Carotid Artery Stenting Before CABG: A Better Alternative to Treat Concomitant Coronary and Carotid Artery Disease

To the Editor:

We read with great interest the article published recently “Is There Any Benefit From Staged Carotid and Coronary Revascularization Using Carotid Stents?” by Randall et al. In our institution, we have a clinical research protocol regarding the management of patients with concomitant coronary and carotid artery disease.2

To date we have treated 37 patients who have had concomitant surgical coronary artery disease and significant carotid artery disease with staged-combined approach of carotid artery stenting (CAS) before coronary artery bypass graft (CABG) surgery. However, our research protocol is different from Randall et al. All the patients underwent CAS with intravenous heparin to maintain an activated clotting time of 200 to 250 seconds along with GpIIb/IIIa inhibitor (Eptifibatide) with a bolus of 180 µg/kg followed by continuous infusion of 2 µg/kg per minute for up to 6 hours before CABG surgery. All patients had CABG within 48 hours after CAS during the same hospitalization. Antiplatelet treatment with aspirin and clopidogrel were started immediately after the CABG. All the patients were evaluated pre- and postprocedures by a board-certified neurologist, and the National Institutes of Health Stroke Scales were recorded. There were no neurovascular complications including transient ischemic attacks, minor or major strokes. There were no postoperative bleeding complications or death. The 30-day neurovascular event rate and mortality were 0%.

It is important to note the difference in approach during CAS and timing between the procedures in our institution and by Randall et al. We attribute our success in part to the proper use of the perioperative antiplatelet therapy.

Although our data are not sufficiently powered to change the present practice guidelines, we strongly believe that our experience can be replicated to exceed these guidelines. We also strongly support Randall et al in recommending the need for conducting randomized controlled trials for this debatable topic, “Management of concomitant coronary and carotid artery disease.”

As mentioned by Randall et al, it is imperative to provide such data so as to show the evidence for staged CAS before CABG being successful with little or no morbidity and mortality at 30 days. A national registry exists for CAS, and this data should be provided to accumulate the information required for evidence-based medical changes.

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