Aspirin and clopidogrel with or without phenprocoumon after drug eluting coronary stent placement in patients on chronic oral anticoagulation.

OBJECTIVES: Optimal antithrombotic/anticoagulation therapy in patients on chronic oral anticoagulation (OAC) undergoing drug-eluting stent (DES) implantation is unknown. We investigated the efficacy and safety of two regimens of antithrombotic/anticoagulation therapy in patients who present for DES implantation whilst on OAC.

METHODS: We included a series of 515 patients on OAC who underwent DES implantation between 2002 and 2007. Based on predefined clinical and echocardiographic criteria, 306 patients continued OAC (triple therapy) and 209 patients discontinued OAC (dual therapy) for the time they received antiplatelet therapy with clopidogrel and aspirin [stenot-related antithrombotic treatment (SRAT)]. The primary end point was a composite of death, myocardial infarction, stent thrombosis or stroke.

RESULTS: During SRAT the primary endpoint was observed in 13 patients in the group with triple therapy versus 15 patients in the group with dual therapy [Kaplan-Meier estimates 4.2% and 7.2%, odds ratio (OR) =0.61, 95% confidence interval (CI) 0.29-1.28; P = 0.19]. At 2 years of follow-up, the primary endpoint was observed in 35 patients in the group with triple therapy versus 36 patients in the group with dual therapy (Kaplan-Meier estimates 14.1% and 18.0%, OR = 0.76, 95% CI: 0.48-1.21; P = 0.25).

Two-year incidence of major bleeding
was 1.4% (n = 4, triple therapy) versus 3.1% (n = 6, dual therapy) (P = 0.34). CONCLUSIONS: In patients on chronic OAC undergoing DES implantation, clinical and echocardiographic criteria help to define postprocedural antithrombotic/anticoagulation therapy. Based on these criteria, both a double antiplatelet therapy (clopidogrel plus aspirin) and a triple therapy (OAC plus clopidogrel plus aspirin) are associated with favourable safety and efficacy.