METABOLIC SYNDROME AND THE RISK OF ADVERSE CARDIOVASCULAR EVENTS AFTER AN ACUTE CORONARY SYNDROME

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Purpose
The incremental prognostic value of assessing the metabolic syndrome (MS) has been disputed. Little is known regarding its prognostic value in patients after an acute coronary syndrome. Methods
The presence of MS was assessed at baseline in SOLID-TIMI 52, a trial of patients within 30 days of acute coronary syndrome (median follow-up 2.5 years). The primary endpoint was major coronary events (coronary heart disease death, myocardial infarction or urgent coronary revascularization). Results
At baseline, 61.6% (n = 7537) of patients met the definition of MS, 34.7% had diabetes and 29.3% had both. MS was associated with increased risk of major coronary events (adjusted hazard ratio (adjHR) 1.29, p < 0.0001) and recurrent myocardial infarction (adjHR 1.30, p < 0.0001). Of the individual components of the definition, only diabetes (adjHR 1.48, p < 0.0001) or impaired fasting glucose (adjHR 1.21, p = 0.002) and hypertension (adjHR 1.46, p < 0.0001) were associated with the risk of major coronary events. In patients without diabetes, MS was numerically but not significantly associated with the risk of major coronary events (adjHR 1.13, p = 0.06). Conversely, diabetes was a strong independent predictor of major coronary events in the absence of MS (adjHR 1.57, p < 0.0001). The presence of both diabetes and MS identified patients at highest risk of adverse outcomes but the incremental value of MS was not significant relative to diabetes alone (adjHR 1.07, p=0.54). Conclusions
After acute coronary syndrome, diabetes is a strong and independent predictor of adverse outcomes. Assessment of MS provides only marginal incremental value once the presence or absence of diabetes is established.