METABOLIC SYNDROME, DIABETES MELLITUS, OR BOTH AND CARDIOVASCULAR RISK IN OUTPATIENTS AT RISK OF OR WITH ATEROTHROMBOSIS IN THE REACH REGISTRY

ACC Moderated Poster Contributions
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Background: The incidence of metabolic syndrome (MetS), diabetes mellitus (DM) and their coexistence is increasing, but whether MetS represents a synergistic increase in CV risk beyond component risk factors (RF) is controversial.

Methods: We set out to compare 4-yr risk for CV death/MI/stroke in patients (pts) w/ MetS, newly recognized DM, prior DM or coexistent MetS/DM to pts w/o MetS or DM independent of traditional RF, subclinical atherothrombosis or prior ischemic events in the international outpatient REACH Registry (n=45,227 with 4-yr follow-up).

Results: Among the 36,682 eligible REACH pts, 34% were without MetS or DM at baseline (n=12,710), 16% had MetS w/o DM (n=5,877), 1.8% new DM (n=645), 28% prior DM (n=10,187) and 20% had both MetS + DM (n=7,263). Cumulative 4-yr rates of CV death/MI/stroke are shown in the figure. The risk of mortality and CV death were consistent with these observations; pts with new DM had highest risk while pts with MetS had no significant increased risk. After further adjustment for CV RF and baseline statin/aspirin use, the risk of the composite endpoint for pts w/ new DM was attenuated (HR 1.25 [0.97-1.61]) but remained significant in those with prior DM and both MetS/DM. However, new DM pts remained at high risk of mortality (HR 1.76 [1.34-2.31]) and CV death (1.77 [1.25-2.52]) similar to pts with prior DM or MetS/DM.

Conclusion: In REACH, the presence of MetS did not confer higher risk for future CVD in pts with or without DM. Pts w/ newly recognized DM had high risk for future CV events.

Figure. Kaplan-Meier Cumulative Incidence Curves for Cardiovascular Death, MI or Stroke in Participants with Metabolic Syndrome, Diabetes Mellitus, Both or Neither in the REACH Registry

*p-trend <.0001

*Adjusted for age, sex, employment, education, ethnic origin, geographic region, history of smoking, obesity, arterial hypertension, vascular disease/score, single vascular disease, CV risk factors, and prior ischemic event (≤1 year). **Adjusted for age, sex, employment, education, ethnic origin, geographic region, history of smoking, obesity, arterial hypertension, vascular disease/score, single vascular disease, CV risk factors, and prior ischemic event (≤1 year), or no ischemic event, baseline statin and aspirin use and baseline fasting glucose. DM status was categorized as prior DM or current therapy or consistent newly recognized if without DM and fasting blood glucose (FBG) ≥100 mg/dL. (FBG only). Pts reclassified as having MetS if they met any 3 out of 4 consensus criteria (technically specific criteria thresholds, FBG 100-125 mg/dL, SBP 130-139 mm Hg, TG ≥150 mg/dL, HDL <40 mg/dL, in those with DM or met criteria for MetS independent of FBG or HDL)