Conservative management in a contemporary cohort of patients with acute coronary syndrome: results from the FORCE-ACS registry

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Background: Contemporary real-world data on conservatively managed patients with acute coronary syndrome (ACS) is scarce.

Objective: To evaluate conservative management compared with revascularization therapy in ACS patients, focused on ischemic and bleeding outcomes at one year follow-up, and to provide insight in physician’s rationale of choice for conservative management.

Methods: From January 2015 to January 2020, ACS patients were enrolled in the FORCE-ACS registry. Patients without coronary revascularization were identified and classified into three groups: 1) No coronary angiography (CAG) performed (CAG−), 2) documented obstructive coronary artery disease (CAD) with CAG (CAG+, CAD+) and 3) no obstructive CAD found with CAG (CAG+, CAD−). The first two groups were established as conservatively managed ACS patients, and were compared with those who received coronary revascularization. Survival analyses were used to assess differences in clinical endpoints and were adjusted for potential confounders using Cox proportional hazard models. The primary endpoint was all-cause mortality, secondary endpoints included myocardial infarction (MI), stroke and major bleeding defined as Bleeding Academic Research Consortium (BARC) 3 or 5.

Results: In 5,379 patients admitted with ACS, 93.8% underwent CAG. In total, 19.9% of patients did not receive coronary revascularization. In the non-revascularized patients, CAG was not performed in 34.8% (CAG−), documented CAD was found during CAG in 32.4% (CAG+, CAD+) and 32.7% of patients did not show obstructive CAD on CAG (CAG+, CAD−). Conservatively managed patients (14.2%) had lower survival rates compared with revascularized patients (HR 2.68; 95% CI: 1.89–3.81; p < 0.0001). No significant differences were found in MI, stroke, or major bleeding between the two groups. The estimated one-year survival was the lowest in CAG− group compared to the CAG+, CAD+ group (adjusted HR 12.24; 95% CI: 4.15–36.07; p < 0.001). Most frequent reasons for choosing conservative management in ACS patients included multi-comorbidity, complex coronary anatomy or a “watchful waiting” strategy. Conservatively treated patients received dual or triple antithrombotic therapy less often than the revascularized group (84.5% vs 94.6%).

Conclusion: In this contemporary ACS cohort, conservatively managed patients are at higher mortality risk than revascularized patients. This heterogeneous group of conservatively managed patients less often received guideline-recommended therapy.