## Triple antithrombotic regimen questioned for AF stent patients

## 12 September 2008

MedWire News: Research published in the journal Chest highlights the difficulty in caring for patients with atrial fibrillation (AF) who require oral anticoagulation (OAC) and percutaneous coronary intervention with stenting (PCI-S).

These patients "represent a complex population with multiple comorbidities and a high rate of short-term and long-term major bleeding complications," Gregory Lip (City Hospital, Birmingham, UK) and co-workers report.

"Moreover, different predictors of major bleeding according to the time from the PCI-S were identified, with glycoprotein (GP)IIb/IIIa inhibitors and triple antithrombotic therapy use being the main factors implicated in early major bleeding and late major bleeding, respectively," they say.

The team compared the outcomes of 51 AF patients undergoing PCI-S who received triple antithrombotic therapy, consisting of aspirin, clopidogrel, and coumadin after surgery with those of 53 patients who received alternative regimes consisting of one or two agents.

Patients were followed-up for early (within 48 hours) and late (after 48 hours) major bleeding events.

Patients given triple antithrombotic therapy had a higher incidence than other patients of late (21.6% vs 3.8%) but not early (5.8% vs 11.3%) major bleeding episodes.

Multivariate analysis revealed that early major bleeding events were independently predicted by receipt of GPIIb/IIIa inhibitor therapy (hazard ratio [HR]=13.5), and PCI-S of three vessels or left main artery disease (HR=7.9).

In contrast, late major bleeding events were predicted by receipt of triple antithrombotic therapy (HR=7.1), early major bleeding (HR=6.7), and anemia at baseline (HR=3.8).

The likelihood of major cardiovascular events - cardiovascular death, myocardial infarction, revascularization, stent thrombosis, or thromboembolic complications - did not differ between patients given triple antithrombotic treatment or other regimens (25.5% vs 21.0%).

"Although triple antithrombotic therapy may theoretically represent the best antithrombotic therapy option for the prevention of cardiac and thromboembolic events, its safety in this context is doubtful, with a significant risk for late major bleeding," Lip *et al* write.

"Further studies are required to assess the bleeding and thrombotic risk with different post-PCI strategies in these patients, in order to facilitate the development of management guidelines."

Chest 2008; 134: 559-567