

Introduction

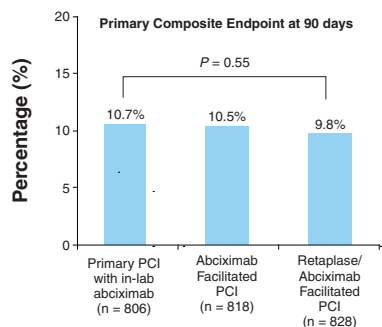
Welcome to the inaugural issue of plateletNEWS Monthly, a newsletter dedicated to providing news in a concise format from the latest meetings and published research on topics related to the use of antiplatelet therapies in cardiology. In this issue, we bring you information from the European Society of Cardiology (ESC) Congress held last month in Vienna, Austria, including the long-awaited FINESSE trial data, new information on the duration of antiplatelet therapy following percutaneous coronary intervention (PCI) for unprotected left main coronary artery stenosis, and the importance of uninterrupted dual antiplatelet therapy following PCI. *Stay tuned for further updates on important issues related to antiplatelet strategies in future issues.*

FINESSE Results May Signal the End for Facilitated PCI in STEMI

Long-awaited results from the FINESSE (Facilitated Intervention with Enhanced Reperfusion Speed to Stop Events) Study were presented by principal investigator Stephen Ellis, MD at the European Society of Cardiology (ESC) annual meeting.¹ Given the real-world time delays that prevent the patient from reaching the cath lab in the recommended 90-minute window, early pharmacologic reperfusion pre-PCI—administered in the field (facilitated PCI)—was theorized as a strategy to improve outcomes. FINESSE randomized 2,453 patients with STEMI presenting for primary PCI to receive primary PCI with in-lab abciximab, facilitated primary PCI after field-administered abciximab, or reduced dose reteplase/abciximab facilitated primary PCI with field-administered reduced dose reteplase/abciximab. At 90-day follow-up, there were no significant differences among the 3 arms in the composite endpoint of death, rehospitalization for heart failure, resuscitated ventricular fibrillation, and cardiogenic shock (Figure 1).

Figure 1: Occurrence of the composite primary endpoint in the 3 arms of the FINESSE Trial.

[Adapted from: Ellis S. Presented at: Annual Congress of the European Society of Cardiology; September, 2007]

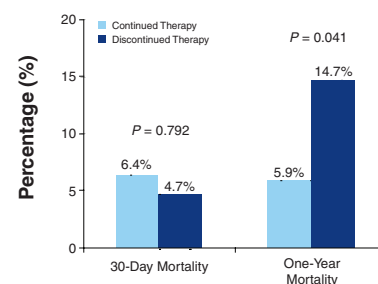


What is the Optimal Duration of Treatment Following PCI for ULMCA Stenosis?

The optimal duration of antiplatelet therapy after percutaneous coronary intervention (PCI) for unprotected left main coronary artery (ULMCA) stenosis is unknown.² Palmerini and colleagues conducted a study in 216 patients who underwent PCI for ULMCA stenosis to answer this question and their results were reported at the ESC annual meeting.³ Participants were divided into two groups: Those who received 12 months of dual antiplatelet therapy after PCI for ULMCA stenosis (Group 1) and those who did not (Group 2). Thirty day mortality was similar between groups, but a significant difference in mortality emerged during the year after PCI (Figure 2).

Independent predictors (in the multivariate analysis) of one-year mortality included left ventricular ejection fraction ($P = 0.025$), peripheral vascular disease ($P = 0.01$), ACS ($P = 0.038$), and 12-month dual antiplatelet therapy ($P = 0.025$). The relative risk of death in patients who stopped taking dual antiplatelet therapy was 2.69 (95% CI, 1.38 to 5.25; $P = 0.037$). Lead author Tullio Palmerini, MD, an interventional cardiologist at the Istituto di Cardiologia Policlinico S. Orsola at the Università di Bologna in Bologna, Italy explained, "This observational study seems to suggest that after stent implantation in the left main, patients should undergo double antiplatelet therapy for at least one year, [regardless] of stent used and clinical presentation."

Figure 2: 30-day and One-year Mortality in Patients Who Did and Did Not Continue Dual Antiplatelet Therapy After PCI for ULMCA Stenosis



Study Evaluates Risk of Discontinuing Antiplatelet Therapy Following PCI

Patients with DES are urged to continue taking dual antiplatelet therapy with clopidogrel and aspirin for at least one year after the procedure. A study presented at the ESC annual meeting evaluated 460 patients with 980 DES stents (2.1 stents per patient) for a median of 26.7 months.⁴ A minority of patients (5.2%) had to discontinue taking dual antiplatelet therapy because they underwent non-cardiac surgical or interventional procedures post-PCI. Perioperative duration of cessation of therapy lasted for a mean of 5.0 days (aspirin) and 7.1 days (clopidogrel). The overall incidence of acute stent thrombosis and late stent thrombosis were low, at 0.86% (4/460) and 0.65% (3/460), respectively. However, all cases of late stent thrombosis occurred in patients who had undergone non-cardiac surgery or invasive procedures. Thus, this group had a 12.5% risk of late stent thrombosis, even though they had discontinued therapy for a short span of time. None of the late stent thrombosis cases occurred immediately after cessation of therapy; all were delayed, occurring at 51, 170, and 304 days post-PCI. These results indicate that even temporary perioperative discontinuation of antiplatelet therapy within 12 months of DES implantation increases the risk for late stent thrombosis that may occur months after the temporary cessation of antiplatelet therapy.

References

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