Editorial

Should Simultaneous Revascularization be Recommended for Patients with Concomitant Innominate Artery Disease and Coronary Artery Disease?

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Symptomatic occlusive disease of the innominate artery is relatively rare and infrequently encountered by most surgeons. Tracing back the history, surgical reconstruction of innominate artery occlusive disease was introduced in the early 1950s, as were the vast majority of modern vascular reconstructive procedures. Although symptomatic innominate artery disease occurs infrequently, a significant association exists between symptomatic innominate artery disease and disease of coronary arteries (CAD). Multiple series have documented that 20% to 45% of patients presenting with symptomatic innominate artery disease have concomitant CAD. Although many articles have dealt with brachiocephalic arterial reconstruction, the literature contains few reports involving the management of patients who have both CAD and symptomatic innominate artery disease.

Dr. Kan and his colleagues reported their initial experience of two patients having significant CAD with symptomatic innominate artery disease. Both of them were successfully treated with simultaneous revascularization for complex brachiocephalic and coronary artery disease. This report is well done and adds some further support for the one-stage reconstruction of concomitant occlusive disease of innominate artery and CAD, although there were only two cases reported here.

As the authors point out, myocardial and cerebral protection is critical for such cases during revascularization in order to prevent morbidity or significant perioperative mortality (e.g., stroke). Cerebral ischemia caused by clamping should occur only rarely if reconstructions of multiple-vessel disease are performed in proper order, being guided with occluded vessels, and strictly to prevent potential complications such as cerebral blood supply to brain. The protection of brain can be further acquired by high-dose barbiturates and hypothermia. Based on the principle cited above, Takach and associates have demonstrated low hospital death (3.2%) and low stroke rates (3.2%) in a series of 31 surgically treated patients. Nevertheless, an important question remains unanswered: Should revascularization be recommended for all patients with CAD and innominate artery disease in the absence of neurologic symptoms? Berguer et al. advised that these procedures should be reserved for patients with symptoms. In contrast, Takach and associates have required revascularization for the progression of initially asymptomatic disease. Thus the management of patients with asymptomatic innominate artery lesions with coronary artery disease remains controversial.

In summary, Dr. Kan and his colleagues lend further support for the safety and potential benefits of aggressive surgical management of patients with concomitant occlusive disease of innominate artery and coronary artery disease, and we look forward to learning of the long-term results.
References


