

**NON-ALCOHOLIC FATTY LIVER DISEASE IN CORONARY ARTERY DISEASE PATIENTS: ASSOCIATION WITH IMPAIRED GLUCOSE METABOLISM AND WITH FUTURE CARDIOVASCULAR EVENT RISK**

Poster Contributions
Poster Hall, Hall C
Sunday, March 19, 2017, 9:45 a.m.-10:30 a.m.

Session Title: Diabetes and Other Issues in Cardiovascular Prevention
Abstract Category: 32. Prevention: Clinical
Presentation Number: 1277-053

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Background: Data on non-alcoholic fatty liver disease (NAFLD) in patients with the combination of both impaired glucose metabolism and established cardiovascular disease are scarce. We therefore aimed at investigating its association with the glycemic state as well as its impact on cardiovascular event risk in patients with established cardiovascular disease.

Methods: We investigated a large series of 1791 patients with established cardiovascular disease (1472 patients with angiographically proven coronary artery disease and 319 patients with sonographically proven peripheral arterial disease) using the validated fatty liver index to diagnose NAFLD.

Results: At baseline, 42.5%, 36.5%, and 19.8% of our patients had normal fasting glucose (NFG), impaired fasting glucose (IFG), and type 2 diabetes (T2DM), respectively. The prevalence of NAFLD significantly increased from 34.2% over 52.2% to 62.7% through these categories of the glycemic state ($p < 0.001$). Prospectively, we recorded 701 cardiovascular events over a mean follow-up period of 5.6 ± 3.3 years. Cardiovascular event risk significantly ($p < 0.001$) increased from 30.7% in patients with NFG over 33.3% in patients with IFG to 46.5% in patients with T2DM. NAFLD significantly predicted cardiovascular event risk both univariately and in age- and gender adjusted analyses (HRs 1.23 [1.05-1.45]; $p = 0.012$ and 1.27 [1.08-1.50]; $p = 0.005$, respectively), but not after additional adjustment for the glycemic state (HR 1.15 [0.97 - 1.37]; $p = 0.098$).

Conclusions: We conclude that the prevalence of NAFLD in CAD patients is high and gradually increases with a worsening glycemic state; however, it does not predict cardiovascular events independently from impaired glucose metabolism in this patient population.