To the Editor:
Dr. Ahmed and colleagues performed a unique study that found percutaneous coronary intervention (PCI)-drug-eluting stent (DES) implantation had a similar 12-month mortality risk to coronary artery bypass grafting (CABG) in metabolic syndrome (MetS) risk-adjusted patients with acute myocardial infarction (AMI). Few studies have looked at the relation of CMS and PCI outcomes, but only one other study has compared bypass surgery with angioplasty in MetS patients. The study by Ahmed et al is one of a kind because it presents the outcome of PCI-DES vs. CABG in MetS patients. Some points are worth further discussion.

The outcome of any study involving MetS always depends on the definition used for the syndrome. The study primarily used the NCEP-ATP III criteria as the baseline for the diagnosis of MetS, along with the WHO modified criteria for central obesity in Asian populations. There can be significant differences in the prevalence of MetS, related vascular disease and mortality as reported by various studies. The DECODE Study Group compared 4 definitions of MetS-related CVD mortality and found that in women the hazard ratio was lower for the revised NCEP definition than for the WHO or IDF criteria. The study by Ahmed et al used a definition that has a good predictive value for cardiovascular events in non-diabetic patients with MetS, in addition to the WHO criteria, but the predication is greatest when using the WHO definition in diabetic patients.

Despite the variation in outcome with the different MetS definitions, the current study brings a useful insight to the results of CABG and PCI in MetS patients with AMI. It has been established by several trials, such as ERAC II, that the mortality rate in patients with PCI is lower than in those undergoing CABG in the general population. There is a need for similar studies in various populations and countries to compare the differences between the 2 interventions in MetS patients.

References

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