Rapid revascularization supported in left main disease

Medwire News: Patients presenting with an acute coronary syndrome (ACS) and unprotected left main coronary artery disease (ULMCD) who undergo revascularization have much higher 6-month survival than patients with an initial strategy of no revascularization.

The findings, from an observational analysis of Global Registry of Acute Coronary Events (GRACE), show the importance of rapid revascularization for patients with ACS and ULMCD.

ULMCD with ACS is a high-risk clinical situation, yet little evidence exists on optimal revascularization strategies in this scenario. In this observational study, Gilles Montalescot (Centre Hospitalier Universitaire Pitié-Salpêtrière, Paris, France) and co-workers described the practice of ULMCD revascularization in ACS patients, analyzed the prognosis of this population, and determined the effect of revascularization on outcome.

Of 43,018 patients in GRACE, 1799 had significant ULMCD and underwent percutaneous coronary intervention (PCI) alone (514 patients), coronary artery bypass graft (CABG) surgery alone (612 patients), or no revascularization (673 patients). Patients undergoing PCI were more likely to present with ST-segment elevation myocardial infarction (STEMI), after cardiac arrest, or in cardiogenic shock.

Almost half (48%) of PCI patients underwent revascularization on the day of hospitalization, compared with just 5% of the CABG group.

Both in-hospital and 6-month mortality rates were higher in the PCI than CABG group, reflecting the higher risk of patients given percutaneous revascularization.

After adjustment, revascularization was associated with an increased risk for early hospital death versus no revascularization, which was statistically significant for PCI (hazard ratio [HR]=2.60) but not for CABG. From discharge to 6 months, however, patients given PCI or CABG were significantly less likely to die than those not revascularized, at HRs of 0.45 and 0.11, respectively.

CABG surgery was associated with a five-fold increase in stroke risk compared with the other two groups.

Montalescot *et al* say that PCI has become the most common strategy of revascularization in ACS patients with ULMCD and is generally preferred in patients with multiple comorbidities and/or those who are very unstable.

They conclude: “In contrast, CABG surgery, when possible, is often delayed by a few days and is associated with good 6-month survival. Therefore the two modes of revascularization appear complementary in this high-risk group.”

In an accompanying editorial, Roberto Corti and Stefan Toggweiler, (Cardiovascular Center, University of Zurich, Switzerland) commented that the most relevant message from this registry is probably that patients who were revascularized during the event hospitalization showed a better long-term outcome compared with the initial conservative therapy.

They added: “This observational study provides new important data that stress the importance of prompt and complete revascularization of patients presenting with ACS and left main coronary artery disease.”

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