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**TIME TO TAKE NOTICE:
THE IMPACT OF
PREVIOUS TRANSRADIAL
CATHETERIZATION ON
RADIAL ARTERY GRAFT
PERFORMANCE IN
"CORONARY ARTERY**

BYPASS GRAFTING

To the Editor:

We read with great interest the recent article by Benedetto and colleagues,¹ comparing all-cause mortality in patients receiving a right internal thoracic artery (RITA) graft with those receiving a radial artery (RA) graft as the second arterial conduit in coronary artery bypass grafting (CABG). The authors found that in this low-risk group of patients, use of the RITA was associated with better survival on grafting the left coronary artery, whereas there was no significant difference between the conduits for right coronary artery grafting. In their analysis, Benedetto and colleagues were able to control for a large number of confounding variables through the use of propensity score matching. However, the study included no investigation into the potential impact of previous transradial catheterization (TRC) on the performance of RA grafts in their study population. We believe this is a vital measure to report in such studies.

In addition to its role in CABG, the RA also is being used with increasing frequency as the access point for coronary angiography and percutaneous coronary interventions in the diagnosis and management of coronary artery disease, respectively. Although the femoral artery traditionally has been the preferred route, recent studies have demonstrated the transradial approach to hold numerous advantages over the transfemoral approach, including decreased bleeding site complications, reduced cost, and a reduction in mortality.² However, it has now been convincingly demonstrated that TRC causes morphologic and functional damage to the RA in situ, which undoubtedly could affect its function as a CABG graft.³ Furthermore, the 2 studies

published to date investigating the performance of grafts from previously catheterized RAs have both found them to have significantly lower patency rates than grafts from uncatheterized RAs. In 2003, Kamiya and colleagues⁴ reported the stenosis-free patency rates of grafts from previously cannulated RAs to be 77% (17/22 patients) at 1 month postsurgery, compared with 98% in grafts from uncannulated RAs (48/49 patients; $P = .017$). A more recent study by Ruzieh and colleagues⁵ also found a significant reduction in the patency rates of previously catheterized RAs, with this evaluation performed over a considerably longer time period (up to 5 years). Consequently, in the current study it may be that the increased survival seen in the RITA group could be explained by the inclusion of previously catheterized RA grafts in the study population, which significantly reduced the overall performance of RA grafts.

Therefore, we would like to encourage authors carrying out any investigation into the performance of RA grafting to include data on the rates of previous TRC in their study sample and to provide separate information on the performance of both the previously catheterized and the uncatheterized RAs. This not only will deliver valuable evidence for the impending debate on whether previously catheterized RAs should be avoided in CABG but also will provide further clarity on the position that uncatheterized RA grafts should take in the hierarchy of conduit choice.

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