INTERVENTIONAL CARDIOLOGY DES SAFE IN LARGE ARTERIES

The risk of late cardiac events in patients with atherosclerotic disease of the large coronary arteries who have second-generation drug-eluting stents is comparable with those who have bare-metal stents. Christoph Kaiser and colleagues assessed this risk because previous studies had found that first-generation drug-eluting stents were associated with late adverse effects in these patients. “The aim was to prove or refute the hypothesis of late harmful effects of drug-eluting stents in large vessels in an adequately sized trial, and to analyze whether this hypothesis holds true for second-generation drug-eluting stents,” explains Kaiser.

In the prospective, multicenter BASKET-PROVE trial, the researchers recruited 2,314 patients requiring large-vessel stents (>3 mm in diameter) and randomly assigned them to either sirolimus-eluting (first generation), everolimus-eluting (second generation), or bare-metal stents. At 2 years follow-up, no differences were found between the three patient groups with respect to death from cardiac causes, nonfatal myocardial infarction, and stent thrombosis (defined as ‘late events’ in the BASKET Trial).

Kaiser’s team noted that the rates of late events were comparable between sirolimus-eluting and everolimus-eluting stents. Furthermore, both types of drug-eluting stent were associated with a considerably reduced rate of target-vessel revascularization in comparison with bare-metal stents.

“The hypothesis that drug-eluting stents cause late harm in patients with coronary disease of the large arteries no longer seems justified,” concludes Kaiser, who goes on to say that “since there was no difference in the outcomes, both types of drug-eluting stent can be used in these patients.” However, the investigators stress that the results of this study are not applicable to patients receiving stents with diameter <3 mm.

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RESEARCH HIGHLIGHTS