



QUALITY OF CARE AND OUTCOMES ASSESSMENT

ADIPOSIITY ASSOCIATED MORTALITY AND CARDIOVASCULAR EVENTS IN PATIENTS WITH CORONARY ARTERY DISEASE

ACC Poster Contributions
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Background: Overweight patients with coronary artery disease (CAD) have lower mortality than patients with normal weight. We hypothesized that adiposity rather than body weight is associated with higher mortality and recurrence of major adverse cardiovascular events (MACE) in patients with CAD.

Methods: We estimated the incidence of MACE (death, acute coronary syndrome, revascularization, stroke) in a cohort of patients with CAD enrolled in cardiac rehabilitation. All patients had assessment of fat% by air-displacement plethysmography. Sex-specific tertiles of fat% were created.

Results: We included 201 patients (33% women). Mean age was 59.6 ± 11 yrs and BMI was 28.6 ± 4.6 kg/m². After a median follow-up of 32.2 months there were 28 MACE (5.3/100 person-years; 7 deaths, 14 acute coronary syndrome, 13 revascularizations and 4 strokes). After adjusting for age, sex, smoking, diabetes, dyslipidemia, and severity of CAD Fat% was associated with increased risk of MACE (HR_{adj} 1.37 per 5 fat%, 95% CI 1.03-1.71). BMI and WC were not associated with the risk of MACE (Table). The highest fat% tertile had 2.7 times higher risk of MACE in comparison to the lowest tertile (HR 2.68, 95% CI 1.02-7.05, Figure).

Conclusion: Adiposity, rather than BMI, is associated with increased risk of MACE in patients with CAD. These findings provide new data to understand the obesity paradox in patients with CAD.

