Letter by Movahed Regarding Article, “Simple or Complex Stenting for Bifurcation Coronary Lesions: A Patient-Level Pooled Analysis of the Nordic Bifurcation Study and the British Bifurcation Coronary Study”

To the Editor:

In the recently published article entitled “Simple or complex stenting for bifurcation coronary lesions: a patient-level pooled analysis of the Nordic Bifurcation Study and the British Bifurcation Coronary Study,”1 by combining NORDIC 1 and BBC ONE trials, the authors found a higher major cardiac adverse event rate in the complex strategy in regard to bifurcation intervention. This is the first large study to finally separate the so-called “true bifurcation lesions” (B2 lesions based on the Movahed classification)2 from others. So-called “nontrue bifurcation lesions” should not have been enrolled in such a study because they are at very low risk for side branch occlusion. Unfortunately, the authors downplayed the strong trend toward higher true bifurcation lesions enrolled in the complex strategy cohort, with a probability value of 0.058. This fact suggests a strong selection bias against complex strategy that could be the main reason for the higher major cardiac adverse event rate in this arm.

In a study of bifurcation intervention that was published in The Journal of the American College of Cardiology 1 week later,3 the authors found opposite results, with a reduction in major cardiac adverse event, using a complex strategy. However, in this trial, they enrolled only true bifurcation lesions (medina 1, 1, 1, and 0, 1, 1) in 100% of their population, explaining two exactly opposite conclusions made comparing these two trials. The importance of selection bias and significant heterogeneities in the randomized, clinical trials involving coronary bifurcation lesions are very important and are extensively discussed in the two recently published reports.4,5 Physicians should chose their strategy on the basis of many other bifurcation lesion characteristics including bifurcation angle, size, and the degree of ostial side branch disease involvement. In a true bifurcation lesion with a very large side branch and a very high risk for side branch occlusion during simple intervention, the operator should follow common sense. They should use all means to prevent side branch occlusion and this prevent major complications. In such a case, a complex strategy should be strongly considered.

Disclosures

None.

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