Editorial Comment

Evaluation of long stent implantation in diffuse coronary lesions in current intervention era

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While the elderly represent one of the highest-risk patient subsets among the growing population of patients undergoing percutaneous coronary intervention (PCI), elderly patients are often under-treated with revascularization therapies. Doubts regarding a lack of durable benefit of PCI in elderly patients often lead physicians to pursue conservative management strategies, despite the potential to derive greater absolute and relative benefits through revascularization. The reluctance to revascularize elderly patients is partly related to the greater risk of immediate complications, greater lesion complexity, and a higher prevalence of diffuse and multivessel disease—all factors that render the performance of PCI more difficult.

In this light, the study by Huang et al in this issue of the Journal of Geriatric Cardiology provides us with further insights into the potential durable benefits of PCI in elderly patients. In this comparative study of 102 patients undergoing stenting with bare metal stents for long (>20 mm) coronary artery lesions, the authors demonstrate that octogenarians had similar short-term and 6 month outcomes to a cohort of younger patients with similar baseline and lesion characteristics. While octogenarians had a numerically (although not statistically) greater prevalence of diabetes, prior coronary artery disease, multivessel disease, and more complex lesions, there were no differences in target lesion revascularization or major adverse cardiac events at 6 months compared to the younger cohort of patients. The baseline similarities of the two patient groups, the acceptable overall target lesion revascularization rates, and the combination of 3-month and 6-month clinical and angiographic follow-up are notable, and lend further support to the overall results of the study.

As the authors state, the major shortcoming of the study is the potential bias due to survivor effects (i.e. only patients who actually underwent 3-month and 6-month angiography were included in the analyses) which could have resulted in non-inclusion of patients who were too ill to undergo angiography or died prior to 6 months after their initial procedure. It is a nonetheless reassuring and important finding that, among octogenarians with lesions suitable for revascularization who are able to undergo follow-up, the angiographic and clinical outcomes are similar to a patient cohort some 25 years younger. Thus, although we should always make decisions regarding revascularization therapies with careful attention to the individual risks and benefits for each patient, the study by Huang et al suggests that if we are up to the challenge, revascularization of carefully selected elderly patients with complex coronary artery lesions may result in comparable outcomes to younger patients.

References