Outcomes Are ‘Terrible’ After Stent Thrombosis

BY BRUCE JANCIN

Vienna — Urgent percutaneous coronary intervention for stent thrombosis is a situation that comes up more frequently and yields considerably worse outcomes than generally is appreciated, Dr. Francesco Verheugt, professor and chair of Cardiology at the University of Leiden in the Netherlands, said at the annual congress of the European Society of Cardiology.

He presented the results of the Outcome of PCI for Stent Thrombosis Multi-center Study (OPTIMIST), a prospective, unfunded registry of all patients who underwent PCI for stent thrombosis at 11 Rome-area hospitals during 2005 and 2006.

OPTIMIST involved 227 patients who experienced 230 stent thromboses, making this the largest-ever single series of patients with angiographically defined stent thrombosis ever reported. The study was led by Dr. Gianluca Verzini of68 Catharina University of the Sacred Heart, Rome.

Optimist accounted for 3.6% of all urgent PCI performed for ST-elevation MI at participating hospitals during the study period, so it is not a rare event.

Clinical outcomes were disappointing, despite many guideline-recommended re-treatments. Dr. Burzotta said. Mortality was 12% at 30 days and 16% at 6 months. The combined rate of death, MI, stroke, or a repeat interventional procedure was 29% at 6 months. Of the 120 stent thromboses, 62 involved drug-eluting stents (DES); the rest involved bare-metal stents (BMS).

The study was not designed to assess whether the thrombosis rate was higher with DES. However, OPTIMIST did show that the clinical circumstances in which thrombo-

Stent thrombosis occurred tend to be different with DES than with BMS. Stent thrombosis within 15 days after discontinuing an antiplatelet therapy was nearly eightfold more common after DES implantation, and patients involving DES was more likely to occur late: 33 cases of stent thrombosis occurred more than 1 month post-DES implantation, compared with 14 cases with BMS.

Once thrombosis has occurred and the patient has been directed to the cath lab, the outcome after stent thrombosis and PCI isn’t significantly af-

The study shows that stent thrombosis is safe when performed with a bare-metal stent, with no increased risk of adverse effects observed. There was no significant trend toward higher rates of ex-

In a multivariate analysis, two factors were independently linked with increased 6-month mortality. Stent thrombosis occurring more than 1 year post-implanta-

Dr. Burzotta said these findings have practical implications for interventional cardiologists: Consider keeping patients on antiplatelet therapy indefinitely after stent placement in order to reduce the risk of late thromboses and focus on reopen-

The Italian study shows that stent thrombosis—with whether a bare-metal or drug-eluting stent—is a malignant disea-

Dr. Verheugt said he and his colleagues were surprised by how few stents in this study had been placed with drug-eluting stents. The 62 patients with stent thrombosis involving DES were placed with drug-eluting stents for indications of high-risk lesions and intimal dissection.