ ) and lower left ventricle ejection fraction ( $p=0.07$ ). A cox regression model revealed that after adjustment for the aforementioned confounders, 3VD was associated with adverse cardiovascular outcome (Hazard ratio=3.14 95%CI: 1.19-8.27,  $p=0.02$ ). Interestingly, when a favorable pattern of diet was added in the model (revealed by principal components analysis) it was observed that high consumption of olive oil and low consumption of seed oil or animal or vegetable fats reduce the hazard of adverse cardiovascular outcome (Hazard ratio=0.70 95%CI: 0.49-0.99,  $p=0.047$ ).

**Conclusions:** In subjects with CAD after PCI a favorable pattern of diet with increased consumption of olive oil and low consumption of seed oil or animal or vegetable fats can decrease the hazard of adverse cardiovascular events.