Triple therapy with aspirin, prasugrel, and vitamin K antagonists in patients with drug-eluting stent implantation and an indication for oral anticoagulation.

This study sought to evaluate whether prasugrel may serve as an alternative to clopidogrel in patients with triple therapy. Approximately 10% of patients who receive dual antiplatelet therapy after percutaneous coronary intervention have an indication for oral anticoagulation and are thus treated with triple therapy. The standard adenosine diphosphate receptor blocker in this setting is clopidogrel. Data regarding prasugrel as part of triple therapy are not available. We analyzed a consecutive series of 377 patients who underwent drug-eluting stent implantation and had an indication for oral anticoagulation between February 2009 and December 2011 and were treated with a 6-month regimen of aspirin and oral anticoagulation with either prasugrel or clopidogrel. The primary endpoint was a composite of Thrombolysis In Myocardial Infarction (TIMI) major and minor bleeding at 6 months. The secondary endpoint was a composite of death, myocardial infarction, ischemic stroke, or definite stent thrombosis. Twenty-one patients (5.6%) received prasugrel instead of clopidogrel. These patients had a higher-risk profile at baseline, and the majority had high platelet reactivity to clopidogrel. TIMI major and minor bleeding occurred significantly more often in the prasugrel compared with the clopidogrel group (6 [28.6%] vs.
24 [6.7%]; unadjusted hazard ratio (HR): 4.6, 95% confidence interval [CI]: 1.9 to 11.4, p < 0.001; adjusted HR: 3.2, 95% CI: 1.1 to 9.1, p = 0.03). There was no significant difference regarding the combined ischemic secondary endpoint (2 [9.5%] vs. 25 [7.0%]; unadjusted HR: 1.4, 95% CI: 0.3 to 6.1, p = 0.61). These findings suggest that substitution of prasugrel for clopidogrel in patients needing triple therapy increases the risk of bleeding. However, specific randomized trials are needed to define the role of newer adenosine diphosphate receptor antagonists in this setting.