

## Short stents do not have high restenosis rate

Andrea CIOBANU, MD

University Hospital of Bucharest, Cardiology and Internal Medicine Department and „Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

**T**he restenosis rate has been proven to be higher when using bare metal stents (BMS), as compared to drug-eluting stents (DES). However, DES implantation does not seem to be the best choice for all lesion types; in addition, high costs do not always justify the routine use of DES. Another parameter was needed in order to extend the use of BMS followed by low restenosis rates, previously obtained only by DES implantation; stent length was found to be an independent predictor for the restenosis rate: 3-11% of the nondiabetic patients and 5-18% of the diabetic ones experienced restenosis when using short BMS (less than 10mm).

**T**he goal of this paper was to evaluate the possibility of providing low restenosis rate with low costs using simple, drug-free stents. In order to reach a reliable conclusion, 331 patients with 424 coronary artery lesions were included in a prospective study. They had to experience pectoris angina, with or without a positive exercise tolerance test, and have coronary arteries with at least 60% diameter stenosis; patients with lesions >30mm in length, lesions in the left main artery and those treated for myocardial infarction failed the inclusion criteria. The patients underwent percutaneous

transluminal coronary angioplasty, followed by the shortest stent implantation when dissection or residual stenoses >30% occurred after balloon dilatation.

**B**are metal stents shorter than 10 mm were used in 59.4% of the lesions, followed by good angiographic results: residual stenosis <30% and 15.6% restenosis rate, after a 4 months angiographic control. Longer stents were implanted in 13.4% of the lesions, with 18.9% restenosis rate. The present study showed lower restenosis rate when not entirely covering the lesion with the stent. The most suitable stent length is that covering the most dangerous parts inside the coronary artery, responsible for the proliferative response of the arterial wall to the stent.

**T**his prospective study showed low restenosis rate after short stent use; incomplete coverage of the lesion did not predict further proliferation of the coronary wall. Also, diabetes, mellitus did not seem to make a difference in predicting restenosis. Vessel size was the only statistically significant parameter in restenosis rate. However, this study needs more validation proves in the near future in order to consolidate its results. □

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### Short stent implantation – incomplete coverage of the lesion does not increase the restenosis rate

Ulrich Dietz, Nina Holz, Cheryl Dauer, Rolf Meinert, Heinz Lambertz

### Short Stent Implantation for Routine Use is Feasible in a High Proportion of Coronary Interventions and Yields a Low Restenosis Rate

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